



**3.2.1: Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident**

BNCA for Women has pioneered the creation of an innovative ecosystem that blends traditional knowledge with cutting-edge technology. This ecosystem not only embraces the principles of the Indian Knowledge System (IKS) but also integrates advanced research methodologies using parametric digital tools, robotics, and immersive AR/VR technology. The institution is fostering a unique platform for both creative and experiential research in architecture, empowering students and faculty to drive the future of the built environment.

Since 2018, with small yet significant and consistent steps taken each year, BNCA has initiated and established an ecosystem of innovation and knowledge exchange along the following two paths (A and B) and along each of the two paths has initiated the following platforms for a continuous exchange of knowledge for students and its faculty and the associated community at large:

**A. Innovation and Research**

1. Ph.D. Center at BNCA, affiliated to SPPU (Savitribai Phule University), Pune- Ph.D. Center for Women
2. BRH (BNCA Research Hub)
3. Research and Innovation Cell, BNCA
  - a. IPR Cell (associated with MKSSS as a parent body)
  - b. Incubation Center (associated with SPPU as a parent University)
  - c. Specialized Labs on campus for training and experimentation

**B. IKS (Indian Knowledge System)**

1. CCS (Center for Cultural Studies), BNCA- Indian Architecture and Culture Awareness
2. CISAA (Center for Interdisciplinary Studies for Art and Architecture)- Indian Music and Performing Art Awareness
3. Kaladhar – Students' Informal interactive platform for knowledge exchange of Indian Architecture and allied arts

**Related links to the Institute's website pages:**

<https://bnca.ac.in/phd-research-centre/>  
<https://bnca.ac.in/bnca-research-hub/>  
<https://bnca.ac.in/startup-and-innovation/>

**Labs:**

<https://bnca.ac.in/digital-fabrication-lab/>  
<https://bnca.ac.in/immerssive-design-lab/>  
<https://bnca.ac.in/wood-working-lab/>  
<https://bnca.ac.in/landscape-lab/>  
<https://bnca.ac.in/reed/>  
<https://bnca.ac.in/center-for-cultural-studies/>  
<https://bnca.ac.in/center-for-interdisciplinary-studies-in-art-architecture-cisaa/>

The highlights of the ecosystem as elaborated as under:

### **1. Indian Knowledge System (IKS) and Its Role in Contemporary Architecture**

The Indian Knowledge System (IKS) encompasses centuries of traditional wisdom that informs sustainable and culturally significant design practices. At the College of Architecture for Women, IKS serves as a foundational framework for integrating vernacular techniques, sustainable material use, and contextual architectural forms into modern practice. This approach encourages students to draw inspiration from India's diverse architectural heritage while creating solutions that meet contemporary needs. The college's curriculum places significant emphasis on how these traditional practices can be innovatively reimaged using modern tools. By engaging with IKS, students learn to respect and incorporate indigenous architectural elements in their designs while addressing pressing global challenges such as sustainability, climate resilience, and cultural preservation. Additionally, students are encouraged to explore the intersection of IKS with futuristic technologies like parametric design and robotics, creating a seamless blend of tradition and innovation.

### **2. Intellectual Property Rights (IPR) Awareness and Innovation Cell**

In line with its commitment to fostering an innovative academic environment, the College of Architecture for Women has been associated with IPR cell of MKSSS, its parent organization. The workshops are conducted to create awareness about intellectual property laws, ensuring that students and faculty understand the importance of protecting their innovative architectural ideas. This includes educating them on patents, copyrights, trademarks, and design rights, and offering support in filing and protecting original works. Through this initiative, students are not only made aware of IPR but are also empowered to take proactive steps to safeguard their intellectual creations—ranging from new architectural forms to sustainable construction technologies. The college's focus on IPR protection plays a crucial role in ensuring that the innovations emerging from its students and faculty are recognized and legally protected in the competitive global landscape. In this direction, institute has applied for patents.

### **3. Futuristic Research in Architecture: Parametric Tools, Robotics, and AR/VR Technologies**

The college's forward-thinking approach to architectural research includes a strong emphasis on the use of parametric digital tools, robotics, and immersive AR/VR technologies. These technologies are reshaping the way architecture is conceived, designed, and constructed, allowing students to push the boundaries of creativity and functionality. The integration of these tools in architectural education ensures that students are prepared to tackle future challenges in the profession with innovation and technical proficiency. Parametric design tools, such as Rhino and Grasshopper, allow students to explore complex geometries and form-making processes, enabling them to create dynamic, adaptive designs that respond to both environmental conditions and user needs. Robotics is being used to automate

construction processes, enabling precise, efficient, and sustainable building techniques that can revolutionize architectural practice. The use of immersive AR and VR technology, on the other hand, enhances experiential learning, allowing students to visualize and interact with their designs in a fully immersive 3D environment. These technologies are further explored in the college's cutting-edge Digital and Robotics Labs. Here, students conduct hands-on research in areas such as computational design, generative architecture, and digital fabrication, while experimenting with robotic arms and 3D printers to create prototypes and models. These labs serve as incubators for experimentation and innovation, providing students with the skills and tools necessary to bring futuristic designs to life.

#### **4. Incubation Centre and Knowledge Transfer**

BNCA is associated with Incubation Centre of SPPU, the state university to which it is affiliated to. The University's incubation centre plays a critical role in facilitating the translation of research into practical applications. The centre serves as a platform for students, faculty, to develop and commercialize innovative ideas, technologies, and architectural solutions. The students get mentorship and support through the research and innovation competition of Avishakar by SPPU each year. The students, access to industry experts, and state-of-the-art resources through SPPU's support.

#### **5. Experiential Research and Campus Labs**

BNCA Women is equipped with a variety of specialized labs that support both theoretical and experiential research. These include Digital Fabrication Labs, Robotics Labs, and Immersive AR/VR Labs, which enable students to explore the frontiers of architectural design and construction. The labs are designed to encourage hands-on experimentation, allowing students to work with advanced technologies, test prototypes, and conduct research that pushes the boundaries of what is possible in architecture. The college's focus on experiential research enables students to engage in cutting-edge projects that bridge the gap between conceptual ideas and practical implementation. By utilizing digital tools, students develop solutions that are not only innovative but also sustainable, efficient, and responsive to the evolving needs of the built environment.

#### **6. Outcomes and Impact**

The outcomes of these initiatives are already evident in the growing body of research, patents, and industry collaborations emerging from the College of Architecture for Women. Students and faculty are engaged in pioneering research that integrates traditional Indian architectural principles with futuristic digital tools, robotics, and immersive technologies. This approach has led to the development of innovative designs, new construction techniques, and sustainable building practices.

By blending IKS with cutting-edge technologies, the college is preparing its students to lead the future of architecture with a deep understanding of both cultural heritage and technological advancement. The innovative environment created by the college ensures that its graduates are equipped not only to protect their intellectual property but also to contribute meaningfully to the global architectural discourse.

In conclusion, BNCA for Women has established a robust and dynamic ecosystem that supports both traditional knowledge and futuristic research. Through initiatives focused on IKS, IPR, parametric design, robotics, and immersive technologies, the college is shaping the next generation of architects who are poised to make a significant impact on the future of the built environment.

### List of some of the important initiatives/activities:

( year 2018-2023)

1. BNCA-Start up and Innovation Cell, set up in 2019
2. Innovation Project ( BNCA, Pune ) at Digital Lab at BNCA “DEVELOPING TOOLS FOR A ROBOTIC ARM” (ongoing project-report of the same is uploaded)
3. BNCA Research Hub ( BRH)  
The Concept & Aim  
BRH is a hub of activities conducted at BNCA related to Research in Architecture and allied / specialized disciplines working on individual and collaborative research.  
BRH aims to become a versatile, inclusive, and holistic knowledge building platform not only at local and national level but also at international level. BRH intends to provide varied scales and types of opportunities for researchers, mentors, experts, professionals, and funding agencies across the world to participate, conduct, collaborate, publish and to execute their research potentials and innovative concepts through forming and evolving Research Clusters of various subject domains as a long-term objective.
4. AVR Immersive Design Lab (2021)
5. Robototic arm Tool Development and Experimentation
6. Avishkaar Competition for Innovation, SPPU, Pune- Student projects at Bachelors and master’s Level in Architecture selected and mentored under Incubation center, SPPU (2023)  
<https://eduvarta.com/The-team-of-Savitribai-Phule-Pune-University-is-all-set-to-win-the-tenth-title>
7. Drone training for young students
8. Design Impact Conclave, SPPU-participation and engagement with SPPU Incubation center
9. Academia -industry – collaborative workshops for capacity building and exposure to industry and research ana startups
10. EXPLORING USE OF BY-PRODUCTS OBTAINED FROM RECYCLED SANITARY
11. NAPKIN’S IN CONSTRUCTION INDUSTRY

With respect to IKS , a detailed report is uploaded which includes some of the important activities:

1. Designing a calendar based on IKS
2. Writing Publishing of research papers by faculty and students at Conferences conducted in regional language- Marathi (2022 and 2023)
3. Guest lectures to build awareness about IKS and how to document the same with technology.
4. Musi-tecture lecture series – to build awareness about Indian classical music and architecture.
5. Kuladhar – Art installations by BNCA students at Pune airport depicting Maharashtra’s cultural history spreading awareness and pride. - hands on experience and opportunity to serve the community with blending of art, technology, and research

These activities encouraged students in actively explore their potential of innovation and experimentation giving them opportunity work on hands-on live projects.

**BNCA is moving ahead based on the following steps in the Strategic plan for Research and Innovation:**

1. Creating research culture by establishing BNCA Research Hub as an interactive platform as part of institutional strategy
2. Strengthening the Ph.D. Center at the institute which is affiliated to Savitribai Phule Pune University by expanding and building the resources with the alumina and Ph.D. guides.
3. Facilitating research by providing guidance to young faculty/ novice researchers through research mentors on regular basis
4. Capacity building of the faculty and students by providing support and knowledge (of various technical aspects of research such as IPR, Plagiarism, various supporting tools and software) sharing through guest / expert lectures, seminars and training programs on research process, methodology, IPR, research publication, etc.
5. Encouraging and providing support for students and faculty to work on their research and publish the same through various interactive programs/ research work presentations at BNCA Research Hub.
6. Supporting faculty researchers by providing them financial assistance for presenting their papers at national and international conferences
7. Establishing Innovation Cell and exploring opportunities with respect to the field of Architecture and allied design and planning disciplines/ professions, to explore possibilities to work in collaboration with industries or professional firms or alike.
8. Exploring opportunities to extend research activity in architecture to community/ society and environment-based concerns and participation through students (NSS) and faculty participation,
9. Integrating research in architectural design studio
10. Collaborating with NGOs and other institutions for research

**Signatures**



IQAC Co-ordinator

Dr. Chetan Sahasrabudhe



PRINCIPAL  
MKSS's DR. BHANUBEN NANAVATI  
College of Architecture For Women  
Karvenagar, Pune-411 052.

Prof.(Dr.) Anurag Kashyap, Principal



MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S

AFFILIATED TO UNIVERSITY OF PUNE, AFFILIATION NO.:PU/PN/ARCH/109/94



UNAI MEMBER  
UNITED NATIONS  
ACADEMIC IMPACT



DR. BHANUBEN NANAVATI  
COLLEGE OF ARCHITECTURE  
FOR WOMEN

BNCA New Campus, Karve Nagar, Pune 411052  
www.bnca.ac.in, mail@bnca.ac.in  
Ph.+91 20 25474062, 25474437

Ref : BNCA/473/2019

Date : 25.06.2019

To,  
Dr. Apoorva Palkar,  
Director, Innovation, Incubation & Linkages,  
Savitribai Phule Pune University,  
Pune – 411007

Sub : Regarding Creation of “Startup & Innovation Cell” at Dr. Bhanuben Nanavati College of Architecture (BNCA), Pune

Ref : Letter received from SPPU's Centre for Innovation, Incubation & Enterprise; Dated : 28/05/2019, Ref. No. : IIE/272

Respected Madam,

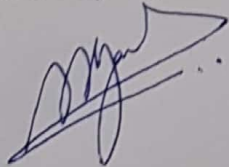
Please find below the constitution of the Startup & Innovation Cell at Dr. Bhanuben Nanavati College of Architecture (BNCA), Pune, for your perusal.

### Startup and Innovation Cell

| Sr. No. | Designation                      | Name                    | Mobile No. | Email Id (Personal)               | Email Id (Official)          |
|---------|----------------------------------|-------------------------|------------|-----------------------------------|------------------------------|
| 1       | Principal                        | Dr. Anurag Kashyap      | 9822014323 | dranuragkashyap@gmail.com         | mail@bnca.ac.in              |
| 2       | Head - Startup & Innovation Cell | Swapnil S Gawande       | 7798879277 | architectswapnilgawande@gmail.com | swapnil.gawande@bnca.ac.in   |
| 3       | Co-ordinator of the Cell         | Deva Prasad             | 9552249710 | aurodev@gmail.com                 | deva.prasad@bnca.ac.in       |
| 4       | Members (Five Students)          | 1. Radhika Kulkarni     | 8178553369 | radzarchi@gmail.com               | radzarchi@gmail.com          |
|         |                                  | 2. Maitreyee P Ranjekar | 8806149187 | maitreyeepranjekar@gmail.com      | maitreyeepranjekar@gmail.com |
|         |                                  | 3. Pratiksha Hurpade    | 9595169739 | pratiksha.hurpade@gmail.com       | pratiksha.hurpade@gmail.com  |
|         |                                  | 4. Nirmitya Patel       | 7083839940 | nirmitipatel@gmail.com            | nirmitipatel@gmail.com       |
|         |                                  | 5. Nupur Bohara         | 7757066655 | nupur.bohara98@gmail.com          | nupur.bohara98@gmail.com     |
| 5       | Industry Members (2 Invitee)     | 1. Hrushikesh Shrotriya | 9370315272 | hvshrotriya@gmail.com             | hrushi@beeban.in             |
|         |                                  | 2. Dr. Reshma Sagari    | 9860407383 | drreshmasagari@gmail.com          | reshma@ridawellness.com      |

Person to be contacted for communication:

Name : Ar. SWAPNIL SANJAY GAWANDE  
 Cell No. : 7798879277  
 Mail ID : architectswapnilgawande@gmail.com




Dr. Anurag Kashyap  
Principal

# AVISHKAR 2023



Inter-University Research Project Competition for UG/PG/Doctoral students

## RESEARCH & INNOVATION

### CATEGORIES FOR PARTICIPATION

1. Humanities, Languages, Fine Arts, etc.
2. Commerce, Management, Law etc.
3. Pure Sciences
4. Agriculture and Animal Husbandry
5. Engineering & Technology
6. Medicine and Pharmacy

Competition- Stage1 (at Institute Level)

Jury on 25<sup>th</sup> September , Monday 2023

9:00 am to 1:00 pm at BNCA, MKSSS, Pune

<https://www.unipune.ac.in/administration/avishkar2023.htm>

Last Date for Submission: 24<sup>th</sup> Sept 2023

Selected entries will be participating for Avishkar Competition 2023 at Zonal Level Competition at SPPU, Pune

### Submission requirements :

1. Poster size : 1M x 1M
2. Name of the participant should not be there in the poster , only Research topic and roll number will be written. No other details of the participants and/or guide shall be included in the poster.

### Criteria for assessment:

1. Relevance of the topic
2. Methodology
3. Contribution, Rigor and hard work
4. Innovativeness/ Novelty/Newness
5. Outcome
6. Affordability and outreach

Co-ordinators:  
Dr. Shubhada Kamaisperkar, Head, Research and Innovation Cell, BNCA  
Dr. Swati Sahasrabudhe, ARC (Academic and Research Co-Ordinator for SPPU, BNCA)



BNCA

Supported by

Dr. Anurag Kashyap  
Principal, BNCA



BNCA Pune



mksss's dr. bhanuben nanawati college of architecture



bncaofficial



mail@bnca.ac.in

## AVISHKAR 2023- Student Competition

Institute Level

SPPU, Pune

A REPORT

Prepared by

Dr. Bhanuben Nanawati College of Architecture for Women (BNCA),

MKSSS, Pune

25 Sept 2023



**AVISHKAR 2023- Student Competition**  
**Institute Level**  
**SPPU, Pune**

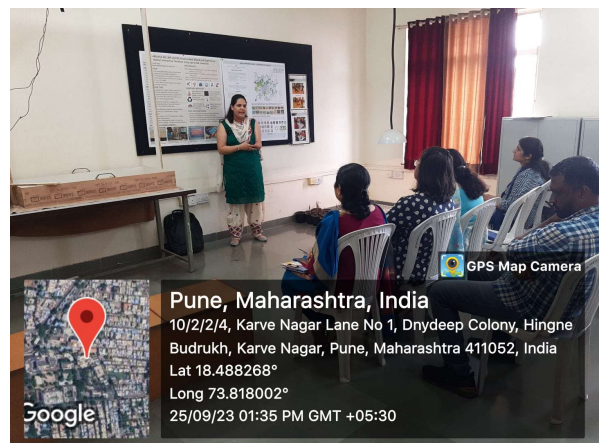
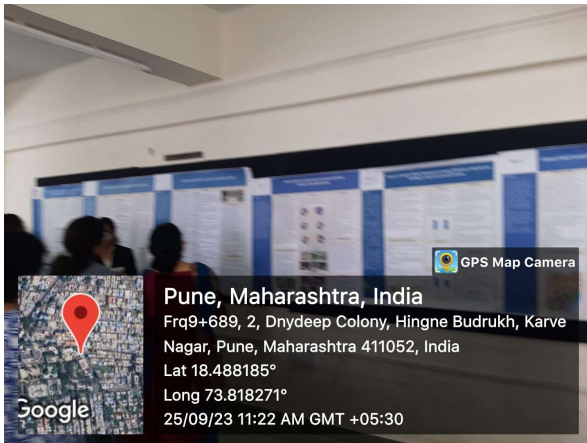
A REPORT  
By

Dr. Bhanuben Nanawati College of Architecture for Women (BNCA),  
MKSSS, Pune

Contents:

1. List of winners and their category-wise topics
2. List of students participated in the competition
3. Geotagged photographs
4. One video clip (at glance)- 1 min- soft copy attached
5. A4 and A3 size posters of the winning entries
6. Abstract of 100 words of each successful participant

|         | AVISHKAR 2023, SPPU                 | INSTITUTE LEVEL STUDENT COMPETITION ,<br>HELD AT BNCA, MKSSS , PUNE  |  | Winners  |
|---------|-------------------------------------|--|--|--|
| Sr. No. | Category                            | "Level"  |  |  |
|         |                                     | UG   | PG   | PPG (M.Phil.& Ph.D. Students those who are pursuing Ph.D. from SPPU)   |
| 1.      | Humanities, Languages and Fine Arts | 1.Div C roll no.29,<br>Name of the student:<br>Anandita Dive<br>(Topic: Analysing the socio-economic impact of Food Trucks on local communities) | Nil  | Name of the student:<br>Shivali Lalbige, Ph.D student (Topic: Urban abandoned quarry's coexistence with Pune City) |
|         |                                     | 2. Div B roll no. 35,<br>Name of the students:<br>Hemansha Mali<br>(Topic: Historic Water Architecture of Shirpur)                               | Nil  |  |
|         | 2.Commoce, Management and           | Nil  | Nil  | Nil  |
|         | 3.Pum Sciences                      | Nil  | Nil  | Nil  |
|         | 4.Agriculture and Animal Husbandry  | Nil  | Nil  | Nil  |
|         | 5.Engineering and Technology        | 1.Div C , roll no 23,<br>Name of the student:<br>Tanaya Takale<br>(Topic: Use of Textile Waste in material for 3D Printing)                      | M.Arch. (Landscape) -<br>Name of the student:<br>Ananya Joglekar<br>( Topic: Development of Cost-effective AR-VR Interactive Sandbox for better learning of Topography in Landscape Architecture Education using Upcycled materials) | Nil  |
|         |                                     | 2.Div B roll no. 29,<br>Name of the student:<br>Vedanti Acharya<br>(Topic: Visualizing Meditation hall in AR, VR, and MR)                        |  |  |
|         | 6.Medicine and Pharmacy             | Nil  | NI   | Nil  |



## AVISHKAR 2023- Student Competition

Geotagged photographs and 1 min video ( submitted as a soft copy)

# **AVISHKAR 2023- Student Competition**

## **Posters and Abstracts of the Winning Entries**

# ANALYZING THE SOCIO-ECONOMIC IMPACT OF FOOD TRUCK ON LOCAL COMMUNITIES



## “STREET FOOD TRUCKS: THE ARCHITECTS OF TASTE WHO REDEFINE CITY CORNERS”

### AIM

This research investigate the social dynamics influenced by food trucks, exploring how they foster community interactions, contribute to public spaces, and shape social experiences.

### OBJECTIVES

- Analyze the Contribution of Food Trucks to the Vitality of Public Spaces
- Analysis the contribution of food Trucks in Fostering Community.
- Investigate How Food trucks Shape Social Experiences.

### LITERATURE REVIEW

Food trucks are transforming urban life by transforming public spaces and creating thriving neighborhoods. These mobile food businesses support the social fabric of cities and offer diverse culinary experiences. They often become social hubs, attracting locals and tourists. Food trucks foster social relationships by bringing people from all backgrounds together in a common setting. They also revitalize underused public spaces by energizing street corners, parks, and plazas, improving safety and liveliness by increasing foot traffic.

### METHODOLOGY

A strong methodology combining qualitative and quantitative techniques is needed to investigate the social dynamics influenced by food trucks and how they promote neighbourhood connections, improve public places, and change social experiences.

Here is a approach for carrying out this investigation: To serve as the main focus of the study, they picked a particular city or area with a robust food truck culture.

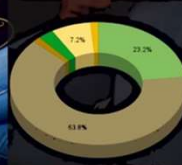
They Spend some time monitoring where food trucks are parked at different times of the day and week and took note of the people who frequent these areas, how they interact with one another, and the atmosphere in general.



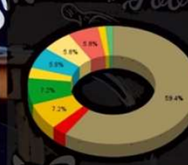
### TOOLS

- Analyze the Contribution of Food Trucks to the Vitality of Public Spaces
- Analysis the contribution of food Trucks in Fostering Community
- Investigate How Food trucks Shape Social Experiences.

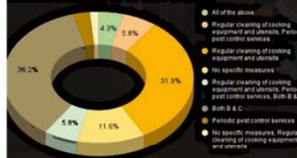
### Waste Disposal Management



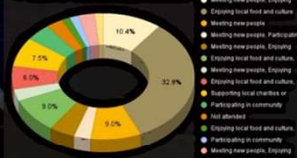
### Innovative Seating Arrangements



### Clean & Hygienic Environment



### Positive Social Experiences



### SCOPE

Food trucks enhance food accessibility in underserved areas by offering affordable, diverse food options. They foster community engagement, promote social interaction, and have positive socioeconomic effects. They also promote cultural and culinary diversity, heritage, and traditions of different ethnic groups. They also have an environmental impact, considering energy sources and waste management practices.

### Winner 1

Category: Humanities, Languages and Fine Arts

Level: UG

Name :Anandita Dive

Topic: Analysing the socio-economic impact of Food Trucks on local communities)

### ABSTARCT:

Around the world, food trucks have become a vibrant and creative part of the culinary scene in many metropolitan and suburban locations. The objective of this study is to thoroughly examine the socio-cultural effects of food trucks on nearby towns. Food trucks have the ability to have an impact on many elements of society and the local economy in addition to providing delicious food. It also considers how they can strengthen intercultural understanding, societal cohesiveness, and civic involvement and how social communities foster environment. In order to examine the numerous impacts of food trucks on the social and cultural fabric of local communities, the research takes a multifaceted approach that combines qualitative and quantitative approaches. The study looks into the legal and regulatory structures that control how they operate as well as how easily accessible their various cuisines. The research sheds light on the role that food trucks play in stimulating the cultural aspect, establishing a deeper feeling of community, celebrating diversity, and encouraging entrepreneurship. Food trucks have the potential to promote social interaction, celebrate cultural variety, and further nurture open spaces of cities. The regulatory environment that affects how they operate is examined in the article. The research shows that food trucks can create lively, welcoming public spaces. The study also deals with waste disposal management and hygienic environment of food truck. The Policymakers, urban planners, and community stakeholders interested in using food trucks for inclusive community development will find this research to be a valuable resource.

# HISTORIC WATER ARCHITECTURE OF SHIRPUR, DHULE

## ABSTRACT

This paper explore's and understands the architecture of barav dated around 17th to 19th century of Shirpur taluka of Khandesh region of Maharashtra. It attempts to study the hydrological and architectural features, construction techniques, socio- cultural aspect and traditional technique of groundwater storage. The data is collected by interviewing experts, literature review and documentation. Findings of this paper reveals that the barav are the most sustainable way of conserving water in hot and dry region , it also brings the awareness of conserving lost heritage of region.

## INTRODUCTION

Stepwell a traditional ground water structure are a wells or ponds with a long corridor of steps descend to the water. Traditional ground water storage such as wells, stepwells , tanks plays an array function of utilitarian, religious, cultural and social. This places are used as meeting places for womens , holy bathing, community spaces for interaction and performing rituals. Bravas are location specific. As new technologies of water provision made easy access of water to individuals fetching thorough pipe, pumps and other means thus, many traditional water structure went into disuse. This paper aim's to explore and understand the historic water architecture of Shirpur taluka.

Shirpur Taluka in Dhule district of Khandesh region has a ancient history. During Maratha period the region war under the Holkar's reign. Shirpur has a hot and dry climate. Located at the base of Satpuda mountain range and it is also at a distance of about 10 km from the Tapi river. Tapi river valley is observed in parts of shirpur. Shirpur taluka has the alluvial soil deposit. The present shirpur taluka boundary is consider for study ,it may be more or less spread in future.

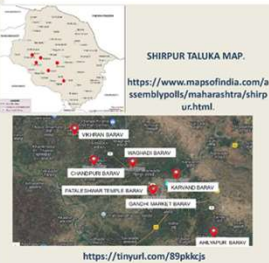
There are seven baravs located in Ahilyapur, Karvand, Waghadi, Chandpuri, Vikhran and two in shirpur. All seven barav comes in alluvial soil patch of taluka which holds the ground water. Most of this Barav are said to be constructed by Ahilybai Holkar. Barav in this region are not in good condition.

## METHODS AND MATERIALS

Primary data was collected by field research, direct observation, documented through map, photography and sketches. Semi- structured interview of experts are taken for understanding the history and timeline of barav and non-structured interview of local people is taken.

Secondary data is collected by literature review such as articles, books, district gazetter.

The descriptive information presented in research paper is based on field research.



## RESULTS

### 1. Ahilyapur Barav:

**Location:** Ahilyapur, shirpur. Located in the village.  
**Construction:** Around 17<sup>th</sup> century- Maratha Period.  
**History:** Subhedar Malharrao Holkar got the jahagiri of khandesh on 20<sup>th</sup> September 1755. Holkar's military base was at shirpur, this army formed a permanent settlement which is today known as a Ahilyapur village in shirpur. Ahilyabai Holkar constructed five storey barav for army system.

**Planning form, Type:** L-shaped, Nanda-One way.  
**Material:** Brick and stone.

**Architectural Features:** 13 arches, iconography, Ganesha temple.  
**Nature of activity:** Performing religious, cultural activity.  
**Present Condition:** Barav is cleaned but the area were water is stored is filled with garbage.

### 2. Karvand Barav:

**Location:** Karvand, shirpur. Located at the boundary of village.  
**Construction:** Around 17<sup>th</sup> century. Maratha Period.  
**History:** Barav was constructed by Holkar's. The Stepwell belonged to Rawals of khandesh.

**Planning form, Type:** Rectangular, Nanda-one way opening.  
**Material:** Stone and brick.

**Architectural features:** Brick arches, niches running through steps.  
**Nature of Activity:** Performing religious and cultural activity.  
**Present Condition:** Barav is in good condition, water is used for farming but it is closed and cleaning is required.

### 3. Waghadi Barav:

**Location:** Waghadi, shirpur. Located in the village.  
**Construction:** Around 17<sup>th</sup> century. Maratha Period.  
**History:** The stepwell belonged to Rawals of waghadi. Shiv temple in the wada is constructed by Ahilyabai Holkar. Wada has barav beside the temple.

**Type:** Nanda-one way opening  
**Material:** Stone and brick. **Present condition:** Buried

### 4. Vikhran Barav:

**Location:** Vikhran, shirpur. Located at boundary of village.  
**Planning form, Type:** U-shaped, Nanda-one way.

**Material:** Brick and stone.  
**Architectural Features:** Eight arches, Shiv temple.  
**Nature of Activity:** Performing religious activity.

**Present condition:** Barav is cleaned , water storage area is buried.

### 5. Pataleshwar Temple Barav:

**Location:** Shirpur. Location in market area of town.  
**Type:** Nanda-one way opening. **Material:** Brick and stone.

**Nature of activity:** Performing rituals.  
**Present condition:** One third part is buried.

### 6. Gandhi Market Barav:

**Location:** Shirpur. Located in market area.  
**Construction:** British period.

**Planning form, Type:** Rectangular, Nanda-one way opening.  
**Material:** Brick **Present condition:** Buried around 1982-85.

### 7. Chandpuri Barav:

**Location:** Chandpuri, shirpur. Located at boundary of village.  
**Planning form, Type:** L-Shaped, Nanda-one way opening.

**Material:** Brick and stone. **Present condition:** Buried.



## DISCUSSION

By the field study and observation the nature of terrain and depth of ground storage has influenced the size of Barav . All seven barvas are made of brick and stone having similar construction technique. Brick pattern can be seen throughout the structure which gives aesthetics to barav. There is banyan tree beside every barav. Every barav has temple of god or goddess in it as it protect from the evil power. Although they are located at different places and varied in there forms, certain architectural characteristics and principles are common. By considering all the similar aspects mentioned above may be all Baravas are constructed by Maratha Queen Ahilybai Holkar. These spaces were used as community spaces by the settlements around it. These spaces are said to be socio-cultural hub as it provide interactive space for people, space for performing rituals and celebration. After considering the form and socio cultural aspect the intend of constructing these barav is primarily associate with its function of conserving water. The barav in the region are structurally stable but the local people have neglected the importance of traditional groundwater structure. From seven, four barav are buried and are filled with garbage. Some of them are hidden from the people as they are fully covered with tree and bushes.

## CONCLUSIONS

This paper conclude that the barav are the most sustainable traditional way of conserving ground water storage in dry climate. Respect to hydrological condition this are location specific structures, and they are served as community spaces. Considering architectural value of barav many barav existing today are neglected in the region. Before any damage to this barav, it is important to take immediate step for their conservation and bring awareness of protecting and conserving the lost heritage of region. If this barav are cleaned and conserved it will solve the problem of water scarcity in the region.

## REFERENCES

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- [https://www.academia.edu/63753226/Reimagining\\_Water\\_Infrastructure\\_in\\_its\\_Cultural\\_SpecificityCase\\_of\\_Pune\\_IN\\_DIA](https://www.academia.edu/63753226/Reimagining_Water_Infrastructure_in_its_Cultural_SpecificityCase_of_Pune_IN_DIA)

Winner 2

Category: Humanities, Languages and Fine Arts

Level: UG

Name :Hemansha Mali

Topic: Historic Water Architecture Of Shirpur , Dhule

## ABSTRACT

This paper explores and understands the architecture of barav dated around 17th to 19th century of Shirpur taluka of Khandesh region of Maharashtra . It attempts to study the hydrological and architectural features, construction techniques, socio- cultural aspect and traditional technique of groundwater storage. The data is collected by interviewing experts, literature review, documentation . Findings of this paper reveals that the barav are the most sustainable way of conserving water in hot and dry region , it also brings the awareness of conserving lesser-known heritage of region.  
 Keywords: Barav, Traditional water storage, Socio-cultural aspect, Conservation

## TOPIC: TRANSFORMING TEXTILE WASTE INTO FIBRE-REINFORCED 3D PRINTED MUD BLOCK

**ABSTRACT:** Environmental problems are severely impacted by textile waste, a large result of the fashion and textile industries. Recent research has shown that many kinds of textile waste, including pre- and post-consumer, may be treated, and used successfully in building operations. 3D printing technology is one of the upcoming innovative technologies which has ability to create complex geometry and intricate details with ease. The purpose of this study is to examine the viability of using textile waste as a raw material for 3D printing. The experimental research will be carried out by manufacturing 3D printed mud blocks using KUKA KR 30 robot and compressive strength of the blocks will be tested to check the sustainability of the product.

SHARE OF TEXTILE WASTE PROCESSED IN % INIDA, 2016-2022

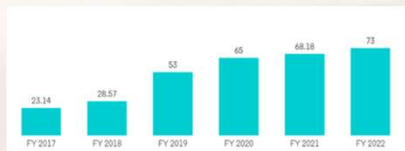


Image source: <https://www.mordorintelligence.com/industry-reports/textile-waste-management-market>

TEXTILE WASTE GENERATED FROM 2016 TO 2022 IN INDIA

**AIM:** This research paper aims to investigate the possibilities of using textile waste as a material for 3D printing in architecture. This research attempts to bring to light the potential of using textile waste as raw material merging with cutting-edge 3D printing technology developing adaptable, and sustainable responsible architectural solutions.

### OBJECTIVES:

- 1) To explore method for processing and transforming textile waste into printable composition used for 3D printing technology.
- 2) To analyse the structural integrity of various types of textile waste, discarded garments and fabrics, and ability to convert it into 3d printing.
- 3) To analyse the costs of 3D printed mud block using textile waste.

### METHODOLOGY:

- 1) **Identifying various types of textile waste and categorizing them:** Finding various types of textiles wastes like cotton, polyester, wool, etc., in the form of fabric scraps, discarded textiles. Sort the waste into groups according to the different types of materials, colours, and textures.
- 2) **Shredding process:** The collected waste should be prepared for shredding by implementing shredding machines, reduce the textile waste to smaller pieces.
- 3) **Blending with construction material:** The shredded textile waste is mixed with the construction material like mud with specific ratio.
- 4) **3D Printing process:** Setting up the 3D printer while considering all parameters for printing like layer height, bed temperature, nozzle temperature, printer speed.
- 5) **Testing in lab:** Check compressive strength of 3D printed textile reinforced mud block.

### PROCESS:



Image sources: <https://thehill.com/changing-america/sustainability/environment/389788-how-industry-are-tackling-the-massive-challenge-of-textile-waste>, [https://www.millierwastemills.com/wp-content/uploads/RTPI19\\_June\\_17593.jpg](https://www.millierwastemills.com/wp-content/uploads/RTPI19_June_17593.jpg), [https://www.innovationintextiles.com/uploads/12473/Press\\_Release\\_Recycling-412x408-boxed.jpg](https://www.innovationintextiles.com/uploads/12473/Press_Release_Recycling-412x408-boxed.jpg), <https://shredplodview.com/wp-content/uploads/2021/09/akmanshap.jpg>, [https://architecturematters.com/wp-content/uploads/2020/08/india\\_37a5674c1d6081522644\\_49644c765a432.jpg](https://architecturematters.com/wp-content/uploads/2020/08/india_37a5674c1d6081522644_49644c765a432.jpg), <https://www.researchgate.net/publication/334664173/figure/fig/3AS-54879987190721/1555539029259/The-3d-printing-set-up-at-Cochin-University-KUKA-KR60-HA-robot-with-a-custom-designed.png>, <https://static.hindawi.com/articles/innovolome-2021/1767238/figures/1767238-fig.005a.jpg>

4C\_ROLL NO-23

### Winner 1

**Category: Engineering and Technology**

**Level: UG**

**Name :Tanaya Takale**

**Topic: Use of Textile Waste in material for 3D Printing**

### ABSTRACT

Environmental problems are severely impacted by textile waste, a large result of the fashion and textile industries. Recent research has shown that many kinds of textile waste, including pre- and post-consumer, may be treated, and used successfully in building operations. 3D printing technology is one of the upcoming innovative technologies which has ability to create complex geometry and intricate details with ease. The purpose of this study is to examine the viability of using textile waste as a raw material for 3D printing. The experimental research will be carried out by manufacturing 3D printed mud blocks using KUKA KR 30 robot and compressive strength of the blocks will be tested to check the sustainability of the product.

## MEDITATION HALL DESIGN APPROACH USING AR,VR

### ABSTRACT

Meditation halls are spaces where people practice meditation and different activities are performed. However, there are other difficulties when constructing a meditation hall, such as the need for ample room for practicing meditation and the impact that the different form of meditation halls has on the events that take place there and natural ventilation inside space. Additionally, visualizing in AR and VR is crucial for effectively designing such meditation halls. In Order to categorize the fundamental design requirements for a meditation hall, a survey study was carried out. Two samples were subsequently designed using tools in accordance with the findings of survey. After that, AR and VR would be used to visualize the designed meditation hall. This would clarify and assist in reducing the difficulties encountered when designing the meditation hall. Since we could see the finished product before building the actual edifice. Here AR,VR are used as Visualization tool for designing meditation hall.

### INTRODUCTION

Meditation practice, along with a few other optional activities, is the focus in meditation halls. A meditation hall is a place where individuals can go to connect with their souls or to commune with nature and foster harmony with it.

The form of the meditation hall also defines the internal activities. When designing a meditation hall, users usually concentrate on design factors like it should include natural lighting, ventilation, the time-of-day meditation should be practiced, different sounds like ambient sound or lounge music should be listened to while meditating, or the color scheme to be used.

These design considerations can occasionally present obstacles for designers. To overcome it tools like 3D printing, AR, and VR is useful. However, expensive technology like 3D printing. However, expensive technologies like 3D printing makes the usage of AR and VR advised.

Virtual Reality (VR) is a stimulating three-dimensional world that enables users to explore and engage with virtual environments in relation to the real world.

The more the user can believe and accept that it is genuine, the more they can immerse themselves in the completely immersive digital environment and block out the physical environment.

Whereas Augmented Reality (AR) is a view of the real world with digital features superimposed on it. It is an experience that blends the virtual and physical worlds. This contains a system with the fundamental components, such as the incorporation of both real and virtual worlds, real-time interaction, and precise 3D aspects of both virtual and actual items. Users' perceptions of the physical world are changed because of art.

Therefore, the use of these technologies for visualization would make it easier to study the places that have been created and reduce their issues while designing.

### METHODS AND MATERIALS

The first stage of the research involved a review of the literature to determine the relationship between building typologies and AR/VR technology.

Then, the primary design elements necessary for constructing a meditation hall were identified through case studies of various spiritual organizations.

In the second stage, a quantitative survey was conducted to get users' perspectives on design elements. An experimental model was created, and observations for a meditation hall will be made using AR and VR.

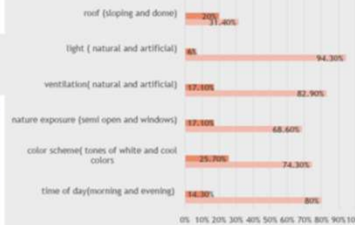
As a result of the created model, a pilot study is conducted to see whether the designed space justifies the design considerations.



### RESULTS

- By means of research papers - AR, VR, and MR are employed for many architectural typologies, such as residential structures, institutional buildings, and industrial buildings.
- But spiritual structures haven't been studied much. The use of AR and VR for spiritual structures, especially meditation halls, is therefore being studied.
- The following are design elements for case studies and literature reviews:
  - For structures, natural and artificial ventilation
  - Exposure or the creation of green pockets
  - Various shapes, including pyramid, dome, and sloping roof, have been used.
  - Walls with perforations
  - For meditation, ambient light is essential.
  - Indoor areas are impacted by outdoor green space
  - Green builds outdoor have a calming effect on people's emotions.
- Users' responses to a survey study were consistent with the literature review and case studies, and they included suggestions for more natural connectivity with the outdoors, natural ventilation and lighting, sloping roofs that lead to domes for form, and morning meditation times requiring for appropriate ventilation and lighting.
- The results of the pilot survey study demonstrate that the perspective of the designed structure has adequate natural ventilation, more pleasant tones, and the ability to visually connect with nature due to its form.

Survey-1 design factors



Pilot study- after design



### DISCUSSION

People are more likely to use natural ventilation and light, according to surveys and case studies. They like settings that evoke a sense of elegance and are more in tune with the surrounding environment.

The study demonstrated that AR and VR can accurately depict the design elements needed for the meditation hall.

According to a pilot study, 100% of people can accurately see the mentioned features, such as ventilation illumination, and 80% of people can picture a color scheme and roof form that work well with the intended structure.

Thus AR,VR can help better designing the space and overcome the challenges while designing.



Figure 3. pyramid shaped meditation hall.



Figure 4. dome shaped meditation hall.

### CONCLUSIONS

The user's needs are taken into consideration when designing the meditation hall. Incorporating AR and VR can be quite helpful when designing and building the environment. The more technology is used, the more we learn about how it can be used in the future as a designing or testing aspect.

In this case, Virtual reality (VR) is effective for imagining the meditation in a completely different world built on a 1:1 scale before construction and would be advantageous if any alterations required to be made only beforehand. However, using augmented reality (AR) would allow users to see the designed environment in relation to its surroundings, for instance by situating themselves on the construction site and understanding how it relates to the real world before it is built.

### REFERENCES

- Literature review (google scholar)
- Sciencedirect.com, Archdaily.com, Rethinkingfuture.com books.google.co.in
- Images: fig 1: archdaily.com  
fig 2: osho.com

**Winner 2**  
**Category: Engineering and Technology**  
**Level: UG**  
**Name :Vedanti Acharya**  
**Topic: Visualizing Meditation hall in AR, VR, and MR**

### ABSTRACT

Meditation halls are spaces where people practice meditation and different activities are performed. However, there are other difficulties when constructing a meditation hall, such as the need for ample room for practicing meditation and the impact that the different form of meditation halls has on the events that take place there and natural ventilation inside space. Additionally, visualizing in AR and VR is crucial for effectively designing such meditation halls. In Order to categorize the fundamental design requirements for a meditation hall, a survey study was carried out. Two samples were subsequently designed using tools in accordance with the findings of survey. After that, AR and VR would be used to visualize the designed meditation hall. This would clarify and assist in reducing the difficulties encountered when designing the meditation hall. Since we could see the finished product before building the actual edifice. Here AR, VR are used as Visualization tool for designing meditation hall.

Keywords: Augmented Reality, Virtual Reality, Visualization, Meditation Hall.



# TOPIC : ' Cost- effective AR / VR interactive Sandbox for better learning of topography in Landscape Architecture education using upcycled material

PROJECT CATEGORY : ENGINEERING / TECHNOLOGY

METHODOLOGY :

PROJECT VISION :

- The project was developed with a vision to provide a replica of an apparatus that helps students to understand the topography of a certain section of land construction giving them the ability to visualize their product in a 3-D model.
- The project is cost- effective and made of recycled, upcycled or reused materials.



Hardware



Build



Basic control



Software



Calibration



Additional features

PROJECT OBJECTIVES :

- To build an augmented reality, virtual reality experiential apparatus that will enable students as well as faculty members to experiment with contours on their site and draw inferences on the basis of the drawings generated.
- To create avenue for students to explore the technological advancements that will soon be widely used in the field of architecture.
- To build a cost-effective model by understanding the basic working of a system/technology.

SCOPE AND LIMITATIONS :



- Cost effective
- Recycle Reuse
- Hands-on working



- Study topography
- Hydrology pattern
- Storm water



- Experiential
- Drawing extraction



- Multi-user sensor-interactive design



- Currently used by BNCA students and faculty only



- Space requirement
- Maintenance of apparatus

USER GROUP :

- Architecture students- UG, PG(Landscape, Digital, Environmental architecture)

SIGNIFICANCE :

- Understanding and visualising response of land to design intervention is crucial and important.
- Easy to understand hydrology and storm water pattern on site.

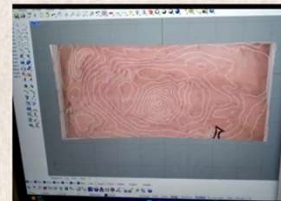
AR / VR SANDBOX WORKING :



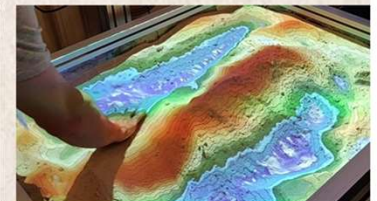
Sandbox - Sawdust from Furniture Lab at BNCA is used



Analysing the patterns created in sawdust, projected on computer



Drawings generated on computer can be extracted



Elevations and valleys shown in AR sandbox  
Dark-light : High-low ; Blue : Water:Depression

## Winner 1

**Category: Engineering and Technology**

**Level: PG**

**Name :Ananya Joglekar**

**Topic: Development of Cost-effective AR-VR Interactive Sandbox for better learning of Topography in Landscape Architecture Education using Upcycled materials**

## ABSTRACT

Education in environmental science has gained importance and has been integrated into education from the pre-primary to post-graduation level. The understanding of landscape topography, and land profiles is necessary for a better understanding of the landscapes and the environment around us.

There are available devices in the market that make students understand landscape topography which are way too costly. There is a need to build a cost-effective device that is a replica of the costly model setup, which can be used for learning and understanding landscape topography, hydrology, and other landscape parameters for educational / Institutional setups. The working of the devised setup is 'Hands-on' in nature supporting, interactive, tactile, and effective visualization using augmented reality and mixed reality for a better understanding of the land, landforms, and landscapes.

# URBAN ABANDONED QUARRY'S COEXISTENCE WITH PUNE CITY

**AIM**  
To find out how urban abandoned quarries and Pune city coexist.

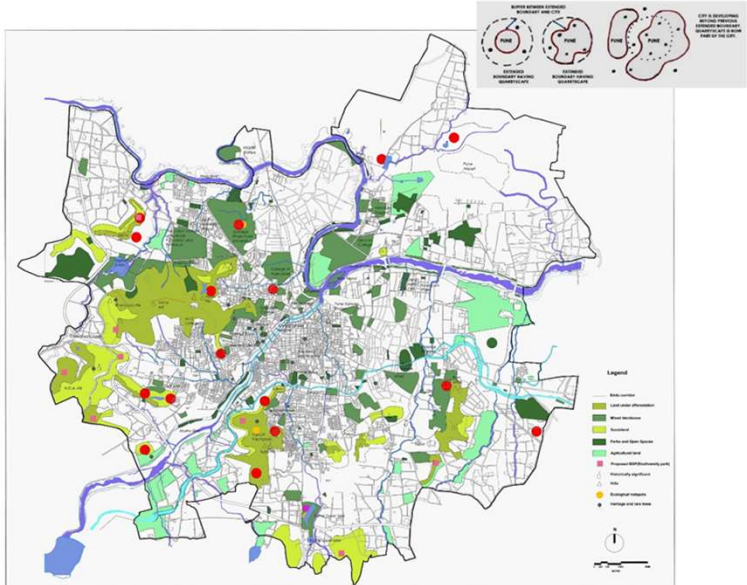
**Objectives of the study**

1. To identify significance of abandoned quarries
2. To find out the existence of abandoned quarries in urban setting as Pune city.
3. To analyse the characteristic of each quarry site concerning, its existence in urban area under different parameters.
4. To analyse the coexistence of the abandoned quarries and Pune City.

**SCOPE**  
Shape a future where the green infrastructure of city and existing abandoned quarryscape go hand in hand by adapting practices that prioritize co-existence

**LIMITATIONS**  
The study is limited to urban abandoned stone quarries under Pune city's administration boundary. Fifteen quarries were identified and mapped within urban administrative boundary of Pune city.

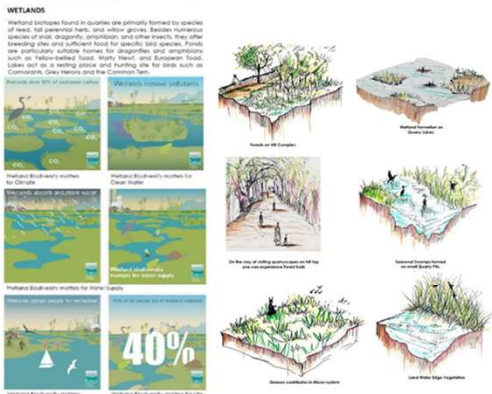
**METHODOLOGY**  
The present research starts with understanding the topic in detail, and analysing the quarries with all aspects. Data related to the quarries was collected through literature, inventories; site visits/field surveys, questionnaire surveys, interviews, observations, etc. Based on this data, comparative analysis all findings are derived. A total of fifteen quarries were identified in Pune based on the map sourced from Survey of India, the national mapping agency open series map and verified through site visits done during the study.



Pune city map showing location of quarries and designated open spaces Pune the city of hills and rivers; Landscape Foundation, India2018 <http://www.lajournal.in/maps.asp>



## Different interfaces along the quarry



## POSSIBLE USAGE OF ABANDONED QUARRIES

While planning for city's green infrastructure of derelict land-abandoned quarry Ideas should design with respect to nature which is already neglected while doing mining. Activities should not disturb the natural ambience it should invite people to experience it. Activities which one can experience, explore nature Without interrupting its own character.



## CONCLUSION

**Winner 1**

**Category: Humanities , Languages and Fine Arts**

**Level: Ph.D.**

**Name :Shivali Lalbige**

**Topic: Development of Cost-effective AR-VR Interactive Sandbox for better learning of Topography in Landscape Architecture Education using Upcycled materials**

## ABSTRACT

The present research starts with understanding the topic in detail and analysing the quarries with all aspects. Data related to the quarries was collected through literature, inventories; site visits/field surveys, questionnaire surveys, interviews, observations, etc. Based on this data, comparative analysis all findings are derived. A total of fifteen quarries were identified in Pune based on the map sourced from Survey of India, the national mapping agency open series map and verified through site visits done during the study. The research project identifies the potential of abandoned quarries and explores innovative approaches for its adaptive reuse as urban green infrastructure of Pune.

## **AVISHKAR 2023- Student Competition**

### **List of students participated in all categories and levels**

Competition- AVISHKAR 2023,  
Institute Level BNCA, SPPU,  
PUNE

| Ph.D. | Number | Name- participant | Surname- Participant | Research Topic/Title                                 | Contact Email id            | Contact Number | Signature/ attendance | Humanities, Languages, Fine Arts, etc. | Commerce, Management, Law etc. | Pure Science & Agricultural Technology and Animal Husbandry | Engineering & Pharmacy | Medical |
|-------|--------|-------------------|----------------------|--|-----------------------------|----------------|-----------------------|--|--------------------------------|---|------------------------|---------|
|       | 1      | Shivali           | Lalige               | Urban abandoned quarry's coexistence with Pune City. | shivalilalige.phd@gmail.com | 9923035955     | <i>Shalige.s</i>      | H//FA                                  | C/M/I                          | PS/A/A<br>H   | ET                     | MF      |
|       |        |                   |                      |  |                             |                |                       |  |                                |   |                        |         |
|       |        |                   |                      |  |                             |                |                       |  |                                |   |                        |         |

Ph.D. 2

Competition- AVISHKAR 2023,  
Institute Level BNCA, SPPU,  
PUNE

| PG | Number | Name -participant | Surname-Participant | Research: Topic/Title   | Contact Email id      | Contact Number | Signature/attendance | H/L/FA | C/M/L | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|----|--------|-------------------|---------------------|---|-----------------------|----------------|----------------------|--------|-------|--|--------------------------|-----------------------|
|    | 1      | Anarinya          | Joglekar            | Development of Cost-effective AR-VR Interactive Sandbox for better learning of Topography in Landscape Architecture Education using Upcycled materials. | ajoglekar11@gmail.com | 8149142270     | <i>Ajoglekar</i>     | H/L/FA | C/M/L | PS/A/AH ET                                     | yes                      | MF                    |
|    |        |                   |                     |   |                       |                |                      |        |       |  |                          |                       |
|    |        |                   |                     |   |                       |                |                      |        |       |  |                          |                       |
|    |        |                   |                     |   |                       |                |                      |        |       |  |                          |                       |

PG 3

Competition- AVISHKAR 2023,  
Institute Level BNCA, SPPU, PUNE

| 4A | No. Name - participant | Surname- Participant | Research Topic/Title   | Contact Email Id   | Contact Number | Signature/ attendance | Humanities, Language & fine art | Commerce, Management, Law etc. | Pure Science & Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|----|------------------------|----------------------|--|--|----------------|-----------------------|---------------------------------|--------------------------------|---|--------------------------|-----------------------|
|    | 1 Sakshi               | Sonawane             | Maximising Space Efficiency: The role of passive circulation systems in Small Housing                | <a href="mailto:sonawanesakshi25@gmail.com">sonawanesakshi25@gmail.com</a>           | 8275544257     |                       | A                               |                                | PS/A/AH   | ET                       | MF                    |
|    | 2 Utkarsha             | Bhure                | Role of deconstructivism in post Industrial era of Pune.   | <a href="mailto:utkarshabhure18@gmail.com">utkarshabhure18@gmail.com</a>             | 9588654509     |                       | H                               |                                |   |                          |                       |
|    | 3 Srija                | Mitra                | Role of graphic design principles in architecture  | <a href="mailto:srija142.srijam@bnca.ac.in">srija142.srijam@bnca.ac.in</a>           | 9130932921     |                       | FA                              |                                |   |                          |                       |
|    | 4 Vaishnavi            | Jadhav               | Urban Conservation through the lens of regionalism.  | <a href="mailto:vaishnavijadhav242403@gmail.com">vaishnavijadhav242403@gmail.com</a> | 9623845259     |                       | H                               |                                |   |                          |                       |
|    | 5 Anagha               | More                 | Exploring relationship between passive design strategies and human comfort in hot and dry climate in | <a href="mailto:moreanagha31@gmail.com">moreanagha31@gmail.com</a>                   | 8237248466     |                       |                                 |                                |   | ET                       |                       |
|    | 6 Riya                 | Mane                 | Utilization and incorporation of smart building appliances in affordable and low cost housing.       | <a href="mailto:a20157.rivam@bnca.ac.in">a20157.rivam@bnca.ac.in</a>                 | 9881564387     |                       | H                               |                                |   | ET                       |                       |
|    | 7 Sabhyata             | Page                 | Recycling architectural model  | <a href="mailto:a20131.sabhyatap@bnca.ac.in">a20131.sabhyatap@bnca.ac.in</a>         | 9326152409     |                       |                                 |                                |   |                          |                       |
|    | 8 Isha                 | Singh                |  |  |                |                       |                                 |                                |   |                          |                       |
|    | 9 Krishnali            | Shrimali             |  |  |                |                       |                                 |                                |   |                          |                       |

4A

Competition-AVISHKAR 2023,  
Institute Level BNCA, SPPU, PUNE








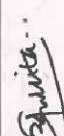
| 4A. |             |            |  |  |  |                             |            |  |  |  |  |  |  |  |  |
|-----|-------------|------------|--|--|--|-----------------------------|------------|--|--|--|--|--|--|--|--|
|     |             |            |  |  |  |                             |            |  |  |  |  |  |  |  |  |
| 10  | Swapnali    | Power      |  | Role of alternate construction materials as a masonry  | Role of alternate construction materials as a masonry  | a20047.swapnali@bnca.ac.in  | 9284240031 |  |  |  |  |  |  |  |  |
| 11  | Akanksha    | Sinha      |  | Performative architecture facade design of office buildings  | Performative architecture facade design of office buildings  | akanksha4011@gmail.com      | 8839960604 |  |  |  |  |  |  |  |  |
| 12  | VAIBHAVI    | MEHER      |  | EVOLUTION OF LANDSCAPE DURING PESHWA PERIOD  | EVOLUTION OF LANDSCAPE DURING PESHWA PERIOD  | mehervai17.11@gmail.com     | 9307477546 |  |  |  |  |  |  |  |  |
| 14  | sakshi      | kokare     |  | use of alternative material for better sustainability of interior spaces of buildings              | use of alternative material for better sustainability of interior spaces of buildings              | sakshidkokare3366@gmail.com | 7083213366 |  |  |  |  |  |  |  |  |
| 15  | SHREYA      | KALE       |  | Construction and Demolition waste and role of an Architect   | Construction and Demolition waste and role of an Architect   | a20051.shreyak.bnca.ac.in   | 7768876272 |  |  |  |  |  |  |  |  |
| 16  | Mrunal      | Sahaje     |  | different roof profiles and its effect on human thermal comfort in hot and dry climate.            | different roof profiles and its effect on human thermal comfort in hot and dry climate.            | mrunalsahaje@gmail.com      | 9405248508 |  |  |  |  |  |  |  |  |
| 17  | Nishigandha | Gojavgunde |  | Use of AR, VR in design thinking in architectural education  | Use of AR, VR in design thinking in architectural education  | nishagolamgunde@gmail.com   | 9689433000 |  |  |  |  |  |  |  |  |
| 18  | Janhavi     | Omergekar  |  | Facade design and day light quality of its occupants in office buildings for sustainable outcomes. | Facade design and day light quality of its occupants in office buildings for sustainable outcomes. | lomeergekar@gmail.com       | 8275472900 |  |  |  |  |  |  |  |  |
| 19  | Vaidehi     | Joshi      |  | Dynamic nature of videography capture th   | Dynamic nature of videography capture th   | vaijoshi2003@gmail.com      | 9175212003 |  |  |  |  |  |  |  |  |
| 20  | Anandi      | Jawkar     |  | Factors influencing psychological comfort of users in office buildings.                            | Factors influencing psychological comfort of users in office buildings.                            | a20065.anandji@bnca.ac.in   | 9175158874 |  |  |  |  |  |  |  |  |
| 21  | Samruddhi   | Ise        |  | Use of IoT in kitchen for ease of visually impaired people   | Use of IoT in kitchen for ease of visually impaired people   | a20033.samruddhi@bnca.ac.in | 7264804127 |  |  |  |  |  |  |  |  |

Competition- AVISHKAR 2023,  
Institute Level BNCA, SPPU, PUNE

| 4A |          |            |   |                             |            | Humanities, Language & Fine art | Commerce, Management, Law etc. | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|----|----------|------------|---|-----------------------------|------------|---------------------------------|--------------------------------|--|--------------------------|-----------------------|
| 22 | Swarali  | Manjarekar | Assessment of the nature of urban voids and adapting reusable design strategy                   |                             |            |                                 |                                |  |                          |                       |
| 23 | Divya    | Jadhav     | Comparative Analysis of old wada and modern house for green building parameters                 | divyariadhav26@gmail.com    | 7507192798 |                                 |                                |  |                          |                       |
| 24 | Janhavi  | Ganjiwale  | Exploring materials and construction techniques used in biomimicry buildings in India           | janhaviganjiwale@gmail.com  | 9284569041 |                                 |                                |  |                          |                       |
| 25 | Hitanshi | Chopda     | Making residential spaces functionally efficient by application of traditional wisdom of wada   | a20041.hitanshi@bnca.ac.in  | 7720088866 |                                 |                                |  |                          |                       |
| 26 | Mayuri   | Dushing    | Application of Vastu Shastra Principles for Enhancing Of Human Comfort in Residential Building. | a20001.mayurid@bnca.ac.in   | 8380090374 |                                 |                                |  |                          |                       |
| 27 | Samrudhi | Dhokale    | comparative analysis of thermal comfort in steel and R.C.C residential buildings in India       | a20149.samrudhi@bnca.ac.in  | 960756717  |                                 |                                |  |                          |                       |
| 28 | Sampada  | Chobihe    | Assessing recreational spaces for elderly people in old age homes                               | a20086.sampadac@bnca.ac.in  | 7757993307 |                                 |                                |  |                          |                       |
| 29 | Navyutha | Virod      | Eco Landscape Development at Shailesh Society Open space with Community Participation           | a20087.navyuthav@bnca.ac.in | 9607513872 |                                 |                                |  | H                        |                       |
| 30 | Saba     | Shaikh     | Plant selection criteria for individual apartment building                                      | a20109.sabhas@bnca.ac.in    | 9370157813 |                                 |                                |  | H                        |                       |
| 31 | Ankita   | Sangtani   | Enhancing autism- Friendly education : A survey on school and surroundings and understanding.   | a20106.ankitas@bnca.ac.in   | 7758996705 |                                 |                                |  |                          |                       |




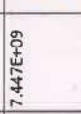
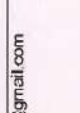

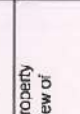

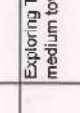
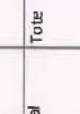
Competition- AVISHKAR 2023,  
Institute Level BNCA, SPPU, PUNE

|    |          |            |   |  |            |   | Humanities, Language & Fine art | Commerce, Management, Law etc. | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|----|----------|------------|---|--|------------|---|---------------------------------|--------------------------------|--|--------------------------|-----------------------|
| 4A |          |            |   |  |            |   |                                 |                                |  |                          |                       |
| 22 | Swarali  | Manjarekar | Assessment of the nature of urban voids and adapting reusable design strategy                   |  |            |   |                                 |                                |  |                          |                       |
| 23 | Divya    | Jadhav     | Comparative Analysis of old wada and modern house for green building parameters                 | <a href="mailto:divyariadhav26@gmail.com">divyariadhav26@gmail.com</a>         | 7507192798 |   |                                 |                                |  |                          |                       |
| 24 | Janhavi  | Ganjiwale  | Exploring materials and construction techniques used in biomimicry buildings in India           | <a href="mailto:ianhaviganjiwale@gmail.com">ianhaviganjiwale@gmail.com</a>     | 9284569041 |    |                                 |                                |  |                          |                       |
| 25 | Hitanshi | Chopda     | Making residential spaces functionally efficient by application of traditional wisdom of wada   | <a href="mailto:a20041.hitanshitc@bnca.ac.in">a20041.hitanshitc@bnca.ac.in</a> | 7720088866 |    |                                 |                                |  |                          |                       |
| 26 | Mayuri   | Dushing    | Application of Vastu Shastra Principles for Enhancing Of Human Comfort in Residential Building. | <a href="mailto:a20001.mayurid@bnca.ac.in">a20001.mayurid@bnca.ac.in</a>       | 8380090374 |    |                                 |                                |  |                          |                       |
| 27 | Samrudhi | Dhokale    | comparative analysis of thermal comfort in steel and R.C.C residential buildings in India       | <a href="mailto:a20149.samrudhid@bnca.ac.in">a20149.samrudhid@bnca.ac.in</a>   | 9607756717 |    |                                 |                                |  |                          |                       |
| 28 | Sampada  | Chobhe     | Assessing recreational spaces for elderly people in old age homes                               | <a href="mailto:a20086.sampadac@bnca.ac.in">a20086.sampadac@bnca.ac.in</a>     | 7757993307 |   |                                 |                                |  |                          |                       |
| 29 | Navyutha | Vinod      | Eco Landscape Development at Shailesh Society Open space with Community Participation           | <a href="mailto:a20087.navyuthav@bnca.ac.in">a20087.navyuthav@bnca.ac.in</a>   | 9607513872 |  | H                               |                                |  |                          |                       |
| 30 | Saba     | Shaikh     | Plant selection criteria for individual apartment building                                      | <a href="mailto:a20109.sabas@bnca.ac.in">a20109.sabas@bnca.ac.in</a>           | 9370157813 |  | H                               |                                |  |                          |                       |
| 31 | Ankita   | Sangtani   | Enhancing autism- friendly education : A survey on school and surroundings and understanding.   | <a href="mailto:a20106.ankitas@bnca.ac.in">a20106.ankitas@bnca.ac.in</a>       | 7758996705 |  |                                 |                                |  |                          |                       |

4B

| Number | Name - participant | Surname- Participant | Research Topic/Title  | Contact Email id            | Contact Number | Signature/ attendance | Humanities, Languages, Fine Arts, etc. | Commerce, Management, Law etc. | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|--------|--------------------|----------------------|---|-----------------------------|----------------|-----------------------|--|--------------------------------|--|--------------------------|-----------------------|
| 1      | Sheha              | Pati                 | Livability in Housing   | shehapatil17@gmail.com      | 9186924532     |                       | Yes (H)                                |                                | PSIA/JA H                                      | ET                       | MF                    |
| 2      | Fizza              | Shivji               | The role of architecture and interior design in retail spaces: malls  | fizzashivji@gmail.com       | 9156807003     |                       |  |                                |  | Yes                      |                       |
| 3      | Paik               | Rathi                | Barriers and motivators of modular construction   | paikrathik602@gmail.com     | 9575149703     |                       |  |                                |  | Yes                      |                       |
| 4      | Vaisnavi           | Shinde               | Construction and Demolition Waste Management  | vaisnavishinde123@gmail.com | 9923748714     |                       |  | Yes (M)                        |  | Yes                      |                       |
| 5      | Sakshi             | Bradar               | Role of public art towards improving quality of life  | sakshibr173@gmail.com       | 9748922481     |                       | Yes (FA)                               |                                |  |                          |                       |
| 6      | Hrishita           | Alekar               | Slum Redevelopment  | hrishitaalekar0@gmail.com   | 902733484      |                       | Yes (H)                                | Yes (L)                        |  |                          |                       |
| 7      | Anvesha            | Mehzabe              | EVOLUTION OF DESIGN: A COMPARATIVE STUDY OF SET DESIGN AND REAL-LIFE HOME INTERIORS TYPICALLY OF MAHARASHTRA ACROSS ERAS. | anveshamehzabe123@gmail.com | 9970944917     |                       | Yes (H)                                |                                |  |                          |                       |
| 8      | Sakshi             | Bejj                 | Set design in theatres  | sakshibejj@gmail.com        | 9168696966     |                       |  |                                |  |                          |                       |
| 9      | Vrushali           | Shete                | Contemporary trends in temple architecture  | vrushalishete1202@gmail.com | 7216270886     |                       | Yes (H)                                |                                |  |                          |                       |
| 10     | Ketaki             | Badhe                | Perception of rooftop gardens in hotels   | ketakibadhe11@gmail.com     | 7387864271     |                       | Yes (H)                                | Yes (M)                        |  |                          |                       |
| 11     | Kashish            | Dawada               | Analysing comfort quality of work cafes promoting co-working culture  | kashishdawada@gmail.com     | 9152430508     |                       | Yes (H)                                |                                |  |                          |                       |
| 12     | Rutuja             | Jadhavrao            | A study of healing effects of hospital healing gardens  | rutujajadhavrao1@gmail.com  | 8886666628     |                       | Yes (H)                                |                                |  |                          |                       |
| 13     | Riddhi             | Doshi                | Trends of bamboo used in contemporary architecture India  | riddhidoshi2003@gmail.com   | 7721875111     |                       | Yes (FA)                               |                                |  |                          |                       |
| 14     | Saachi             | Yadav                | Trends in New Religious Spaces  | saachiyadav0775@gmail.com   | 7030732777     |                       |  |                                |  |                          |                       |
| 15     | Darshika           | Patil                | To understand how the interior spaces in cafe/dining restaurants in Pune affect the user perspective                      | darshikapatil@gmail.com     | 7620188888     |                       | Yes (H)                                |                                |  |                          |                       |
| 16     | Agni               | Nuvare               | Analysing elements giving malleability to a street  | agninuvare21@gmail.com      | 8530164165     |                       | Yes (HL)                               |                                |  |                          |                       |
| 17     | Srujithi           | Lemita               | Role of colour affecting livable spaces   | srujithilemita@gmail.com    | 9423983610     |                       | Yes (FA)                               |                                |  |                          |                       |
| 18     | Vaishali           | Chitale              | Investigating the design of office building based on green building norms   | vaishalichitale@gmail.com   | 9000975873     |                       | Yes (M)                                |                                |  |                          |                       |
| 19     | Pratyaksha         | Sangra               | Preferences of citizens regarding their front development   | pratyakshasangra@gmail.com  | 7083198260     |                       | Yes (H)                                |                                |  |                          |                       |
| 20     | Komal              | Kadam                | The future of bricks: exploring agricultural waste based bricks in sustainable construction                               | komalkadam3@gmail.com       | 8087391327     |                       |  |                                |  |                          |                       |
| 21     | Ganesh             | Ravhans              | Relationships between spaces in institutional buildings and students  | ganeshravhans@gmail.com     | 7750018720     |                       | Yes (H)                                |                                |  |                          | Yes                   |

| 4B | Number | Name - participant | Surname- Participant | Research Topic/Title  | Contact Email id             | Contact Number | Signature/ attendance | Humanities, Languages, Fine Arts, etc. | Commerce, Management, Law etc. | Pure Sciences, Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|----|--------|--------------------|----------------------|---|------------------------------|----------------|-----------------------|--|--------------------------------|---|--------------------------|-----------------------|
|    | 22     | Surbhi             | Sahuj                | Open spaces in residential societies affecting senior citizen's livability factors                          | sahujasurbhi@gmail.com       | 9595291768     |                       | H/IFA<br>Yes (H)                       | C/M/L                          | PS/JANA H                                       | ET                       | M/F                   |
|    | 23     | Shivani            | Kadam                | Reason for decline in Vernacular Architecture   | shivnidhishan2002@gmail.com  | 8010252341     |                       | Yes (F)                                |                                |   |                          |                       |
|    | 24     | Riddhi             | Doshi                | Trends of bamboo used in contemporary architecture, India   | rdhosani2003@gmail.com       | 7721979111     |                       | Yes (FA)                               |                                |   |                          |                       |
|    | 25     | Geetika            | Prachan              | Impact of Passive Design Strategies on Energy Efficiency of Residential Buildings in Warm and Humid Climate | geetika.p1512@gmail.com      | 9511768808     |                       |  |                                |   | Yes                      |                       |
|    | 26     | Nisha              | Soni                 | Study of net zero energy buildings in india   | nishasoni6714@gmail.com      | 6963681772     |                       |  |                                |   |                          |                       |
|    | 27     | Srushthi           | Nagnote              | cultural symbolism in earthquake resistant structure  | srushthimagnote14@gmail.com  | 8010644373     |                       | Yes (F)                                |                                |   |                          |                       |
|    | 28     | Tejal              | Bera                 | Urban Assessment of pune streets with the help of Urban Design Qualities                                    | tejalbera19@gmail.com        | 9322871909     |                       | Yes (H)                                |                                |   |                          |                       |
|    | 29     | Vedanti            | Acharya              | Visualizing Meditation hall in Ar, Vr, and Mir<br><b>AK, VPS</b><br><b>meditation hall design approach</b>  | vedanti.acharya@gmail.com    | 9669994544     |                       |  |                                |   | Yes                      |                       |
|    | 30     | Kesluri            | Nerkar               | Comparative analysis of parametric structures   | 027kastumarkar@gmail.com     | 9861245556     |                       |  |                                |   |                          |                       |
|    | 31     | Vedanti            | Kashid               | Transformation of traditional houses in Fali, Kolkat  | vedantakashid@gmail.com      | 9145689132     |                       | Yes (H)                                |                                |   |                          |                       |
|    | 32     | Aranya             | Sakle                | A study in walkability and neighbourhood connectivity in Pune   | aranya_sakle@gmail.com       | 9820081844     |                       |  |                                |   |                          |                       |
|    | 33     | Priya              | Hewale               | Design criteria of sustainable urban parks in pune  | priyahewale10@gmail.com      | 7758886696     |                       | Yes (H)                                |                                |   |                          |                       |
|    | 34     | Radhika            | Supetkar             | Heritage structures in Kopergaon  | radhikasupetkar09@gmail.com  | 9730028645     |                       |  |                                |   |                          |                       |
|    | 35     | Hiemansha          | Mali                 | Historic Water Architecture of Shirpur  | hiemansha705na@gmail.com     | 7796259028     |                       | Yes (H)                                |                                |   |                          |                       |
|    | 36     | Priyanka           | Grankale             | Implementation of interior Branding in Retail Interior Design   | grankalepriyanka72@gmail.com | 9991856361     |                       | Yes (H)                                |                                |   |                          |                       |
|    | 37     | Isha               | Belpai               | How cultural symbolism of public open spaces has changed w.r.t. time  | ishabelpai25@gmail.com       | 893761575      |                       | Yes (F)                                |                                |   |                          |                       |
|    | 38     | Gaurani            | Dakwale              | Gathering Spaces in institutional hostels in India  | Gaurani.dakwale@gmail.com    | 7026686245     |                       | Yes (H)                                |                                |   |                          |                       |

|    |        | Competition- AVSHIKAR 2023,<br>Institute Level BNCA, SPPU, PUNE |                      |  |                             |                |   |  |                                |                                      |                          |                       |  |  |  |  |  |  |
|----|--------|---|----------------------|--|-----------------------------|----------------|---|--|--------------------------------|--------------------------------------|--------------------------|-----------------------|--|--|--|--|--|--|
| 4C | Number | Name - participant  | Surname- Participant | Research Topic/Title   | Contact Email id            | Contact Number | Signature/ attendance   | Humanities, Languages, Fine Arts, etc. | Commerce, Management, Law etc. | Pure Sciences Agriculture and Animal | Engineering & Technology | Medicine and Pharmacy |  |  |  |  |  |  |
|    |        |   |                      |  |                             |                |   | H/L/FA                                 | C/M/L                          | PS/A/AH                              | ET                       | MF                    |  |  |  |  |  |  |
|    | 1      | Khyati  | Latkar               | A STUDY OF FACTORS AFFECTING THE BEHAVIOUR AND RESPONSES OF UNDERGRADUATE ARCHITECTURE STUDENTS IN ARCHITECTURE DESIGN JURIES          | conladyemai17@gmail.com     | 9.89E+09       |      | Yes                                    |                                |                                      |                          |                       |  |  |  |  |  |  |
|    | 2      | Chandramoulika  | Muddana              | Experimental Research on Sawdust concrete  | moulika702@gmail.com        | 7.447E+09      |      |  |                                |                                      | Yes                      |                       |  |  |  |  |  |  |
|    | 3      | Rama  | Velankar             | Studying the role of aesthetics in architecture of art galleries   | ramavelankar2001@gmail.com  | 9.805E+09      |     | Yes                                    |                                |                                      |                          |                       |  |  |  |  |  |  |
|    | 4      | JANHAVI   | Pati                 | Integrating Artificial Intelligence in Architectural Education and Practice: Perspectives from Students, Professors, and Practitioners | janupatil0831@gmail.com     | 8.665E+09      |    |  |                                |                                      | Yes                      |                       |  |  |  |  |  |  |
|    | 5      | Meghna  | Apte                 | Factors influencing residential property selection: A comprehensive review of individual preferences                                   | msaple28.2017@gmail.com     | 9.075E+09      |    | Yes                                    |                                |                                      |                          |                       |  |  |  |  |  |  |
|    | 6      | Veulika   | Somani               | Influence of Culture on the Imagery of streets in pune   | somanivedika2@gmail.com     | 8.459E+09      |   | Yes                                    |                                |                                      |                          |                       |  |  |  |  |  |  |
|    | 7      | Maitreyee   | Bakare               | Exploring Temples as public spaces in medium towns in Maharashtra  | a20004.maitreyee@bnca.ac.in | 7.62F+09       |  | Yes                                    |                                |                                      |                          |                       |  |  |  |  |  |  |
|    | 8      | Sejal   | Tote                 | Analysing the impact of the choice of materials on the design of the residential projects. A case of Pune.                             | sejalote007@gmail.com       | 7.028E+09      |  |  |                                |                                      | Yes                      |                       |  |  |  |  |  |  |

4C 10

|    |         |               |  |  | Competition- AVISHKAR 2023,<br>Institute Level BNCA, SPPU, PUNE |           |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----|---------|---------------|--|--|---|-----------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 4C |         |               |  |  |   |           |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9  | Namita  | Pawar         | ASSESSING THE USEFULNESS OF BIM IN AN ARCHITECT'S OFFICE   |  | namitapawar1206@gmail.com                                       | 7.058E+09 | AB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Anushka | Bijve         | APPLICABILITY OF USE OF GREEN ROOF SYSTEM IN RESIDENTIAL BUILDING IN CLIMATE OF NAGPUR                     |  | a20080anushkab@bnca.ac.in                                       | 7.822E+09 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | SIDDHI  | Twaskar       | Study the effect of furniture layouts for productivity & comfort of users & employees. Case of Banks       |  | siddhitwaskar6128@gmail.com                                     | 9.834E+09 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Anya    | Purse         | Exploring Fly-Ash as an Eco-friendly Component for internal wall plastering                                |  | purnesanya@gmail.com  | 8.554E+09 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | POOJA   | Bafna         | EFFECTIVENESS OF DOUBLE SKIN FACADE IN INSTITUTIONAL BUILDINGS   |  | bafnap16@gmail.com  | 8.53E+09  | AB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Abhaya  | Babhulkar     | Integration of Architecture and Visual Arts  |  | a20044.abhayab@bnca.ac.in                                       | 9.113E+09 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Bela    | Dharmadhikari | To study the design of urban local parks , and its influence on the use by senior citizens (case of Pune ) |  | dharmadhikaribela@gmail.com                                     | 8.33E+09  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Shruti  | Somvanshi     | Analysis of recycled materials in Interior Spaces  |  | somvanshi0509@gmail.com   | 7.621E+09 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Shreya  | Toraskar      | To study biophilic design strategies for design of healing spaces.   |  | toraskarshreya19@gmail.com                                      | 8.983E+09 |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Nishka  | Gada          | Analysis of changing choices of Generation Z for residential buildings                                     |  | ngada1100@gmail.com   | 9.82E+09  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|    |           |          |  |  | Competition- AVISHKAR 2023,<br>Institute Level BNCA, SPPU, PUNE                        |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----|-----------|----------|--|--|--|------------------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 4C |           |          |  |  |  |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Radhika   | Kale     |  |  | The effect of interior design on human behaviour in residential spaces.                | rradhakale@gmail.com         | 9.021E+09 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Maithil   | Bang     |  |  | Adaptive thermal comfort in high rise buildings in Pune                                | maithil2728@gmail.com        | 9.764E+09 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | SAI       | Jagtap   |  |  | Comparison Between Smart & traditional lighting systems for energy efficiency          | saijagtap54@gmail.com        | 9.285E+09 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Abhilasha | Pawar    |  |  | Comparative study of structural systems of High-rise                                   | abhilashapawar0404@gmail.com | 8.805E+09 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | Tanava    | Takale   |  |  | Use of Textile Waste in material for 3D Printing                                       |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Diya      | Jain     |  |  | Enhancing Architectural spaces through Art Installations                               |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | Samruddhi | Mungaze  |  |  | Benefits of adaptable & convertible furniture in Interiors                             |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | Manasvee  | Dixit    |  |  | Analysis of factors affecting way finding in public spaces: Case of Shopping Malls     |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | Akanksha  | Dhumal   |  |  | Role of VR in Enhancing Architectural presentations                                    |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | Nikita    | Bedmutha |  |  | Investigating toxic gas emissions from pet bottles structures <i>Human Performance</i> |                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |

|    |           | Competition- AVISHKAR 2023,<br>Institute Level BNCA, SPPU, PUNE |   |  |  |  |  |  |  |  |   |                                      |   |                             |                             |  |
|----|-----------|---|---|--|--|--|--|--|--|--|---|--------------------------------------|---|-----------------------------|-----------------------------|--|
|    |           |   |   |  |  |  |  |  |  |  | Humanities,<br>Languages,<br>Fine Arts, | Commerce,<br>Management,<br>Law etc. | Pure<br>Sciences<br>Agriculture<br>and Animal | Engineering &<br>Technology | Medicine<br>and<br>Pharmacy |  |
| 4C |           |   |   |  |  |  |  |  |  |  |   |                                      |   |                             |                             |  |
| 29 | Anandita  | Dive  | Analyzing the socio-economic impact of Food Trucks on local communities                                     |  |  |  |  |  |  |  | Adve                                    |                                      |   |                             |                             |  |
| 30 | Shreya    | Dhawal  | Exploring the socio-historic context, Architectural traits & Cultural significance of godhis in Pune Region |  |  |  |  |  |  |  | Karnad                                  |                                      |   |                             |                             |  |
| 31 | Pradnya   | Morey   | Adaptive reuse of Industrial Buildings  |  |  |  |  |  |  |  | Pradnya                                 |                                      |   |                             |                             |  |
| 32 | Aditi     | Kolhe   | Thermal perf. of mud structures   |  |  |  |  |  |  |  | AD                                      |                                      |   |                             |                             |  |
| 33 | Vedika    | Kulkarni  |   |  |  |  |  |  |  |  | Vedika                                  |                                      |   |                             |                             |  |
| 34 | Sakshi    | Pabalkar  | Feasibility of glass as replacement for aggregate   |  |  |  |  |  |  |  | Sakshi                                  |                                      |   |                             |                             |  |
| 35 | Neha      | Patil   |   |  |  |  |  |  |  |  | NehaPatil                               |                                      |   |                             |                             |  |
| 36 | Shreyoshi | Sanyal  | Health Benefits of Urban Parks in Pune  |  |  |  |  |  |  |  | Shreyoshi                               |                                      |   |                             |                             |  |
| 37 |           |   |   |  |  |  |  |  |  |  |   |                                      |   |                             |                             |  |





ET: Eng. & Tech  
H: Humanity

Competition- AVISHKAR 2023,  
Institute Level BNCA, SPPU, PUNE

| Number | Name - participant | Surname- participant | Research Topic/Title  | Contact Email id           | Contact Number | Signature/ attendance | Humanities, Languages, Fine Arts, etc. | Commerce, Management, Law etc. | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|--------|--------------------|----------------------|---|----------------------------|----------------|-----------------------|--|--------------------------------|--|--------------------------|-----------------------|
| 40     |                    |                      |   |                            |                |                       |  |                                |  |                          |                       |
| 2      | Muskaan            | Joshi                | Students' Awareness of Safety Practices followed in case of an Emergency  | muskaanjoshi55@gmail.com   | +91 9405335225 |                       | H                                      |                                |  |                          | MF                    |
| 2      | Sayali             | Khare                | Lesser known deities and it's interrelation with socio cultural setting of Pune   | sayaalkhare2707@gmail.com  | +91 9518783219 |                       | H                                      |                                |  |                          |                       |
| 3      | Divya              | Ayyer                | People's perception towards steel residential building  | ayyerdivi15@gmail.com      |                |                       |  |                                |  | ET                       |                       |
| 4      | Revati             | Sangam               | Are the "Hostel Interiors" impacting on student's psychology?   | revati7602@gmail.com       | 9113539672     |                       |  |                                |  | ET                       |                       |
| 5      | Srushti            | Shinde               | Influence of outdoor spaces on residential living areas   | srushtishinde077@gmail.com | 9373631064     |                       |  |                                |  |                          |                       |
| 6      | Shreya             | Limble               | Importance of courtyard in institutional buildings  | shreyalimble22@gmail.com   | 8856970227     |                       | H                                      |                                |  | ET                       |                       |
| 7      | Tanuja             | Raut                 | Issues of safety practices on construction site   | tanujar64@gmail.com        | 7744879816     |                       |  |                                | C  |                          |                       |
| 8      | Vriddhi            | Bhosle               | Use of spaces in public parks<br>Analysing the public parks and an essential aspect of Urban life: Case PCMC Pune, Pune Garden. | bhoslevriddhi@gmail.com    | 9529611975     |                       | H                                      |                                |  |                          |                       |

ET-1

H-4

4015

| 4D |                 |         |   |                            |            |  | Humanities, Languages, Fine Arts, etc. | Commerce, Management, Law, etc. | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|----|-----------------|---------|---|----------------------------|------------|--|--|---------------------------------|--|--------------------------|-----------------------|
| 9  | Prajka          | Gavali  | EFFECTS OF ENCLOSURE ON WALKABILITY AND IMAGEABILITY OF URBAN STREETS   | gavali.p239@gmail.com      | 9579741998 |  |  |                                 |  | ET                       |                       |
| 10 | Esha            | Bhujbal | Analysis of natural light in office spaces  | eshabhujbal@gmail.com      | 9370237069 |  |  |                                 |  | ET                       |                       |
| 11 | Vaibhavi        | Kokate  | Risk analysis of landslide impacts on the village settlement through media elicitation : A case of Irshaiwadi | vaibhavi.kokate@brca.ac.in | 9764649914 |  |  | C                               |  |                          |                       |
| 12 | Rutuja          | Desai   | Why Youth attractive towards High Street (Balewadi High Street).  | rutuja.desai2204@gmail.com | 9922114780 |  |  |                                 |  | ET                       |                       |
| 13 | Anupriya        | Dhulaj  | Managing Solid Waste in MRS&S Campus.   | anupriyadhulaj@gmail.com   | 9372479671 |  |  |                                 |  |                          |                       |
| 14 | Shruti          | Veer    | Utility of spaces under Ayover  | shrutiv2002@gmail.com      | 9322663091 |  |  |                                 |  |                          |                       |
| 15 | Priganta Sambhu | Sambhu  | Analysis of relationship of Kathak with Architecture - towards form   | prigantasambhu@gmail.com   | 578559827  |  |  |                                 |  |                          |                       |
| 16 | Diksha          | Taskar  | Use of green spaces for social interaction; case study, Prague  | dikshatakar2001@gmail.com  | 7499691120 |  |  |                                 |  |                          |                       |
| 17 | Snigdha         | Shetty  | Community Participation and its relationship with community development                                       | snigdhashetty@gmail.com    | 982437124  |  |  |                                 |  |                          |                       |

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(7)

(10)

| 4D  |          |           |  |   | Humanities, Languages, Fine Arts, etc.        | Commerce, Management, Law etc. | Pure Sciences Agriculture and Animal Husbandry | Engineering & Technology | Medicine and Pharmacy |
|-----|----------|-----------|--|---|---|--------------------------------|--|--------------------------|-----------------------|
| 18. | Shubhata | Shivankar |  | Do Luxurious amenities assure quality of life in residential spaces?<br>Architectural design influencing set design                             | Shubhata Shivankar@gmail.com                  | 9168310246                     |  |                          |                       |
| 19. | Ashlesha | Durgule   |  | Comparison of different floor plans with respect to functionality, aesthetics. Individuals safety on busy road & lane of EC during day & night. | ashleshadurgule@gmail.com                     | 9137973757                     |  |                          |                       |
| 20. | Gruissla | Chadha    |  | Analysis of Interior lighting, Decor, color of a co-working cafe.   | <del>ggruissla</del> chadhagruissla@gmail.com | 7888044929                     |  |                          |                       |
| 21. | Isha     | Gore      |  |   | ishagore@gmail.com                            | 7378783308                     |  |                          |                       |
| 22. | Savita   | Dabwal    |  |   | savitadabwal@gmail.com                        | 9029280979                     |  |                          |                       |

23. Aditi Paw

Analyzing digital technology at heritage sites

aditipaw@gmail.com

7709931977

24. Sakshi Khaire

Condition assessment for Pandeshwar temple Nazare, Pune  
Impact of Outdoor Spaces on Elderly in Care Centre

7385051064

25. Siddhata Bendre

942118831

Division - A

AVISHKAR COMPETITION - ZONAL / COLLEGE LEVEL - 2023

| Sr.No   | Poster No  | Relevance (20 Marks) | Methodology opted (20 Marks) | Contribution (20 Marks) | Innovativeness (20 Marks) | Outcome (20 Marks)                 | Total (100 Marks) |
|---|--|----------------------|------------------------------|-------------------------|---------------------------|------------------------------------|-------------------|
| 1   | 06<br>Smart Tech- Policy in Affordability                | 15                   | 10                           | 05                      | 00                        | Not clear 10<br>partially clear 05 | 45                |
| 2   | 07<br>Recycling Architecture, Madhya Pradesh             | 12                   | 05                           | 05                      | 00                        | Not clear 05                       | 27                |
| 3   | 15<br>Role of Architecture in Recycling remaining waste  | 12                   | 00                           | 05                      | 00                        | Partially clear 05                 | 22                |
| 4   | 16<br>Thermal Performance of diff. roof profile in H/c   | 12                   | 12                           | 12                      | 05                        | Not clear 10                       | 49                |
| 5   | 21<br>IoT of kitchen for visually blind                  | 15                   | 12                           | 10                      | 05                        | Not clear 10                       | 52                |
| 6   | 24<br>Biomimicry & Biobuilding                           | 10                   | 05                           | 05                      | 05                        | Not clear 05                       | 30                |
| 7   | 27<br>KCC & Steel Component for Thermal Comfort          | 10                   | 05                           | 05                      | 05                        | Not clear 05                       | 30                |
| 8   | 28<br>Reinforced Spaces for old age home                 | 10                   | 10                           | 05                      | 00                        | Not clear 05                       | 30                |
| 9   | 29<br>Landscape Development with Community Participation | 10                   | 05                           | 05                      | 00                        | Not clear 05                       | 25                |
| 10  | 30<br>Plant Selection for individual apt                 | 10                   | 05                           | 05                      | 00                        | Not clear 05                       | 25                |
| Jun 1 Dr. Shruv Jeshi - SJF<br>Jun 2 Mr. Sayant Anandine - SM |  | 11 - 30              | R 10                         | M 10                    | C 05                      | I 00                               | 30                |

Integration of AI in Architecture Threat

18

25.09.23

Division - C

| AVISHKAR COMPETITION - ZONAL / COLLEGE LEVEL - 2023 |   |                      |                              |                         |                           |                                  |                   |  |  |
|---|---|----------------------|------------------------------|-------------------------|---------------------------|----------------------------------|-------------------|--|--|
| Sr. No  | Poster No   | Relevance (20 Marks) | Methodology opted (20 Marks) | Contribution (20 Marks) | Innovativeness (20 Marks) | Outcome (20 Marks)               | Total (100 Marks) |  |  |
| ③ ✓   | ⑥②<br>Expen mental<br>Research on<br>Student Com    | 15                   | 15                           | 10                      | 15                        | Not clear<br>10                  | 65                |  |  |
|   | ⑥⑥<br>Cultural<br>Imagery of<br>Streets.            | 10                   | 10                           | 10                      | 00                        | 05                               | <del>35</del> 35  |  |  |
| ⑤   | ⑥⑦<br>Temples as<br>Public<br>Space                 | 12                   | 10                           | 10                      | 00                        | 00                               | 32                |  |  |
| ④ ✓   | ①②<br>Flyash for<br>internal<br>plastering          | 15                   | 12                           | 12                      | 10                        | Not clear<br>10                  | 57                |  |  |
|   | ①⑧<br>Gen - 2<br>Randomised<br>Choices.             | 10                   | 05                           | 10                      | 00                        | Not clear<br>10                  | 35                |  |  |
| ① ✓   | ⑥③<br>T-shirt mask<br>for treatment<br>in mud block | 15                   | 15                           | 15                      | 15                        | Not clear<br>10                  | 70                |  |  |
| ⑤ ✓   | ⑥④<br>PET bottles<br>Thermal<br>Performance         | 12                   | 10                           | 10                      | 10                        | Not clear<br>10                  | <del>52</del> 52  |  |  |
| ② ✓   | ⑥⑨<br>Food Truck<br>Socio - Economic<br>Impact      | 15                   | 15                           | 10                      | 05                        | Not clear<br>padding entry<br>10 | 55                |  |  |
|   | ⑥⑤<br>Glass security<br>for aggregates etc          | 15                   | 10                           | 10                      | 10                        | Not clear<br>05                  | 50                |  |  |
|   | 10  |                      |                              |                         |                           |                                  |                   |  |  |

Jury-1 Dr. Shruni Joshi - ST  
 Jury-2 Av. Sayab Andhark - GM  
 25-09-23

| AVISHKAR COMPETITION - ZONAL / COLLEGE LEVEL - 2023 |           |                        |                                 |                            |                              |                       |                     |
|---|-----------|------------------------|---------------------------------|----------------------------|------------------------------|-----------------------|---------------------|
| Sr.No   | Poster No | Relevance<br>(20Marks) | Methodology opted<br>(20 Marks) | Contribution (20<br>Marks) | Innovativeness<br>(20 Marks) | Outcome<br>(20 Marks) | Total ( 100 Marks ) |
| H2*<br>1  | 2         | 10                     | 15                              | 15                         | 15                           | 15                    | 70                  |
| E2*<br>2  | 1         | 15                     | 15                              | 13                         | 12                           | 15                    | 65                  |
| 3   | 8         | 10                     | 11                              | 12                         | 10                           | 12                    | 55                  |
| 4   | 22        | 10                     | 10                              | 10                         | 10                           | 13                    | 53                  |
| 5   | 11        | 10                     | 12                              | 10                         | 10                           | 10                    | 52                  |
| 6   | 19        | 10                     | 10                              | 10                         | 10                           | 10                    | 50                  |
| 7   | 13        | 10                     | 09                              | 10                         | 10                           | 10                    | 49                  |
| 8   | 09        | 10                     | 10                              | 8                          | 8                            | 10                    | 46                  |
| 9   | 10        | 15                     | 15                              | 05                         | 05                           | 05                    | 45                  |
| 10  | 14        | 10                     | 15                              | 05                         | 05                           | 05                    | 40                  |

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| AVISHKAR COMPETITION - ZONAL / COLLEGE LEVEL - 2023 |           |                     |                              |                         |                           |                    |                   |  |  |
|---|-----------|---------------------|------------------------------|-------------------------|---------------------------|--------------------|-------------------|--|--|
| Sr.No   | Poster No | Relevance (20Marks) | Methodology opted (20 Marks) | Contribution (20 Marks) | Innovativeness (20 Marks) | Outcome (20 Marks) | Total (100 Marks) |  |  |
| H04 1   | 35        | 15                  | 15                           | 15                      | 15                        | 15                 | 75                |  |  |
| E104 2  | 29        | 15                  | 14                           | 14                      | 15                        | 14                 | 72                |  |  |
| 3   | 20        | 15                  | 15                           | 15                      | 15                        | 10                 | 70                |  |  |
| 4   | 33        | 15                  | 15                           | 15                      | 10                        | 10                 | 65                |  |  |
| 5   | 28        | 14                  | 15                           | 15                      | 10                        | 10                 | 64                |  |  |
| 6   | 25        | 14                  | 14                           | 14                      | 10                        | 10                 | 62                |  |  |
| 7   | 22        | 12                  | 14                           | 14                      | 10                        | 10                 | 60                |  |  |
| 8   | 12        | 11                  | 13                           | 14                      | 10                        | 10                 | 58                |  |  |
| 9   | 02        | 13                  | 15                           | 15                      | 10                        | 10                 | 63                |  |  |
| 10  | 01        | 11                  | 13                           | 14                      | 10                        | 10                 | 58                |  |  |

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| AVISHKAR COMPETITION - ZONAL / COLLEGE LEVEL - 2023 |                                |                     |                              |                         |                           |                    |                     |
|---|--------------------------------|---------------------|------------------------------|-------------------------|---------------------------|--------------------|---------------------|
| Sr.No   | Poster No                      | Relevance (20Marks) | Methodology opted (20 Marks) | Contribution (20 Marks) | Innovativeness (20 Marks) | Outcome (20 Marks) | Total ( 100 Marks ) |
| 1   | Sayali Khare (2)               | 10                  | 15                           | 15                      | 15                        | 15                 | 70                  |
| 2   | Muskan Joshi (1)               | 15                  | 15                           | 13                      | 12                        | 15                 | 68                  |
| 3   | Vandhi Bhosale (8)             | 10                  | 11                           | 12                      | 10                        | 12                 | 65                  |
| 4   | Sanika Dahiwale (2)            | 10                  | 10                           | 10                      | 10                        | 10                 | 58                  |
| 5   | Ashlesha Vaibha vi kokale (11) | 10                  | 10+2                         | 10                      | 10                        | 10                 | 52                  |
| 6   | Ashlesha Durgute (10)          | 10                  | 10                           | 10                      | 10                        | 10                 | 50                  |
| 7   | Anupriya Dhulaj (13)           | 10                  | 09                           | 10                      | 10                        | 10                 | 49                  |
| 8   | Prajakta Gavali (9)            | 10                  | 10                           | 08                      | 08                        | 10                 | 46                  |
| 9   | Esha Bhujbal (18)              | 15                  | 15                           | 05                      | 05                        | 08                 | 45                  |
| 10  | Shruti Vcer (14)               | 10                  | 15                           | 05                      | 05                        | 05                 | 40                  |

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| AVISHKAR COMPETITION - ZONAL / COLLEGE LEVEL - 2023 |                     |                      |                              |                         |                           |                    |                   |
|---|---------------------|----------------------|------------------------------|-------------------------|---------------------------|--------------------|-------------------|
| Sr.No   | Poster No           | Relevance (20 Marks) | Methodology opted (20 Marks) | Contribution (20 Marks) | Innovativeness (20 Marks) | Outcome (20 Marks) | Total (100 Marks) |
| H01** <sub>1</sub>                                  | Hiranisha Mali 35   | 15                   | 15                           | 15                      | 15                        | 15                 | 75                |
| *E10 <sub>2</sub>                                   | Vedanti Acharya 29  | 15                   | 14                           | 14                      | 15                        | 14                 | 72                |
| 3   | Komal Radgam 20     | 15                   | 15                           | 15                      | 15                        | 10                 | 70                |
| 4   | Priya Hawale 33     | 15                   | 15                           | 15                      | 10                        | 10                 | 65                |
| 5   | Tejal Baral 28      | 14                   | 15                           | 15                      | 10                        | 10                 | 64                |
| 6   | Geetika Pradhaan 25 | 14                   | 14                           | 14                      | 10                        | 10                 | 62                |
| 7   | Surabhi Sahni 22    | 12                   | 14                           | 14                      | 10                        | 10                 | 60                |
| 8   | Rutuja J 12         | 11                   | 13                           | 14                      | 10                        | 10                 | 58                |
| 9   | Fizza Shive 12      | 13                   | 15                           | 15                      | 10                        | 10                 | 63                |
| 10  | Snehal Patil 1      | 11                   | 13                           | 14                      | 10                        | 10                 | 58                |

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Signature

**Winner 1****Category: Humanities, Languages and Fine Arts****Level: UG****Name :Anandita Dive****Topic: Analysing the socio-economic impact of Food Trucks on local communities)****ABSTARCT:**

Around the world, food trucks have become a vibrant and creative part of the culinary scene in many metropolitan and suburban locations. The objective of this study is to thoroughly examine the socio-cultural effects of food trucks on nearby towns. Food trucks have the ability to have an impact on many elements of society and the local economy in addition to providing delicious food. It also considers how they can strengthen intercultural understanding, societal cohesiveness, and civic involvement and how social communities foster environment. In order to examine the numerous impacts of food trucks on the social and cultural fabric of local communities, the research takes a multifaceted approach that combines qualitative and quantitative approaches. The study looks into the legal and regulatory structures that control how they operate as well as how easily accessible their various cuisines. The research sheds light on the role that food trucks play in stimulating the cultural aspect, establishing a deeper feeling of community, celebrating diversity, and encouraging entrepreneurship. Food trucks have the potential to promote social interaction, celebrate cultural variety, and further nurture open spaces of cities. The regulatory environment that affects how they operate is examined in the article. The research shows that food trucks can create lively, welcoming public spaces. The study also deals with waste disposal management and hygienic environment of food truck. The Policymakers, urban planners, and community stakeholders interested in using food trucks for inclusive community development will find this research to be a valuable resource.

**Winner 2****Category: Humanities, Languages and Fine Arts****Level: UG****Name :Hemansha Mali****Topic: Historic Water Architecture Of Shirpur , Dhule****ABSTRACT**

This paper explores and understands the architecture of barav dated around 17th to 19th century of Shirpur taluka of Khandesh region of Maharashtra . It attempts to study the hydrological and architectural features, construction techniques, socio- cultural aspect and traditional technique of groundwater storage. The data is collected by interviewing experts, literature review, documentation . Findings of this paper reveals that the barav are the most sustainable way of conserving water in hot and dry region , it also brings the awareness of conserving lesser-known heritage of region.

Keywords: Barav, Traditional water storage, Socio-cultural aspect, Conservation

**Winner 1**

**Category: Engineering and Technology**

**Level: UG**

**Name :Tanaya Takale**

**Topic: Use of Textile Waste in material for 3D Printing**

**ABSTRACT**

Environmental problems are severely impacted by textile waste, a large result of the fashion and textile industries. Recent research has shown that many kinds of textile waste, including pre- and post-consumer, may be treated, and used successfully in building operations. 3D printing technology is one of the upcoming innovative technologies which has ability to create complex geometry and intricate details with ease. The purpose of this study is to examine the viability of using textile waste as a raw material for 3D printing. The experimental research will be carried out by manufacturing 3D printed mud blocks using KUKA KR 30 robot and compressive strength of the blocks will be tested to check the sustainability of the product.

**Winner 2****Category: Engineering and Technology****Level: UG****Name :Vedanti Acharya****Topic: Visualizing Meditation hall in AR, VR, and MR****ABSTRACT**

Meditation halls are spaces where people practice meditation and different activities are performed. However, there are other difficulties when constructing a meditation hall, such as the need for ample room for practicing meditation and the impact that the different form of meditation halls has on the events that take place there and natural ventilation inside space. Additionally, visualizing in AR and VR is crucial for effectively designing such meditation halls. In Order to categorize the fundamental design requirements for a meditation hall, a survey study was carried out. Two samples were subsequently designed using tools in accordance with the findings of survey. After that, AR and VR would be used to visualize the designed mediation hall. This would clarify and assist in reducing the difficulties encountered when designing the meditation hall. Since we could see the finished product before building the actual edifice. Here AR, VR are used as Visualization tool for designing meditation hall.

Keywords: Augmented Reality, Virtual Reality, Visualization, Meditation Hall.

**Winner 1****Category: Engineering and Technology****Level: PG****Name :Ananya Joglekar****Topic: Development of Cost-effective AR-VR Interactive Sandbox for better learning of Topography in Landscape Architecture Education using Upcycled materials****ABSTRACT**

Education in environmental science has gained importance and has been integrated into education from the pre-primary to post-graduation level. The understanding of landscape topography, and land profiles is necessary for a better understanding of the landscapes and the environment around us.

There are available devices in the market that make students understand landscape topography which are way too costly. There is a need to build a cost-effective device that is a replica of the costly model setup, which can be used for learning and understanding landscape topography, hydrology, and other landscape parameters for educational / Institutional setups. The working of the devised setup is 'Hands-on' in nature supporting, interactive, tactile, and effective visualization using augmented reality and mixed reality for a better understanding of the land, landforms, and landscapes.

**Winner 1****Category: Humanities , Languages and Fine Arts****Level: Ph.D.****Name :Shivali Lalbige****Topic: Development of Cost-effective AR-VR Interactive Sandbox for better learning of Topography in Landscape Architecture Education using Upcycled materials****ABSTRACT**

The present research starts with understanding the topic in detail and analysing the quarries with all aspects. Data related to the quarries was collected through literature, inventories; site visits/field surveys, questionnaire surveys, interviews, observations, etc. Based on this data, comparative analysis all findings are derived. A total of fifteen quarries were identified in Pune based on the map sourced from Survey of India, the national mapping agency open series map and verified through site visits done during the study. The research project identifies the potential of abandoned quarries and explores innovative approaches for its adaptive reuse as urban green infrastructure of Pune.

**INNOVATION CELL REPORT FOR NAAC**  
**COMPILED BY DR SHUBHADA KAMALAPURKAR**  
**HEAD - INNOVATION CELL , BNCA**



**REPORT ON 4 day online workshop convened by Dr Shubhada, Member , Board of Studies ,Architecture, SPPU**

In the architectural and construction industries, intellectual property is a valuable asset that can be monetized and licensed, with exclusive rights providing a competitive edge. The protections recognize construction and design professionals' investment of significant time, energy, and money in creating original architectural works. However, the of knowledge regarding intellectual property as a concept, various laws in place, different types of IP that are relevant to the architectural and construction industries is relatively short and succinct. It is important to look into the nuances of how the IP interplay with architectural works to protect originators own creation and don't accidentally infringe on somebody else's right. Considering IP issues early can also help mitigate risks and avoid costly disputes. Universities and educational institutions are among the direct contributors towards innovation and research but regrettably the academicians and researchers have minimal awareness about IPR and they do not understand the multitude of issues surrounding intellectual property in academics. The proposed 4 day workshop is aimed to address the following aspects of IPR.

**Dr Shubhada Kamalapurkar and Dr Vasudha Gokhale ,as Member ,Board of Studies took initiative to host the 4 day online workshop for the benefit of all colleges of Architecture across India. This was hosted in the month of August 2022 ,post college hours so that the participation is ensured.**

| Sr. No. | Reporting items                              | Details  |
|---------|--|--|
| 1       | Name of the Activity                         | <b>4 day online Workshop on IPR</b>  |
| 2       | Name of the College                          | Hosted by Dr Shubhada Kamalapurkar as Convener of the workshop. She is Professor at Dr. Bhanuben Nanavati College of Architecture, Maharshi Karve Stree Skikshan Samstha (MKSSS) and Member, BOS, SPPU |
| 3       | District and State                           | Pune, Maharashtra  |
| 4       | No. of students participated in the Activity | <b>10</b>  |
| 5       | No. of Faculty Members Participated          | <b>26</b>  |



|    |                                      |  |
|----|--------------------------------------|--|
|    |                                      | <p><b>Resource Faculty of BNCA –</b></p> <p><b>Dr Shubhada Kamalapurkar</b></p> <p>Convener , Workshop</p> <p><b>Asst. Prof Nishigandha S</b></p> <p>Workshop Co-ordinator</p> <p><b>Dr Vasudha Gokhale</b></p> <p>Professor and Head , Ph.D Cell</p> <p>Other participants</p>  |
| 6  | Name of the Head of the Institution  | <b>Dr.Anurag Kashyap</b>   |
| 7  | Email of the Head of the institution | anurag.kashyap@bnca.ac.in  |
| 8  | Date                                 | <b>2- 5<sup>th</sup> August 2022</b>   |
| 9  | Highlights of the program/ Activity  | <ul style="list-style-type: none"> <li>• 2 Faculty members of BNCA took lead for this workshop</li> <li>• 1 faculty member of BNCA was speaker for 2 sessions</li> <li>• 26 faculty of BNCA benefitted from this workshop</li> <li>• Faculty of Architecture college, pan India and outside Pune University attended and benefitted from the Workshop.</li> <li>• Registrations for the workshop were 146</li> <li>• 10 students of UG and PG of BNCA attended this workshop.</li> </ul> |
| 10 | Feedback/ Event Outcome              | <p>The proposed 4 day workshop addressed the following aspects of IPR.</p> <ul style="list-style-type: none"> <li>• Introduction to Intellectual Property &amp; Architecture</li> <li>• Overview of Intellectual Property Laws and policy</li> <li>• IPR concerning Architectural Design and detailing</li> <li>• IPR concerning Architectural education and Research</li> </ul>   |

## Event Poster –



**INTELLECTUAL PROPERTY RIGHTS IN ARCHITECTURAL PROFESSION AND EDUCATION**

*Tuesday, 2<sup>nd</sup> August to Friday 5<sup>th</sup> August 2022 (3 pm to 5.00 pm)*  
**4 day Online Workshop**  
by  
**Board of Studies [Architecture]  
Faculty of Science and Technology  
Savitribai Phule Pune University**

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In the Architectural and Construction Industries, Intellectual Property is a valuable asset that can be monetized and licensed, with exclusive rights providing a competitive edge. The 'Protection' recognizes construction and design professionals' investment of significant time, energy, and money in creating original architectural works. However, knowledge regarding intellectual property as a concept, various laws in place, and different IP types relevant to the architectural and construction industries is insignificant. Therefore, it is essential to look into the nuances of how the IP interplay with architectural works to protect the originator's own creation and don't accidentally infringe on somebody else's right. Early consideration of IP issues can help mitigate risks and avoid costly disputes. In addition, universities and educational institutions are among the direct contributors to innovation and research that need to address IPR issues by and large.

This 4-day workshop focused mainly on the architectural discipline that includes presentations, discussions, and sharing of experiences to broaden and encompass several issues regarding IPR in light of the architectural profession and academics.

The broad areas to be discussed include:

1. Intellectual Property Rights in Architecture: An evidence-based analysis.
2. Overview of Intellectual Property Laws and policies in India and abroad.
3. Issues and Concerns in the architectural profession and academics regarding Intellectual Property.

Workshop Registration fees is Rs 300/- (Payment details as below).  
Open for all Academicians and Architect Professionals across the country.

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### SPEAKERS



**Ar Habeeb Khan , President , Council of Architecture , India**



**Prof. Dr. Kavita Daryani Rao , Vice-Chancellor, JNAFAU, Hyd.**



**Dr. Ujwala Chakradeo, Vice-Chancellor, SNTD Women's University**



**Dr Manohar Chaskar, Dean, Faculty of Science & Tech., SPPU**



**Dr. Abhijit Natu, Chairman, BoS [Architecture], SPPU**



**Ar Hemant Mahajan, Practicing Architect , Pune**



**Dr. Vasudha Gokhale, Professor and Head, Ph.D Centre , BNCA , Pune**



**Prof. Anugrah A. Nagaich , Department of Architecture and Planning, M.A.N.I.T., Bhopal**



**Dr. Sandeep Sankat, Asso. Professor, SPA, Bhopal**



**Ar. Nishigandha Sakhardande**

Convener : Dr Shubhada Kamalapurkar  
Enquiries-  
Ar. Nishigandha Sakhardande  
Whatsapp - +91-9112355287 Email – nishigandha.sakhardande@bnca.ac.in  
Dr. Shubhada Kamalapurkar, Member, BoS[Architecture], SPPU Mobile : +91-9850958250  
Workshop fees Rs 300/- by Gpay on +91-7722015545 Vaishnavi Shevde (Admin)  
The digital platform details would be shared to registered participants.

Workshop Co-ordinator : Ar. Nishigandha Sakhardande



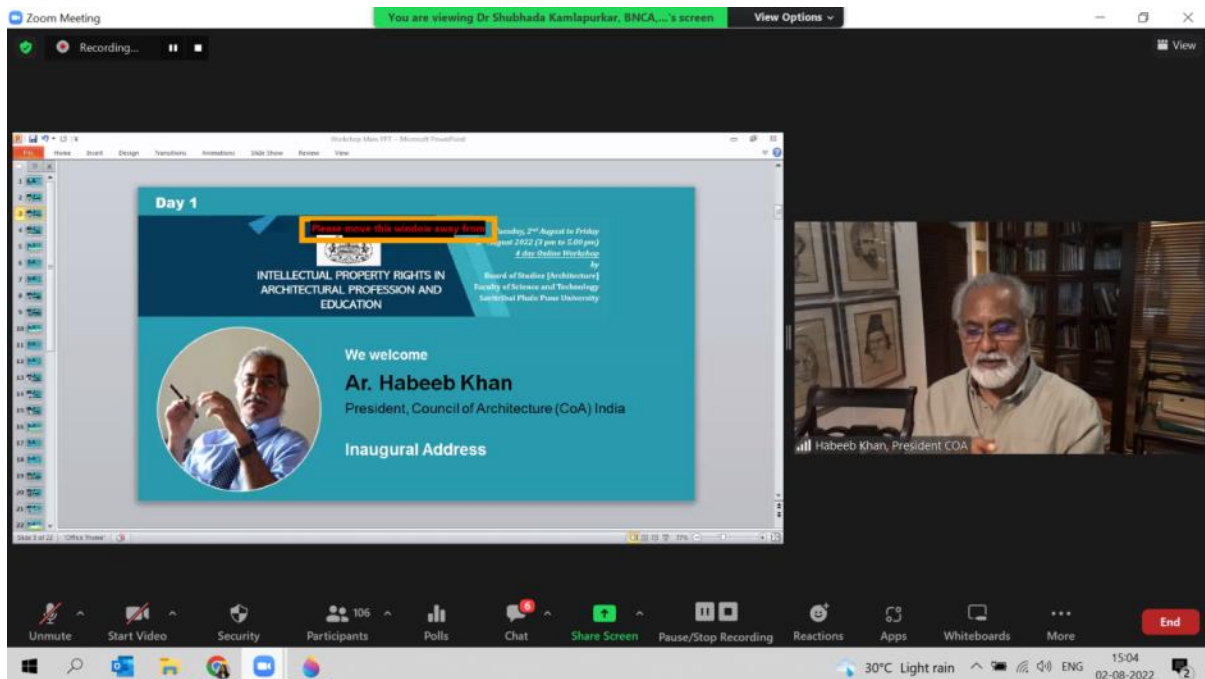
Registration form link

## Screenshots of the Event with titles –

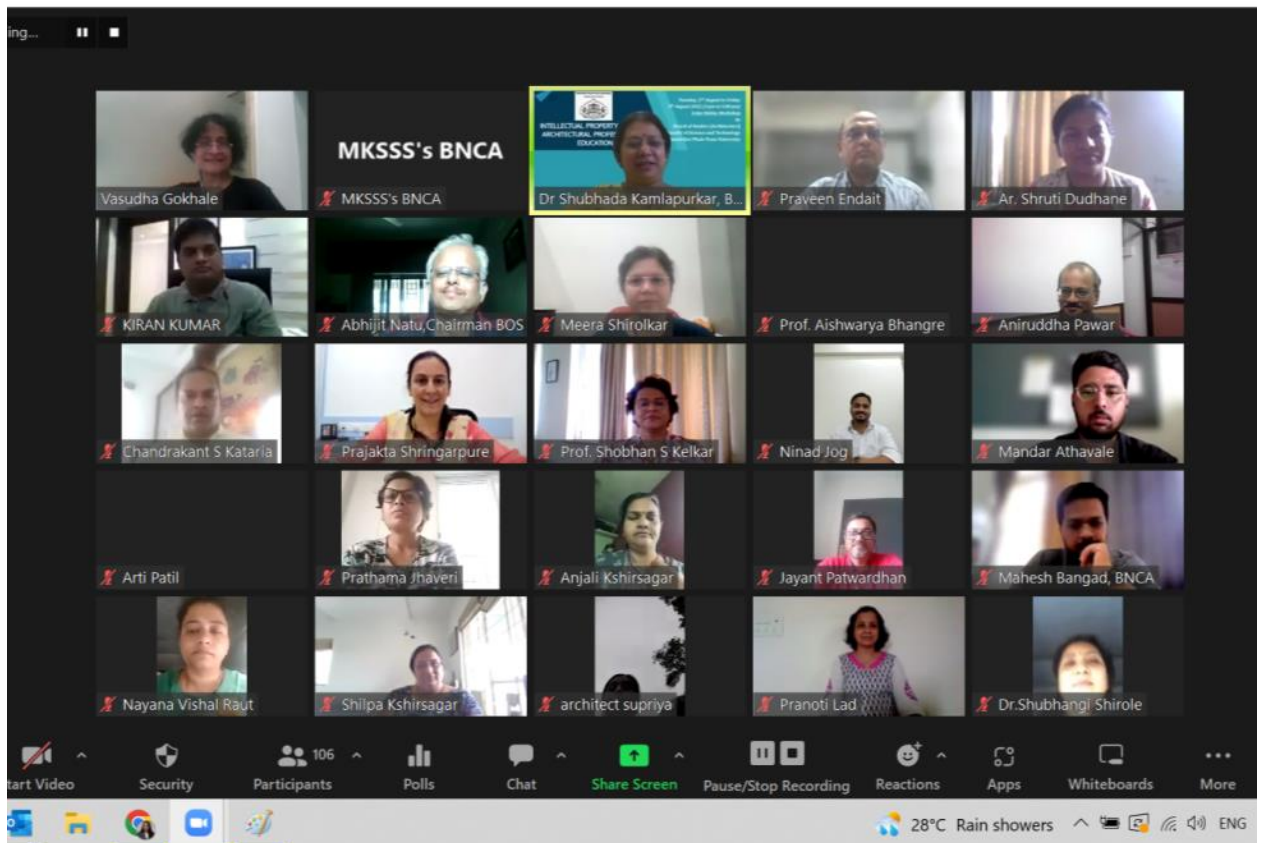
1. Dr Shubhada Kamalapurkar, Professor and Board of Studies Member, SPPU introducing the IPR workshop to the participants



2. Ar Habeeb Khan, Council of Architecture giving inaugural address and talking about importance of copyright and patents in the field of Architecture



3. Screenshot of online participants



Participants list and details-

(those highlighted in yellow are BNCA Participants- Students 10 and faculty 26 number

|    |            |  |                              |                  |
|----|------------|--|------------------------------|------------------|
| 1  | 9881134313 | asmitadivekar@gmail.com                | Asmita Joshi                 | UTR 220436133475 |
| 2  | 9975706561 | ar.priyankajadhav@gmail.com            | Priyanka Jadhav              | UTR 220438653074 |
| 3  | 9850150999 | vaibhavghodke@gmail.com                | Ghodke Vaibhav Govind        | CICAg/Cw59T6aA   |
| 4  | 9392482481 | r.nitinsinha@gmail.com                 | Nitin Ranveer Sinha          | UTR 220432682397 |
| 5  | 9422514642 | cskacademics@gmail.com                 | CHANDRAKANT KATARIA          | UTR 220440632203 |
| 6  | 9890268999 | ar.abhijit.bhagat@gmail.com            | Abhijit Bhagat               | UTR 220439562086 |
| 7  | 9975672282 | tasneem.3110@gmail.com                 | Tasneem Badri Jaitly         | UTR 220489205251 |
| 8  | 9028843313 | snehasharma@dypcoa.ac.in               | Prof. Ar. Shama Sneha Suresh | UTR 220543384007 |
| 9  | 9422769499 | manisharajole7@gmail.com               | RAJOLE MANISHA PARSHURAM     | UTR 220543545360 |
| 10 | 8826872233 | shwetagupta@bmssa.ac.in                | Shweta Gupta                 | UTR 220503889887 |
| 11 | 9849682171 | shilparoy.arch@jnafau.ac.in            | Shilpa Roy                   | UTR 220552588094 |
| 12 | 9885307077 | ishinelikesunshine@gmail.com           | Harshita Vangara             | UTR 220572449506 |
| 13 | 9850986751 | swati.s@bnca.ac.in                     | Swati Sahasrabudhe           | UTR 220558685122 |
| 14 | 9767733996 | nggeeta@gmail.com                      | Nagarkar Geeta Girish        | UTR 220661396785 |
| 15 | 9920025477 | arkushdevadhia@gmail.com               | Devadhia                     | UTR 220698908582 |
| 16 | 9921698469 | shirokar.meera@gmail.com               | SHIROKAR MEERA PANKAJ        | UTR 220664907513 |
| 17 | 7276382828 | prathama.kapil@gmail.com               | Prathama Jhaveri             | UTR 220666788382 |
| 18 | 9822284722 | 02anjaliadhav@gmail.com                | Anjali S Jadhav              | UTR 220690990627 |
| 19 | 9850975339 | pranoti_lad@yahoo.com                  | Lad Pranoti Rajesh           | UTR 220671994339 |
| 20 | 9422187300 | abhijitmarawar@dypcoa.ac.in            | ABHIJIT MARAWAR              | UTR 220783225761 |
| 21 | 9403517111 | ar.aditijaptiwale@gmail.com            | Aditi Japtiwale              | UTR 220747936185 |
| 22 | 9922847029 | ssb@bvcoa.in                           | Bodhankar Sudarshan Subhash  | CICAg/Dwh-bQMg   |
| 23 | 9941912481 | jothilakshmy@gmail.com                 | Dr.N.Jothilakshmy            | UTR 220812291449 |
| 24 | 8600990425 | sonaljwale@hotmail.com                 | Sonal Jawale                 | UTR 220801117917 |
| 25 | 9373455474 | shilpa.kshirsagar@indiraicad.ac.in     | Shilpa Sachin Kshirsagar     | UTR 220801144714 |
| 26 | 9373337520 | prajaktanshiringarpure@gmail.com       | Dr Prajakta Shringarpure     | UTR 220853554204 |
| 27 | 9417283564 | neerjababbar@gmail.com                 | Neerja Babbar                | UTR 220801636225 |
| 28 | 9075734342 | seema.patil@sanjayghodawatuniversity.  | Seema Umesh Patil            | UTR 220814082130 |
| 29 | 9881600001 | shubhangishirole@gmail.com             | Dr.Shubhangi Shirole         | 6955             |
| 30 | 9850841760 | anjali.kshirsagar@sanjayghodawatuniver | ANJALI PRASHANT KSHIRSAGAR   | UTR 220828357181 |
| 31 | 9458159851 | aniruddha.s.pawar@gmail.com            | Dr. Aniruddha S Pawar        | CICAg/CIOj7Ug    |
| 32 | 8790175085 | sabhashareef24@gmail.com               | Ar.saba naaz                 | UTR 220829138853 |
| 33 | 9923850564 | aishwaryagaikwad@gmail.com             | Aishwarya Bhangre            | UTR 220810841516 |
| 34 | 9822835671 | kalyaniiesh2911@gmail.com              | Ar. kalyani Junankar         | UTR 220846366466 |
| 35 | 9422774038 | psbaste@gmail.com                      | Dr. Baste Prajakta Shailesh  | UTR 220811522380 |
| 36 | 7507303122 | sujatakarve@gmail.com                  | Sujata Karve                 | UTR 220843650478 |
| 37 | 9960947534 | architectureguidance@gmail.com         | Dumane Priyanka Shivraj      | UTR 220844388622 |
| 38 | 9822875750 | priyamvada1007@gmail.com               | Dr.Priyamvada Nitin Chitale  | UTR 220920036096 |
| 39 | 9400141234 | nivednarendran1@gmail.com              | Nived Narendran              | UTR 220946894885 |
| 40 | 9822461968 | arch.soares@gmail.com                  | Nisha Soares                 | UTR 220952256186 |
| 41 | 9900460623 | arshwetam@gmail.com                    | Shweta Mattoo                | UTR 220951485394 |
| 42 | 9421124077 | purvakul10@gmail.com                   | Ar. Purva Kulkarni           | UTR 220939694079 |
| 43 | 8108895895 | asawarisohani.dypcoa@gmail.com         | Asawari A Sohani             | UTR 220939985220 |
| 44 | 9881401646 | ar.madhavi.k@gmail.com                 | Madhavi Karangale            | UTR 220953838252 |
| 45 | 9845853840 | vinutha.guruprasad@gmail.com           | Vinutha BG                   | UTR 220971885852 |
| 46 | 8867462588 | AKSHATHA.S@BMSSA.AC.IN                 | Akshatha Devi                | UTR 220955219521 |
| 47 | 9890946152 | slshot@mes.ac.in                       | Sarojini Keshav Lohot        | UTR 220956727984 |
| 48 | 6381918916 | karthigeyan.s@learner.manipal.edu      | KARTHIGEYAN MS               | UTR 220961856010 |
| 49 | 9666188866 | bindubhargavi.arch@jnafau.ac.in        | Bindu Bhargavi               | CICAg/Clpb_sPQ   |
| 50 | 9604554611 | shruti.joshi@bnca.ac.in                | Joshi Shruti Sanjay          | UTR 221042320191 |
| 51 | 8087546155 | radhikabhattach@kansnashik.org         | Radhika Ronak Bhattad        | CICAg/CjFTNEA    |
| 52 | 8421512579 | niketakothe@gmail.com                  | Niketa Nikhil Kothavale      | UTR 221042766847 |
| 53 | 9458351676 | smitasuryawanshi.scoa@sinhgad.edu      | Dr. Smita Suryawanshi        | UTR 221057002615 |
| 54 | 7261967599 | arswatidivan@gmail.com                 | Swati Viraj Tagare           | UTR 221072930756 |
| 55 | 7709047233 | ar.shrutiskncoa@gmail.com              | Shruti Dudhane               | UTR 221073295695 |
| 56 | 9158918989 | praveen.endait@gmail.com               | Praveen Sopan Endait         | UTR 221044447274 |

|     |             |                               |                                 |                  |
|-----|-------------|-------------------------------|---------------------------------|------------------|
| 57  | 9960947534  | archi30ssd@gmail.com          | Dumane Priyanka Shivraj         | UTR 220844388622 |
| 58  | 9730756557  | ujjwala.khot@gmail.com        | Dr Ujjwala Palsuley             | CICAg/CivYXLQ    |
| 59  | 9121966804  | divyashree491@gmail.com       | Boini Anna Divyashree           | UTR 221076007824 |
| 60  | 7588816706  | kolhevinita@gmail.com         | Vinita Kolhe                    | UTR 221059475791 |
| 61  | 7588701728  | ar.tarvimpatil@gmail.com      | Ar. Tarvi Ganorkar              | UTR 220813518444 |
| 62  | 9309914209  | kiptipawar.scoa@sinhgad.edu   | Bajare Kirti                    | UTR 221064008386 |
| 63  | 9307294327  | nayanavishalraut@vivaarch.org | Prof. Nayana Raut               | UTR 221059833176 |
| 64  | 8686268663  | mpadmashri.arch@jnafau.ac.in  | Padmashri Maharaj               | UTR 221075793979 |
| 65  | 9177408685  | nandubestpal29@gmail.com      | P Nanditha                      | UTR 22106234862  |
| 66  | 9940063106  | akshiarul94@gmail.com         | Akshaya Arul                    | UTR 221063349055 |
| 67  | 9820085841  | neil.kolhatkar@bnca.ac.in     | Neil Kolhatkar                  | UTR 221049735659 |
| 68  | 7447786950  | diptisk@gmail.com             | Dipti Natu                      | UTR 221050509012 |
| 69  | 7506482420  | dr.amrutagarud@gmail.com      | Garud Amruta                    | UTR 221065191325 |
| 70  | 9561775792  | dharati.sote@bnca.ac.in       | Wankhade Dharati                | UTR 221068384064 |
| 71  | 7980864484  | reetwikmukherji@gmail.com     | Reetwik Mukherji                | UTR 221057426985 |
| 72  | 74066 71160 | bksowmya92@gmail.com          | Sowmya Pooapadi Subramania Raja | UTR 221190613784 |
| 73  | 9881499351  | smिता.ogale@bnca.ac.in        | Smita Ogale                     | UTR 221160218614 |
| 74  | 9922471777  | arti.patil@mmcoa.edu.in       | Arti Patil                      | UTR 221115434510 |
| 75  | 9910169301  | prashantkumar@dei.ac.in       | Prashant Kumar                  | UTR 221174981181 |
| 76  | 9225647447  | shobhan.keikar7447@gmail.com  | Prof.Shobhan S. Keikar          | UTR 221182549096 |
| 77  | 7798628609  | siddhi.joshi@bnca.ac.in       | Siddhi Joshi                    | UTR 221299552288 |
| 78  | 73960 16232 | haritha2498@gmail.com         | Ponnapalli Harita               | UTR 221215297588 |
| 79  | 8329544952  | nsure2020@gmail.com           | NITIN SHIURKAR                  | UTR 221237756139 |
| 80  | 8805197641  | chariganga2008@gmail.com      | Ganga Chari                     | UTR 221286543637 |
| 81  | 8956361833  | architect.anshuma@gmail.com   | Anshuma Gokhale                 | UTR 221291954206 |
| 82  | 9003026030  | syedk@smist.edu.in            | K I Syed Ahmed Kabeer           | UTR 221335884636 |
| 83  | 9011072091  | mu.pune@aaayan.edu.in         | Manjusha Ukidve                 | UTR 221302477154 |
| 84  | 9860561113  | archsourabh@gmail.com         | Sourabh Marathe                 | UTR 22132647243  |
| 85  |             | priyankashewale007@gmail.com  | Snigdha Shewale                 | UTR 221103535391 |
| 86  |             | kiranslg@gmail.com            | Gade Kiran Kumar                | UTR 221339467650 |
| 87  |             | nitika.torvi@gmail.com        | Nitika Torvi                    | UTR 221340089052 |
| 88  |             | arc.sruthi@gmail.com          | Sruthi Reddy C                  | UTR 221342444558 |
| 89  |             | surabhi.gadkari@bnca.ac.in    | Surabhi Gadkari                 | UTR 221342607996 |
| 90  |             | ninad.jog@bnca.ac.in          | Ninad Jog                       | UTR 221307795645 |
| 91  |             | rutujad11@gmail.com           | Rutuja Ajinkyakumar Jagtap      | CICAg/DIO96Obg   |
| 92  |             | ar.mandarathavale@gmail.com   | Mandar Athavale                 | UTR 221344484945 |
| 93  |             | sakavale1306@gmail.com        | Shubham Atul Kavale             | CICAg/DI0771Aw   |
| 94  |             | rutik.kokate@mmcoa.edu.in     | Rutik Vijay Kokate              | UTR 221347686978 |
| 95  |             | sanikapatil007@gmail.com      | SANIKA PATIL                    | UTR 221375685637 |
| 96  |             | udaybir.chhatwal@mmcoa.edu.in | Udaybir Chhatwal                | 9823497959       |
| 97  |             | prachipawara8@gmail.com       | Prachi Pawara                   | UTR 221332221942 |
| 98  |             | jiyoti.tholiya@mmcoa.edu.in   | Jyoti Jain Tholiya              | UTR 221378286137 |
| 99  |             | aparna.dixit@mmcoa.edu.in     | Aparna Dixit                    | UTR 221342388635 |
| 100 |             | gargithakare20@gmail.com      | Gargi Durgesh Thakare           | UTR 221345021264 |
| 101 |             | fatima.ark@gmail.com          | Ar.Kaneez Fatima                | UTR 221362087843 |
| 102 |             | sejal.sancheti@mmcoa.edu.in   | Sejal Sancheti                  | UTR 221316856823 |
| 103 |             | deepa.d@lrsra.edu.in          | Deepa Desai                     | CICAg/DI66yDAw   |
| 104 |             | yjash77@gmail.com             | Yash Joshi                      | UTR 221345902738 |
| 105 |             | anitateskar@dypcoa.ac.in      | Anita Meskar                    | UTR 221312690089 |
| 106 |             | avantigole@gmail.com          | Avanti Gole                     | UTR 221319390160 |
| 107 |             | ketaki.kadam@gmail.com        | Ketaki Kadam                    | UTR 221330102576 |
| 108 |             | bongirwar.raksha@gmail.com    | Raksha VILAS BONGIRWAR          | UTR 221310386246 |
| 109 |             | sdupasani10@gmail.com         | Shubhashri Deependu Upasani     | UTR 221349388198 |
| 110 |             | kalyani25varade@gmail.com     | Ar. Kalyani Prakash Varade      | UTR 221334035479 |
| 111 |             | prb@bvcoa.in                  | Priya Rahul Bangle              | UTR 221312090575 |
| 112 |             | vinita.lavate@gmail.com       | Vinita Ajit Lavate              | UTR 221313578624 |

|     |            |                              |                           |                  |
|-----|------------|------------------------------|---------------------------|------------------|
| 113 |            | harshadavazarkar@gmail.com   | Harshada Vazarkar         | UTR 221320294534 |
| 114 |            | joshipriyanka.p@gmail.com    | joshi priyanka pedapalli  | UTR 22133258626  |
| 115 |            | sharvey.dhonde@bnca.ac.in    | Sharvey Dhonde            | UTR 221315202460 |
| 116 |            | a19098.ruchikaj@bnca.ac.in   | Ruchika Jadhav            | UTR 221351122996 |
| 117 |            | manisha.plads@gmail.com      | Manisha Yelne             | UTR 221338282982 |
| 118 |            | architect.abhish@gmail.com   | Abhishhek Kulkarni        | UTR 221291954206 |
| 119 |            | dhruv.chalode@mmcoa.edu.in   | Dhruv Chalode             | UTR 221316810084 |
| 120 |            | aryaa.singl@mmcoa.edu.in     | Aryaa Singi               | CICAg/Dir55YAw   |
| 121 |            | rms.pune@aaayan.edu.in       | Rakesh Shekatkar          | CICAg/DIz8eXDA   |
| 122 |            | srushti.ghodke11@gmail.com   | Srushti Ghodke            | CICAg/DI7_3rOg   |
| 123 |            | sanika.kanhere@mmcoa.edu.in  | Sanika Kanhere            | UTR 221319714012 |
| 124 |            | poorva.kulkarni@bnca.ac.in   | Poorva M Kulkarni         | UTR 221321351290 |
| 125 |            | aaryatilekar999@gmail.com    | Aarya Tilekar             | UTR 221358828359 |
| 126 |            | attarsafiya01@gmail.com      | Safiya A Attar            | UTR 221392606906 |
| 127 |            | sakshighodke27@gmail.com     | Sakshi Sanjay Ghodke      | UTR 221324032479 |
| 128 |            | manasvidhamik07@gmail.com    | Manasvi Dharmik           | UTR 221345279654 |
| 129 |            | a19138.tanushreet@bnca.ac.in | Tanushree Tambe           | UTR 221345637354 |
| 130 |            | dheerajsaikaruna@gmail.com   | G.S.Sai Karuna            | UTR 221361002269 |
| 131 |            | a19142.srijam@bnca.ac.in     | Srija Mitra               | UTR 221302107832 |
| 132 |            | damielanagha@gmail.com       | Pathak Anagha Kedar       | UTR 221447504833 |
| 133 |            | vibhavarishirodkar@gmail.com | Shirodkar Vibhavani Ashok | UTR 221463473232 |
| 134 |            | adobeinfr@gmail.com          | Ravindra Mahadev Chavan   | UTR 221427366885 |
| 135 |            | neha.adkar@bnca.ac.in        | Neha Adkar                | UTR 221309426804 |
| 136 |            | yogesh.gandevikar@ppsu.ac.in | Yogesh Gandevikar         | UTR 220981883781 |
| 137 |            | anujainamdar@sinhgad.edu     | Anuja Inamdar             | UTR 221051405145 |
| 138 | 9711743525 | madhuri@gbu.ac.in            | Madhuri Agarwal           | UTR 221174755159 |
| 139 |            | arsupriya4@gmail.com         | Supriya Sawant            | UTR 221337300273 |
| 140 |            | pritisma.katoty@gmail.com    | Pritisma Katoty           | UTR 221308294671 |
| 141 | 9890411174 | vaishali@gmail.com           | Vaishali Latkar           |                  |
| 142 | 9730073470 | jayant.patwardhan@bnca.ac.in | Jayant Patwardhan         | UTR 221437117785 |
| 143 | 9850567445 | sanjeevani.pendse@bnca.ac.in | Sanjeevani Abhay Pendse   | UTR 221309544529 |
| 144 | 9964869268 | deepakdg@bmsa.ac.in          | Ar. Deepak                | UTR 221468688579 |
| 145 | 9966540086 | ar.anunimashankar@gmail.com  | Arunima Shankar           | UTR 221673941784 |
| 146 | 9850757773 | avanti.bambawale@bnca.ac.in  | Avanti Bambawale          | UTR 221434141738 |

| S.No | Name                    | Designation     | Email                    | Mobile     |
|------|-------------------------|-----------------|--------------------------|------------|
| 1    | Dr Shubhada             | Professor       | Shubhada.k@bnca.ac.in    | 9850958250 |
| 2.   | Nishigandha Sakhardande | Asst. Professor | Nishigandha.s@bnca.ac.in | 9112355287 |

**Enclosure 1 List of Participants (BNCA Faculty)**

Prof Asmita Divekar

Prof Shruti Joshi

Prof Sujata Karve

Prof Meera Shirolkar

Prof Amruta Garud

Prof Smita Ogale

Prof Sharvey Dhongde

Prof Geeta Nagarkar

Prof Surabhi Gadkari

Prof Jayant Patwardhan

Prof Swati S

Prof Dhanashree S

Prof Deva Prasad

Prof Mahesh Bangad

Prof Mandar Athavale

# AVISHKAR

*idea* Idea Generation: Creativity Unfolds

## **PARTICIPATION IN AVISHKAR – INNOVATION COMPETITION HOSTED BY SPPU**

Brief note on the Innovation project (supported with photos)

His Excellency, the then Governor of Maharashtra, Shri. S.M. Krishna has initiated a novel inter university research project competition named 'AVISHKAR' in the year 2006. This activity, unique in its nature and Savitribai Phule Pune University has taken special efforts to increase the participation of the talented students from rural and urban areas. His Excellency, the then Governor of Maharashtra, Shri. S.M. Krishna has initiated a novel inter university research project competition named 'AVISHKAR' in the year 2006. This activity, unique in its nature and Savitribai Phule Pune University has taken special efforts to increase the participation of the talented students from rural and urban areas.

Savitribai Phule Pune University has won the overall championship at the state level Avishkar competition ninth times in last consecutive ten years.

Aim and Objectives

- a. To inculcate research culture among students.
- b. To encourage original and novel thinking.
- c. To provide an opportunity for expression of academic talent.
- d. To promote interaction among academia, R & D Institutes and Industries.

Innovation Projects can be in the form of live demonstration /models / posters and should be based on innovative ideas, in given six categories -

- I. Humanities, Languages, Fine Arts, etc.
- II. Commerce, Management, Law
- III. Pure Sciences
- IV. Agriculture and Animal Husbandry
- V. Engineering & Technology
- VI. Medicine and Pharmacy

Each college/institution can send separate entries for four levels of:

- UG Level
- PG level
- Post PG level (M. Phil /PhD)
- Teacher level

There are levels of rounds for Avishkaar-

- College Level Round
- University Level Round
- State Level Round

**Dr Shubhada Kamalapurkar , Dr Swati S , Prof Nidhi Dixit and Prof Sayali Andhare were involved in conduct of this competition.**



| Sr. No. | Reporting items                              | Details   |
|---------|--|---|
| 1       | Name of the Activity                         | <b>Avishkaar Competition</b><br>(MAHARASHTRA STATE INTER-UNIVERSITY RESEARCH CONVENTION) COMPETITION FLOATED BY SPPU, PUNE  |
| 2       | Name of the College                          | Hosted by Dr Shubhada Kamalapurkar –BNCA –First Level<br>Hosted by SPPU, Pune – Second Level  |
| 3       | District and State                           | Pune, Maharashtra   |
| 4       | No. of students participated in the Activity | <ul style="list-style-type: none"> <li>a. 21 students from UG participated in the competition <b>out of which 2 of them selected for University level round.</b></li> <li>a. 4 students from PG – Landscape Architecture,</li> <li>b. 4 Students from PG Environmental Architecture</li> <li>c. 3 Students from PG- Digital Architecture</li> </ul> Participated at College level round<br><b>of which 2 students from PG- Landscape Architecture and 1 Student of PG-Environmental Architecture were selected by the Jury panel for University Round.</b>          |
| 5       | No. of Faculty Members Participated          | <b>10</b>   |
|         |  | <b>Resource Faculty –</b><br><br><b>Dr Shubhada Kamalapurkar</b><br>Innovation cell Head<br><br><b>Dr Swati Sahasrabudhe</b><br>SPPU RAC<br><br><b>Prof Nidhi Dixit</b><br>Ex Innovation cell Head<br><br><b>Prof Sayali Andhare</b><br>Competitions Head<br><br>Mentors – <ul style="list-style-type: none"> <li>1. Dr Vaishali Angal</li> <li>2. Prof Mahesh Bangad</li> <li>3. Prof Neil Kolhatkar</li> <li>4. Prof Deva Prasad</li> <li>5. Prof Neha Adkar</li> <li>6. Dr Swati S</li> <li>7. Dr Shubhada Kamalapurkar</li> <li>8. Prof Umesh Chavan</li> </ul> |

|    |                                      |   |
|----|--------------------------------------|---|
|    |                                      |   |
| 6  | Name of the Head of the Institution  | <b>Dr.Anurag Kashyap</b>  |
| 7  | Email of the Head of the institution | anurag.kashyap@bnca.ac.in   |
| 8  | Date                                 | <b>October 31- January 15</b>   |
| 9  | Highlights of the program/ Activity  | <ul style="list-style-type: none"> <li>• Both , UG and PG students participated in the Avishkaar Competition</li> <li>• Research work done under subject of research was carried forward for innovation</li> <li>• Students worked further under guidance of mentors</li> <li>• Best 2 entries at UG level and 2 entries at PG level were selected for University level round</li> <li>• 2 entries were selected of which one entry got selected for State level round.</li> <li>• 10,000/- rs / Students * 5 Students = 50,000/- Rs were sanctioned in HOD Meeting for facilitating further research of 5 entries selected at college level of Avishkaar.</li> <li>• For experiments , labs were provided to do further work on their research project.</li> </ul> |
| 10 | Feedback/ Event Outcome              | <p>Innovation was introduced for the field of architecture through this competition</p> <p>Students work done in Research subject was taken up further to qualify for innovation</p> <p>The selected 4 innovations were guided by 2 eminent experts present as Jury in the college level round.</p> <p>Post this competition, 2 Faculty and a Student attended E-Chai Session to understand more about innovations and linkages between innovator, facilitator and funding agency.</p> <p>This competition brought in the culture of Innovation in the Institute.</p> <p>Innovation is now introduced at first year level as part of Architectural design / Basic Design subject.</p>   |

## STRUCTURE OF INNOVATION CELL

| Sr.No. | Designation                 | Name                     | Mobile No      | Email id   |
|--------|-----------------------------|--------------------------|----------------|--|
| 1      | Principal                   | Dr. Anurag Kashyap       | 9822014323     | <a href="mailto:mail@bnca.ac.in">mail@bnca.ac.in</a> |
| 2      | Head - Startup & Innovation | Dr. Shubhada Kamlapurkar | 98509<br>58250 | shubhada.k@bnca.ac.in                                |
| 3      | Student Co-ordinator        | Vaishnavi Shevde         | 77220<br>15545 | a19137.vaishnavis@bnca.ac.in                         |
| 4      | Members                     | Kshamita Pai             | Student Team   |  |
| 5      | Members                     | Ruchika Jadhav           |                |  |
| 6      | Members                     | Pallak Singh             |                |  |
| 7      | Members                     | Shruti Mittal            |                |  |
| 8      | Industry Mentor 1           | Adv. Pankhil Baunthiyal  | 92848<br>89366 | legal@legaverse.com                                  |
| 9      | Industry Mentor 2           | CS Abhishek Soni         | 97640<br>00349 | abhishek.soni23@gmail.com                            |

## Orientation meeting with the Participants



Award winning student at the SPPU level competition venue



3. Innovation is introduced at first year level. First meeting was conducted on 19<sup>th</sup> December 2022 to orient the design and technology faculty towards innovation (9.15 am to 10.00 am)



4. Competition participants List –UG LIST AND PG LIST

| AYISHKAR 2022 CIG CATEGORY |     |                   |   |              |                            |                   | SUB-CATEGORY |
|----------------------------|-----|-------------------|---|--------------|----------------------------|-------------------|--------------|
| Sr.No                      | Div | Name              | Topic   | Phone Number | Email id                   | Sign              |              |
| 1                          |     | Anuja Pawar       | Composite blocks from plastic waste & concrete      | 91721 25434  |                            | Anuja Pawar       | E&T          |
| 2                          |     | Nidhi Patil       | Sustainable floor from waste material               | 88067 48646  |                            | Nidhi Patil       | E&T          |
| 3                          |     | Swilee Gunjal     | Biophilic- Bio material                             | 74220 93156  |                            | Swilee Gunjal     | E&T          |
| 4                          |     | Riddhi Bhutada    | Design for labor Safety                             | 8 4464 16147 |                            | Riddhi Bhutada    | Humanities   |
| 5                          |     | Mitali Khedekar   | Bamboo slabs  | 8830560987   | a19073.mitalik@bca.ac.in   | Mitali Khedekar   | E&T          |
| 6                          |     | Sakshi Khodke     | Carbon Conscious bio brick                          | 89899 43803  |                            | Sakshi Khodke     | E&T          |
| 7                          |     | Rathod Ravi       | app for women safety                                | 84219 45099  | a19000.rathod@bca.ac.in    | Rathod Ravi       | Humanities   |
| 8                          |     | Brutha Lomate     | mixture of RCC with clastic waste types for pavings | 96157 53535  | a19114.prettha@bca.ac.in   | Brutha Lomate     | E&T          |
| 9                          |     | Aswini Hivale     | waste types for pavings                             | 84222 00110  |                            | Aswini Hivale     | E&T          |
| 10                         |     | Pragati Mulla     | Climate control in building                         | 9803605482   | a19068.pragati@bca.ac.in   | Pragati Mulla     | E&T          |
| 11                         |     | Preetha Bhatnagar | Device to give light in hostel                      | 7744805777   | a19191.preetha@bca.ac.in   | Preetha Bhatnagar | E&T          |
| 12                         |     | Kehama Walvekar   | use of plastic waste in roads                       | 8860112307   | a19196.kehama@bca.ac.in    | Kehama Walvekar   | E&T          |
| 13                         |     | Shivani Kulkarni  | Env. tech for residential buildings                 | 96972 66611  | a19120.shivani@bca.ac.in   | Shivani Kulkarni  | E&T          |
| 14                         |     | Tanvi Kulkarni    | Kinetic facade design                               | 7778029946   | a19054.tanvi@bca.ac.in     | Tanvi Kulkarni    | E&T          |
| 15                         |     | Anandini Upadhyay | Checkered for public interaction                    | 8799070292   | a19150.anandini@bca.ac.in  | Anandini Upadhyay | Humanities   |
| 16                         |     | Sakshi Shah       | Feasibility of concrete with waste                  | 7875028352   | a19071.sakshis@bca.ac.in   | Sakshi Shah       | E&T          |
| 17                         |     | Anita Tombarde    | design of light using waste material                | 7588601380   | a19109.anita@bca.ac.in     | Anita Tombarde    | E&T          |
| 18                         |     | Savika Shinde     | RCC for climate change                              | 9168408901   | a19012.savika@bca.ac.in    | Savika Shinde     | E&T          |
| 19                         |     | Devanshi Pansare  | Using bio brick in roads                            | 9316 837015  | a19058.devanshi@bca.ac.in  | Devanshi Pansare  | E&T          |
| 20                         |     | Shraddha Parange  | Digital fabrication- design for safety              | 8825609234   | a18073.shraddha@bca.ac.in  | Shraddha Parange  | Humanities   |
| 21                         |     | Tanushree Tambe   | Smart home for disabled                             | 9850839899   | a19070.tanushree@bca.ac.in | Tanushree Tambe   | E&T          |

| Sr. No | Name of Student   | Topic Name  | Category                   | Signature            |
|--------|---|---|----------------------------|----------------------|
| 1      | Ruchi Vacchhani<br>Email: Ruchivacchani@gmail.com<br>Mob no: 9807693127     | 'Vrukshamitra' - Development of knowledge portal in institutional campus for tree identification and information using QR code and learning management system | Humanities                 | Ruchi Vacchhani      |
| 2      | Pooja Mujumdar<br>Mob no: 7720049790<br>Email: mujumdarpoja458@gmail.com    | Paver blocks using building waste material  | Engineering and Technology | Pooja Mujumdar       |
| 3      | Tejal Hundekar<br>Email: tejal.hundekar@gmail.com<br>Mob no: 9579811833     | Technology for Management of vineyard   | Agriculture                | T.P.Hundekar         |
| 4      | Radhika Kinjawadekar<br>Email: kradhika1998@gmail.com<br>Mob no: 9130417336 | Chemical free vegetable and fruit farming on terraces integrating wet waste from buildings and aquaponics   | Agriculture                | Radhika Kinjawadekar |

Department of Environmental Architecture

| Sr. No | Name of Student  | Topic Name                              | Category                   | Signature        |
|--------|--|---|----------------------------|------------------|
| 1      | Mrunmayee Kamble<br>Email: ea2111.mrunmayeek@bca.ac.in<br>Mob no: 7798944598 | Waste segregation system                | Engineering and Technology | Mrunmayee Kamble |
| 2      | Shrushti Kumbhar<br>Email: ea2108.shrushtik@bca.ac.in<br>Mob no: 7083638954  | Sensor based indoor quality data logger | Engineering and Technology | Shrushti Kumbhar |
| 3      | Rashmi Yelpure<br>Email: ea2103.rashmiy@bca.ac.in<br>Mob no: 9923056786      | portable heat sink screens              | Engineering and Technology | Rashmi Yelpure   |
| 4      | Mrunal Joglekar<br>Email: ea2107.mrunalj@bca.ac.in<br>Mob no: 9405076452     | Using waste material to 3d print Jalis  | Engineering and Technology | Mrunal Joglekar  |

Department of Digital Architecture

| Sr. No | Name of Student  | Topic Name  | Category                   | Signature         |
|--------|--|---|----------------------------|-------------------|
| 1      | Shrushti Kodle<br>Email: Shrushtikodle1997@gmail.com<br>Mob no: 9663984474 | Optimizing roof typology with respect to sunlight hours in Scandinavian regions | Engineering and Technology | Shrushti Kodle    |
| 2      | Hansa Agrawal<br>Email: Agrawal.hansa16@gmail.com<br>Mob no: 73788 53733   | Regenerative design for Alpine village  | Engineering and Technology | Hansa Agrawal     |
| 3      | Anushka Poovasery<br>Email: Anushkhpoo@bca.ac.in<br>Mob no: 8600528777     | Optimizing, materialization and form finding using wheat bran                   | Engineering and Technology | Anushka Poovasery |

Report Compiled by Dr Shubhada Kamalapurkar, Innovation Cell Head



### **Immersive Design Lab [ AR VR MR Lab]**

Immersive Design Lab at the Dr. B N College of architecture aims to enable the practice and delivery of mixed Reality (MR)-based, simulation-based, active teaching and learning of difficult topics, complex skills, or demanding tasks in both online and face-to-face settings.

Mixed Reality (MR) technologies, including Virtual Reality (VR) and Augmented Reality (AR), are rapidly emerging technologies that help create a multimodal, inquiry-oriented, and immersive learning environment.

It will also act as a learning space for the students and faculties to explore MR & VR based transformative teaching in varied educational contexts. It will also be a virtual participatory design space.

Immersive Design Lab aims to give students a strong foundation in developing mixed reality applications within Gravity Sketch, Rhino and Grasshopper in order to explore and prototype mixed reality design tools, workflows, fabrication approaches and construction logistics.

Immersive Design Lab aims to translate parametric design models directly to holographic construction information, build mixed reality user interfaces to streamline sequences of fabrication tasks.

Mixed reality allows learners to experience lifelike environments and scenarios that are high-risk or difficult to simulate. Virtual reality (VR) is a computer-generated 3D representation of real-world environments, while augmented reality (AR) is a live view of a real-world environment augmented by computer generated sensory input.

At initial stage lab is going to be portable and not dependent on a designated physical space. The equipment can be easily set up in any available classroom or study area.

### **Benefits and advantages of Mixed Reality**

Mixed Reality is a very powerful tool to share information between digital and real world. Mixed Reality has the potential to guide fabrication process in architectural field, especially for nonstandard works, Compared to robotic technology, which is now normally used in digital fabrication.

### **Advantages of Mixed Reality**

1. low cost of purchasing devices,
2. convenience of using and moving devices,
3. Low degree of difficulty to find trained technicians.

It provides accuracy while cutting down the cost in a very high degree. MR technology will be widely used in student researches in the future.

### **Impact of Immersive Lab on Students**

- Learn emerging technology and concepts
- Studying and understanding complex design and fabrication through practical tasks provides better understanding of subject.
- Create immersive and interactive MR & VR presentations for 3D models.
- Use MR to communicate complex 3D design.
- Simplify complex fabrication and assembly tasks using MR instructions.
- Use 3d models as fabrication instructions to eliminate creating complex 2D drawing.

### **Equipment's – Hardwares and Software of Immersive Design Lab till date ( 26<sup>th</sup> Feb 2023)**

1. Two **Microsoft HoloLens**, a holographic headset that enables mixed reality learning applications development.
2. Fourteen **Oculus quest all in one Headsets** - Oculus quest all-in-one is a virtual reality system that helps to create an immersive 3D interaction and experience for learners in a VR-based learning environment.
3. One **I pad pro** to visualise AR content.
4. **FOLOGRAM** software for PC
5. One **Insta 360 one R** camera to capture 360 photos and videos for digital twining and immersive experience.

**\*\* Please note, prices mentioned above are subjected to change and excluding taxes \*\***



Oculus Quest 2 All-in -one



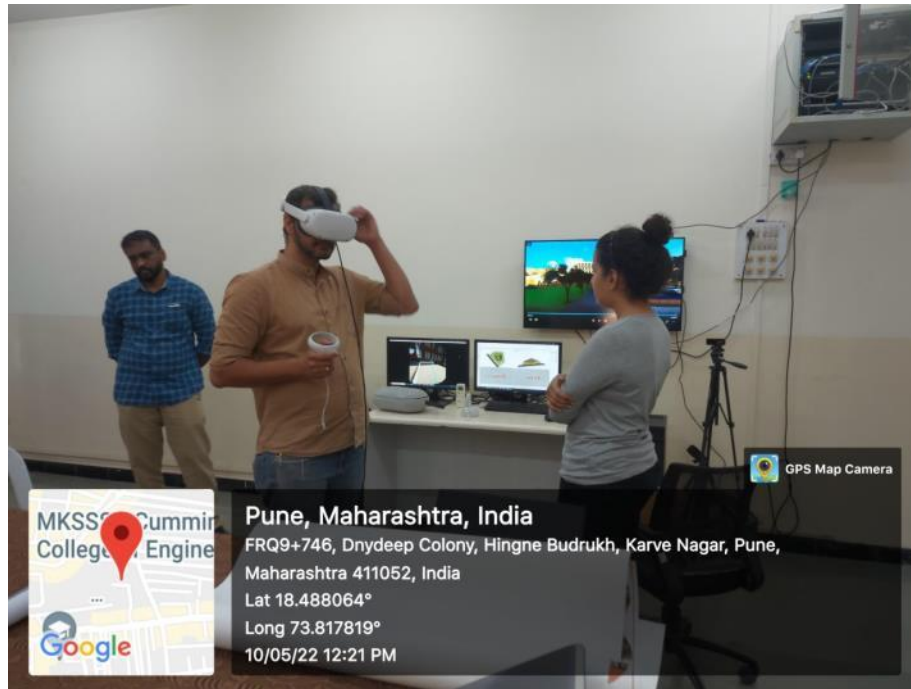
Microsoft HoloLens 2

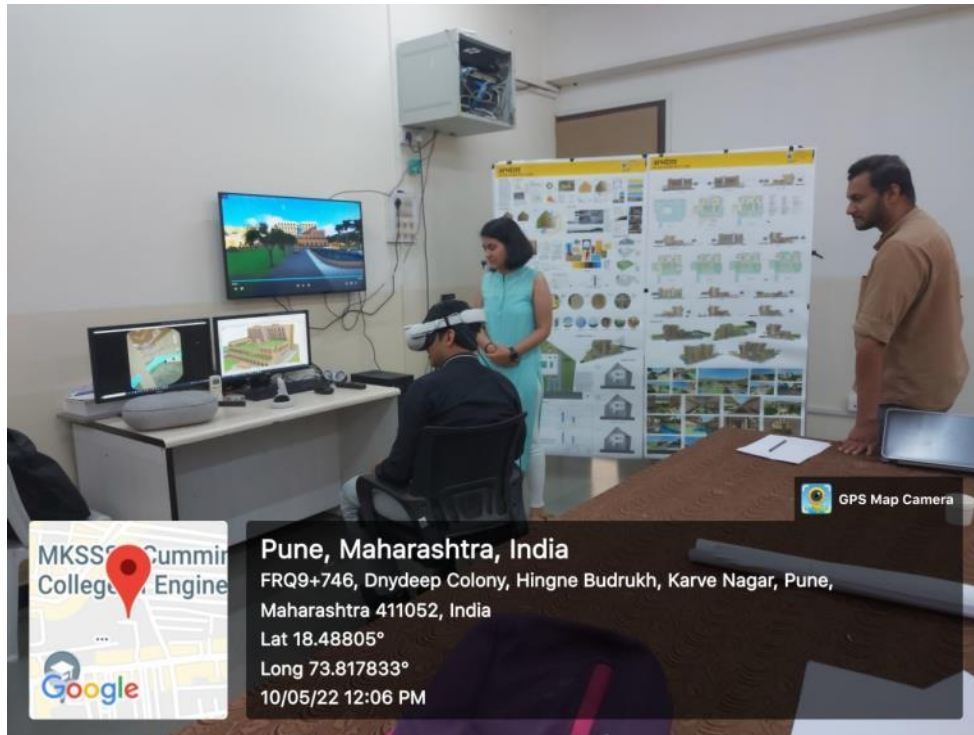
*Photos of Students exploring design in Virtual reality environment with Oculus HMD's*





***Third year Students presenting their final Design Jury in Virtual reality environment with Oculus HMD's to Examiners***





Document prepared and submitted by- Deva Prasad



**Innovation Project : Material Museum** using QR Code and Virtual reality ( ongoing)

Study of materials is an essential part of Architectural Education. We study different properties and characteristics of materials in Building construction, Services and various other subjects. Starting with first year, at every stage we deal with various elements of structural systems and assembly of materials for execution of spaces. A material museum or a lab provides the students with an opportunity of experiencing the materials. We understand the physical properties such as weight, texture, size, etc. and conduct Hands-on assignments to study the structural systems and Material assemblies. BNCA has started an initiative to use modern technology and convert the college building and the campus into a virtual lab. Students can experience the materials and its use in structural systems and Services that are present around at all times within the college premise. A physical material museum has limitation of space and is not economical to execute.

1. **Aim:** To Create a Virtual Material Museum / lab using modern technology.
2. **Objectives:** Objective is to convert the college building and campus into a Material Museum / Laboratory. To study materials and their applications in structural system. To study Services hidden or concealed in the structure using Virtual technology.
3. **Brief note on the Innovation project (supported with photos)**

**QR Code for Services** – All the toilets in the college building are provided with a QR code located outside on the entrance. Students can scan this code using a simple application which reads QR codes using the mobile camera and all the drawings of Water supply, Drainage (hidden in the structure) open on the device.



To Know more about Plumbing and Drainage, Scan the Code

Fig 1: QR Code to scan.

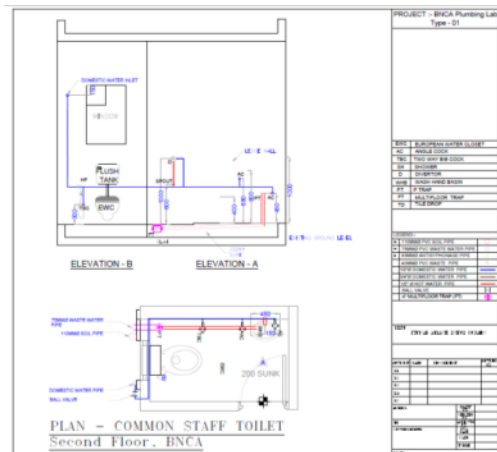


Fig 2: Drawing connected to the QR Code.

Similarly, Services such as HVAC, Electrical layouts, etc. and structural systems displaying the structural steel have been set up in the college premise. Integrating technology makes accessing

data/drawings very easy. To access this data/ drawings, students just scan the QR code. Reading the drawing on the device and observing the elements simultaneously can increase the learning multifold.

4. Client and Funding– This Project is being executed under the Archineering Department at BNCA. BNCA is collaborating with Industries for sponsorship of products
5. List of Participants: Er. Jayant Patwardhan, Ar. Poorva Kulkarni, Ar. Ninad Jog, Ar. Aniruddha Kolhatkar.
6. Facilitation given by the Institute to faculty and students for Innovation and transfer of knowledge – Technical expertise from within the institute and outside as well.

Document prepared and submitted by- Ninad Jog, Jayant Patwardhan

**M.Arch – ENVIRONMENTAL ARCHITECTURE DEPARTMENT**

**EXPLORING USE OF BY-PRODUCTS OBTAINED FROM RECYCLED SANITARY NAPKIN'S IN CONSTRUCTION INDUSTRY**

Ar. Aishwarya Mandavgane, a student of BNCA's M.Arch Environmental Architecture course under the guidance of Prof. Prajakta Dalal-Kulkarni has developed bricks using the by-product generated from recycling of waste sanitary napkins. She has used this waste to replace cement in fly ash blocks, which makes them further greener option for building industry.

| S. No. | Reporting items                              | Details   |
|--------|--|---|
| 1      | Name of the Activity                         | <b>Thesis: EXPLORING USE OF BY-PRODUCTS OBTAINED FROM RECYCLED SANITARY NAPKIN'S IN CONSTRUCTION INDUSTRY</b>   |
| 2      | Name of the College                          | Dr. Bhanuben Nanavati College of Arcitecture  |
| 3      | District and State                           | Pune, Maharashtra   |
| 4      | No. of students participated in the Activity | <b>01 (Aishwarya Mandawgane)</b>  |
| 5      | Name of the Faculty coordinator              | <b>Ar. Prajakta Dalal-Kulkarni</b>  |
| 7      | Name of the Head of the Institution          | <b>Dr.Anurag Kashyap</b>  |
| 8      | Email of the Head of the institution         | anurag.kashyap@bnca.ac.in   |
| 9      | Date   | <b>April- June 2022</b>   |
| 10     | Highlights of the program/ Activity          | This experimental research explored the use of by-product generated from recycling of waste sanitary napkins be used to replace cement in fly ash blocks. |

**List of Enclosures:**



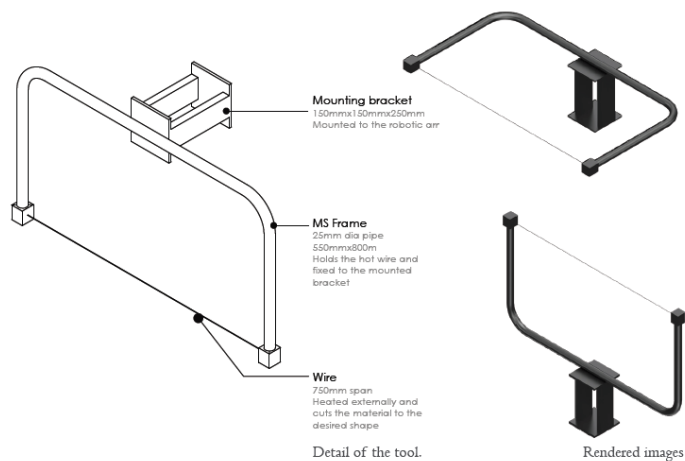
## Introduction

Tools for Robotic arm KR\_30 are developed by the DFL team, BNCA, led and developed (design and built) by faculty in charge Deva Prasad. The development has led to many explorations and helped in achieving different fabrication techniques like cutting, milling, weaving, extruding of materials. The output results in achieving precision and consistent throughout the process. The tools promote students to implement different fabrication process in their design process and experiment with the materials and techniques.

## 2016-

### Hot wire cutter

The tool was developed to explore the precise cutting using the robotic arm. The tool uses simple heating technique to cut the material. This can be used to cut materials like thermocol, foams - Polystyrene foam, Styrofoam.



## Acrylic Sheet Bending Tool

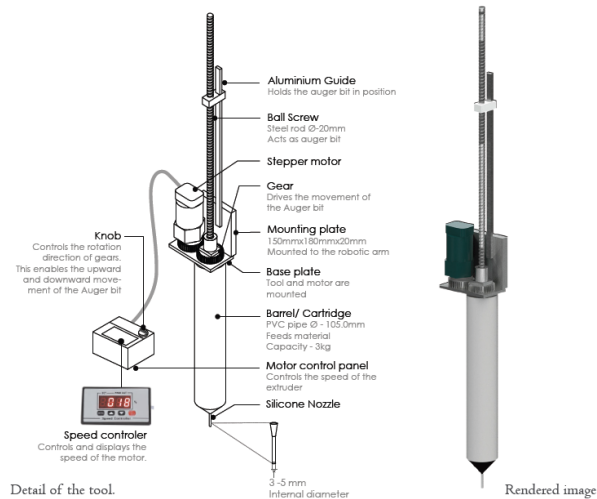
## 2017-

### Clay extruders

Clay extruders are developed to research clay extrusion technologies or clay 3d printing. Two extruders are developed: Pneumatic and Motor driven extruder for small and large scale printing. Typical extrusion width of the extruders is 2mm - 10mm and the barrels holds approximately 3.4kg wet clay. Attaching simple relays and proximity sensors makes the extrusion process semi-automatic.

## 1. Clay extruder Motor Powered

The tool is operated by electric power to drive the extrusion of the clay. The mechanism involves the power supply which helps in the movement of material resulting in extrusion. The power supply and the robot speed have to be calibrated for a consistent extrusion of clay.

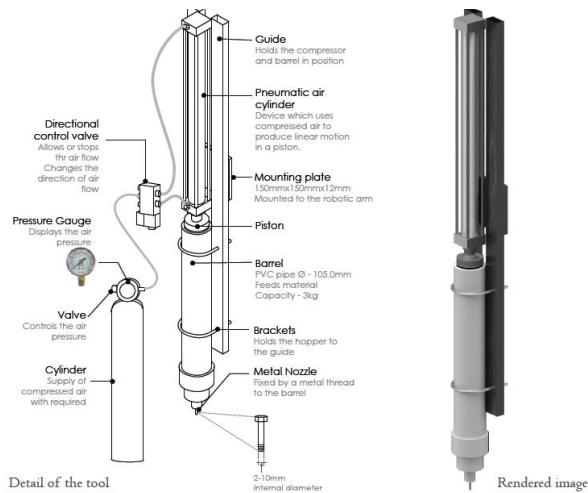


Tool has Barrel is filled with the clay mixture of proper consistency for extrusion, Stepper motor with gear which helps in the mechanism of extrusion. The power supply exerts the linear motion of the ball screw which acts as auger bit. The direction of the motion is controlled by the rotation of the gears. The control panel connected to the stepper motor controls the power supply and also controls the rotation of gears. Silicone Nozzle is used for the extrusion. Based on the extrusion thickness required, the nozzle can be varied.

## 2. Clay Extruder \_Pneumatic Powered

Tool operates by Pneumatic mechanism - compressed air is supplied and produces the linear motion in the piston. The direction of the motion is controlled by the directional control valve by changing the direction of air flow. The piston movement results are the extrusion of the material in the barrel. A pressure gauge is fixed to the cylinder to monitor the air pressure supplied. Variable nozzle of different diameter can be used as per the thickness of the extrusion required.

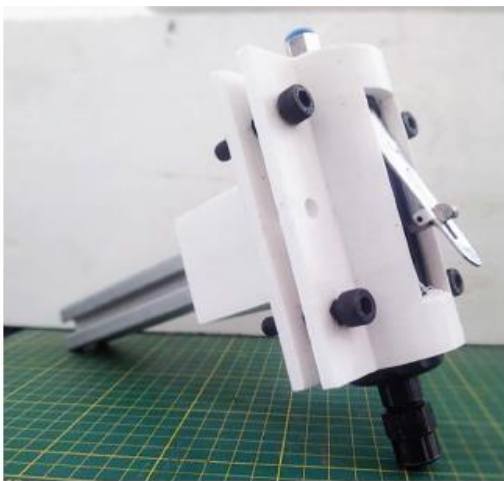




2018 –

### 1. Pneumatic Grinder/ milling for soft material.

The tool demonstrates the pick and place tool in action using Pneumatic mechanism. This tool operates with 4 bar pressure and has variable clamping range. This assembles the objects in a programmed pattern.



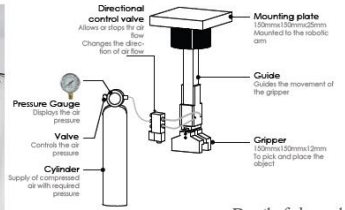
Grinding tool @ DFL, BNCA

### 2. Pneumatic Gripper for Pick & Place.

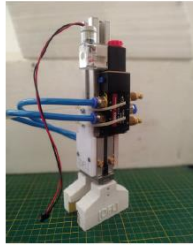
The tool demonstrates the pick and place tool in action using Pneumatic mechanism. This tool operates with 4 bar pressure and has variable clamping range. This assembles the objects in a programmed pattern.



Assembly of plywood planks @ DFL, BNCA



Detail of the tool



View of the tool @ DFL, BNCA

## 2019 –

### **Metal Sheet Forming (Single point incremental forming) tool.**

This tool is a Single Point Incremental Forming (SPIF). This tool is developed for the collaborative workshop with IAAC (GSS) in July 2019, themed Robot in Architecture. This is explored to design and fabricate using strategies of robotic single point incremental forming in making of doubly curved or complex surfaces.



SPIF on a Aluminum sheet @ DFL, BNCA



SPIF tool with different tips ranging from 2mm-20mm @ DFL, BNCA



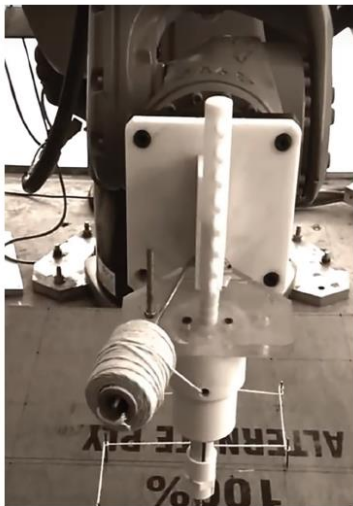
Assembled SPIF tool @ DFL, BNCA

## 2020 –

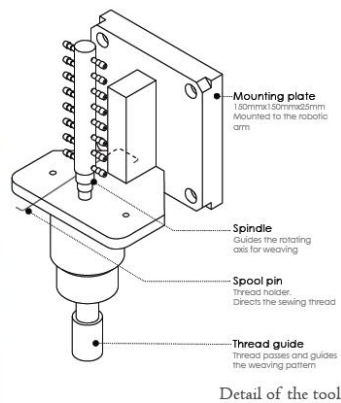
### **Pneumatic Pick & Place (with suction cups)**

## **2021 – Weaving tools**

Weaving tool is complete made out of scrap of DFL it has nozzle size to receive different thickness of fibres



Assembly of plywood planks @ DFL, BNCA



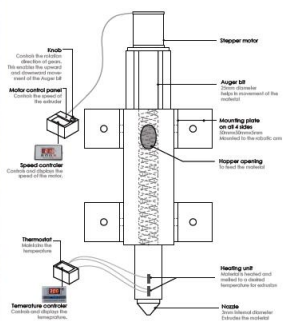
## 2022 –

- 1. Robotic metal bending**
- 2. Concrete Extruder**
- 3. Plastic Pellet Extruder**

The tool is capable of printing small and large architecture components and objects. It can take any kind of plastic as a raw material. It is capable of printing on various surfaces and non-planar layers. Calibrating this extruder for printing is more involved than a conventional 3d printer because it is loaded with high watt heating band to melt tough plastics.



Assembly of plywood planks @ DFL, BNCA



Detail of the tool

## Gallery

Prototypes made using tools developed in Digital Fabrication Lab



## Team

### **1. Deva Prasad**

*Faculty In charge, Digital Fabrication Lab ( DFL)*

### **2. Dhanashree Sardeshpande**

*Course Coordinator M.Arch (Digital Architecture)*

### **3. Yogesh Kulkarni**

*Head Technician, DFL*

### **4. Nilesh Jadhav**

*Assistant Technician, DFL*

## Youth Training - Urban & Heritage mapping through Drones , Jaipur

The workshop is designed to be delivered to 20 youths (2nd and 3rd year Architecture students) of Vivekanand global university, Jaipur and Dr. Bhanuben Nanavati College of Architecture, Pune. Area of approximately of 1 km<sup>2</sup> for academic and training purpose. Square of Chooti Chaupar, Badi Chaupar, Sanganer gate & to Ajmer Gate. One heritage structure – haveli was to be 3d mapped.

| OVERVIEW                          |  |
|-----------------------------------|--|
| <b>Flying Labs</b>                | India Flying Labs  |
| <b>Location of activity</b>       | Jaipur, Rajasthan State , India  |
| <b>Date</b>                       | Start and end date   |
| <b>Length (number of days)</b>    | 5 Days   |
| <b>Activity Type</b>              | <a href="#">Youth Training Program</a><br><a href="#">Youth-led Projects</a> |
| <b>Format</b>                     | Both (online and in-person)  |
| <b>Co-organizer if applicable</b> | Institute of Sustainability & Development Studies (ISDS)                     |

| DATA COLLECTION (YOUTH TRAINING AND YOUTH-LED PROJECTS ONLY) |                    |                                     |                           |
|--|--------------------|-------------------------------------|---------------------------|
| Type   | Collected (Yes/No) | Shared (Yes/No)<br>Link if possible | If shared, then with whom |
| Participants List  | Yes                | YES                                 | Amrita                    |
| Participants Multimedia Forms                                | No                 |                                     |                           |
| Youth Baseline Questionnaire<br>(Participants Questionnaire) | Yes                | YES                                 | Amrita                    |
| Pre-Test Data  | NO                 |                                     |                           |
| Post-Test Data   | Yes                | YES                                 | Amrita                    |

| PARTICIPANTS                               |   |
|--|---|
| <b>Name of participants' organizations</b> | Dr. Bhanuben Nanavati College of Architecture & Vivekanand Global University , Jaipur |
| <b>Who paid for the training?</b>          | Under sub grant by BOTNAR   |
| <b>Participant fee rate (if</b>            | NOT APPLICABLE  |

|                       |  |
|-----------------------|--|
| applicable)           |  |
| Scholarships offered? | participants were offered a full scholarship |

## CHALLENGES AND LESSONS LEARNED

|                        |  |
|------------------------|--|
| <b>Challenges</b>      | <ol style="list-style-type: none"> <li>1. Indian make survey Drones are big and difficult to carry (approx. weight is 32 kg). But Regulation wise, it's the best to carry out large scale exercise and are officially allowed for flying in Indian Drone regulations.</li> <li>2. Data collected in Jaipur after several difficulties (police interference - special permission required, fog, makar sankranti festival, falcons and kites for Republic Day).</li> <li>3. Students' co-ordination challenges on site due to spread of study area</li> </ol>  |
| <b>Lessons Learned</b> | <p>Please provide details or any lessons learned which can be shared with the rest of the FL network</p> <p>Prepare training in 3 phases</p> <ol style="list-style-type: none"> <li>1. Pre training preparation – For students where the intended study is to be conducted. Recce trip to site to identify the exact location on flying the drone if it's an urban settlement &amp; inform the authorities. (check local events &amp; Public event)</li> <li>2. Training Preparation – Minimum 3 days are required if the captured data needs to be processed on site along with the participants.</li> <li>3. Post Image processing – Infrastructure and software is a challenge, as not all the training locations/ partner might have same kind of infrastructure.</li> </ol> |

## DRONE USED FOR TRAINING

Crystaball made V – Survey drone (made in india)



Theory Sessions in Conference Room



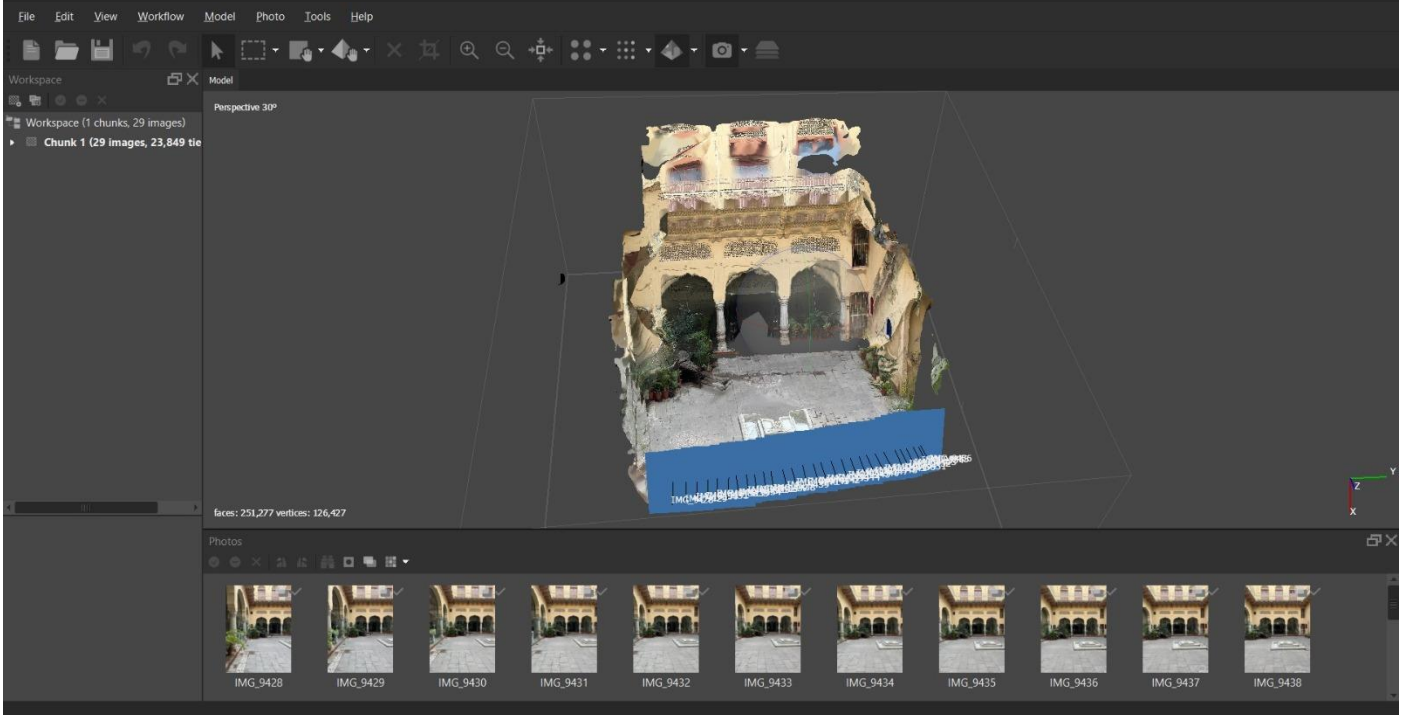
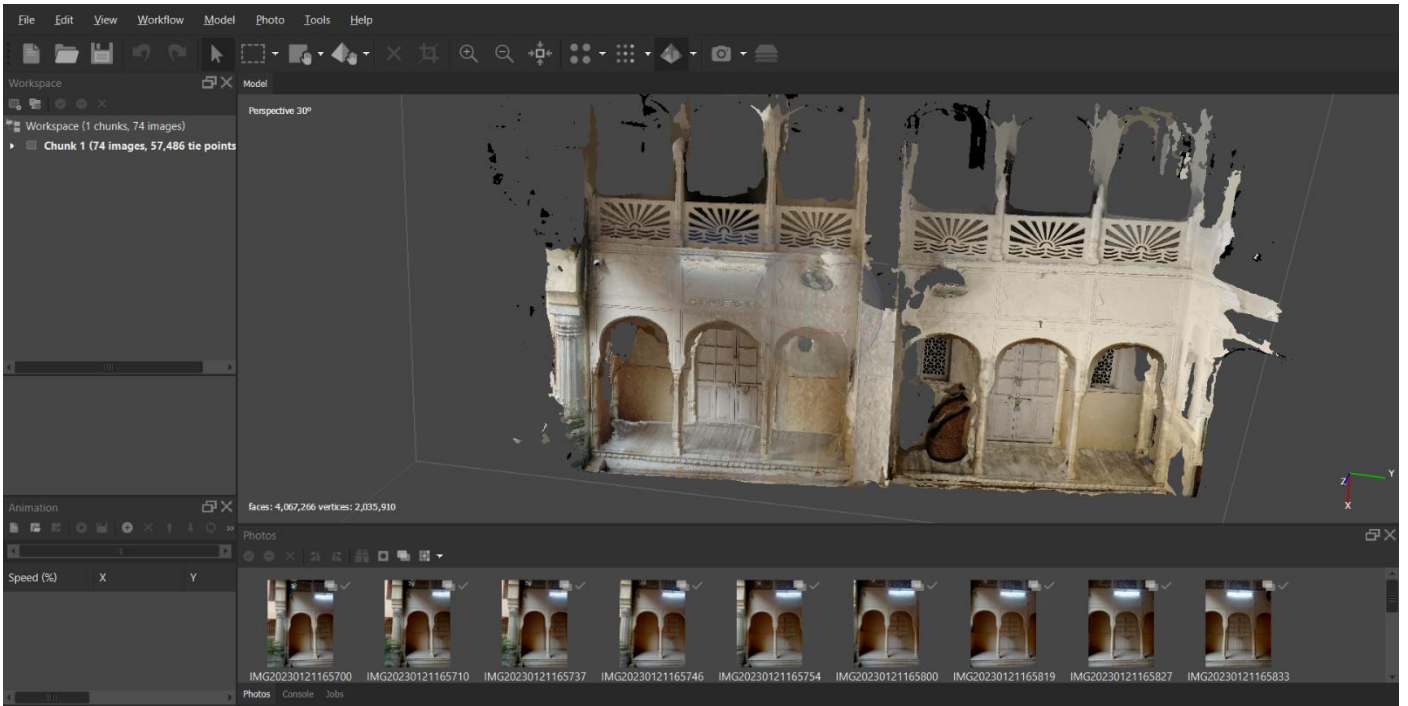
Demonstrating drones





Post imaging processing – Mentoring session







# SETTLEMENT STUDY EXHIBITION

28/03 - 04/04

We warmly welcome you to witness our exciting journey through the vibrant streets of Jaipur! Join us and immerse yourself in an unforgettable experience that showcases the cutting-edge technologies of VR and drone. We can't wait to share this incredible adventure with you.

## INAUGURATION

- 28<sup>TH</sup> MARCH, 2023
- TIME - 12:30 PM

Venue : BNCA, Courtyard



# Jai pur WALLED CITY



SETTLEMENT STUDY EXHIBITION CURATED BY

Third year Design Studio A

**SUPPORTED BY**

Dr. Anurag Kashyap

**MENTORED BY**

Prof. Asmita Joshi

Prof. Mohit Jadhav


Prof. Sujata Kodag

Prof. Ketaki Kadam



**BNCA**  
ISO 9001:2008 CERTIFIED  
MAHARSHI KARVE STREE SHIKSHAN SAMSTHANS  
**DR. BHANUBEN NANAVATI**  
COLLEGE OF ARCHITECTURE  
FOR WOMEN



 GPS Map Camera



## Pune, Maharashtra, India

Dr. Bhanuben Nanavati College, Dnydeep Colony, Hingne Budruk, Karve Nagar, Pune, Maharashtra 411052, India

Lat 18.488117°

Long 73.817801°

28/03/23 03:03 PM GMT +05:30









MAHARSHI KARVE STREE SHIKSHAN SAMSTHA



Affiliated to Savitribai Phule Pune University.(SPPU)  
University Affiliation No.: PU/PN/ARCH/109/1994.  
Approved by:  
\*Council of Architecture.(COA)  
\*All India Council for Technical Education (AICTE)  
\*National Assessment & Accreditation Council(NAAC)

**BNCA**

DR.BHANUBEN NANAVATI  
COLLEGE OF ARCHITECTURE

FOR WOMEN

Gate No:04, BNCA Campus,  
Cummins College Road,  
Karve Nagar, Pune 411 052.  
Ph: +91 20 25474062 / 25476966  
E-mail:mail@bnca.ac.in, www.bnca.ac.in

BNCA/ 318 /2021

Date : 12/10/2021

## TO WHOM SOEVER IT MAY CONCERN

We are happy to announce that, BNCA Research Hub (BRH) which is established on 12/10/2021 Tuesday, under BNCA under the guidance of Dr. Anurag Kashyap with the intent of nurturing, developing and facilitating research and related activities at BNCA in Architecture and allied discipline in lieu with objectives of higher education.

The following members were unanimously appointed as steering committee members.

**Dr. Anurag Kashyap : Hon. Chairperson**

**Dr. Swati Sahasrabuddhe : Hon. Convener**

**Mrs. Harshada Gadgil : Co- Convener (Administration Representative)**

**Dr. Meera Shirolkar : Member (BNCA Ph.D. Research Center, Representative)**

**Dr. Amita Pradhan : Member (Research Repository, BNCA library, Representative)**

Dr. Anurag Kashyap  
Principal



Harshada





Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

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## Fwd: Designing a Better World: Your Invitation to the Design Impact Movement!" – Call for Student Projects

---

shivali lalbige <ar.shivalilalbige@gmail.com>  
To: tanayatakale16@gmail.com

Tue, Feb 6, 2024 at 3:49 PM

----- Forwarded message -----

From: **SPPU Notifications** <no-reply@pun.unipune.ac.in>

Date: Mon, Feb 5, 2024, 8:37 PM

Subject: Designing a Better World: Your Invitation to the Design Impact Movement!" – Call for Student Projects

To: <ar.shivalilalbige@gmail.com>



Dear Student/s,

I trust this message finds you in good spirits. We are thrilled to extend an invitation for your participation in the Design Impact Movement, a collaborative initiative brought to you by SPPU Research Park Foundation & TinkerLabs.

### About the Design Impact Movement:

Design Impact is a social initiative of Titan Company Ltd., that aims at providing a platform and ecosystem to student projects to develop and thrive.

Short-term solutions don't cut it. The world needs **sustainable change** — and social design is the way. If you've got an idea, we've got the platform to help you realize it. With full access to relevant support and to the **social design and entrepreneurship ecosystem**. Basically, everything you need to take your idea **from good to #goals**.

Our collective mission is to harness the creative energy of students like you to drive positive change through innovative design projects.

### There is no registration cost

### Call for Student Projects:

We are currently seeking project proposals from students who exemplify the spirit of social impact design. Whether you are passionate about the environment, Healthcare, Agriculture, Livelihood, or Education, we encourage you to submit projects that showcase the transformative potential of design in addressing pressing issues.

Solutions in the space of Social Impact in any of the following categories:

1. **Environment:** Waste management, Sustainability, Energy conservation, Improving public infrastructure (buses, walkways etc) for the society.
2. **Healthcare:** Device Innovations, Improving accessibility for differently-abled, elderly. Early detection of diseases, service redesign for hospitals, clinics, and healthcare centers.
3. **Agriculture:** Device innovations in farming tools, Agri-tech, Farming marketplace redesign
4. **Livelihood:** Improving livelihood of local vendors, artisans, and specially-abled groups.
5. **Education:** Improving learning access for underprivileged communities, children, people with learning disabilities

This is not an exhaustive list. If you have any other solution that fits in any of these themes, you can participate.

### What's in it for the students?

**Selected teams/Individuals will be invited for a physical in-person session on 8th and 9th February 2024 at SPPU Research Park Foundation.**

**Time: 10.00 am to 4.00 pm (both days)**

| Date                    | Agenda  | Description  |
|-------------------------|---|--|
| Thursday,<br>08/02/2024 | Day 1- Problem Framing and Ideation                   | - Behavioural deep dive for the selected insights<br>- Problem reframing and structuring<br>- Ideation and idea finalization |
| Friday,<br>09/02/2024   | Day 2-Ideation and Prototyping<br>(In-Person Session) | - Developing prototype (mock-up, 3D print, CAD Renders)<br>- Feedback on iterated prototype                                  |

**Note: It is mandatory to attend physical in-person sessions to participate in the Design Impact Movement.**

#### Rewards:

Best team to win a 4-day sponsored workshop with Proto Village and a visit to Titan Watches in Bangalore

#### National Rewards:

1. Top 100 teams to get tech incubation support to develop their prototype
2. Top 25 teams to get business incubation support and invite to exclusive sessions.
3. Top 3 teams will go for an international design exchange program.

#### Submission Guidelines:

- Clearly outline your project's social impact goals.
- Provide a concise description of the problem you aim to solve.
- Present your envisioned impact for the proposed solution.

#### Why Participate:

- Contribute to meaningful social change through your design expertise.
- Showcase your creativity and design skills.
- Connect with a community of like-minded individuals passionate about social impact.
- Gain visibility and recognition for your work.

#### Collaborative Partners:

This initiative is made possible through the collaborative efforts of SPPU Research Park Foundation, TinkerLabs, and Design Innovation Centre, also support provided by Titan Company Ltd. Together, we aim to foster a community of changemakers committed to using design for positive societal transformation.

#### How to Submit:

Kindly open the below link and submit the form or scan the QR code. We encourage you to think innovatively – this is your chance to make a tangible impact through design!

#### Link for registration:

<https://forms.gle/R5JfD5MqKyMpy4fu8>

Also find attached QR code for your reference.

#### Key Dates:

- **Submission Deadline: 05/02/2024**
- **Announcement of Selected Projects: 06/02/2024**

Should you have any questions or require additional information, please don't hesitate to reach out to us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com) or [dic@unipune.ac.in](mailto:dic@unipune.ac.in) or [info.sppurpf@gmail.com](mailto:info.sppurpf@gmail.com) or Mr Arun Aynodkar at +91-9405228167

Thank you for considering being a part of the Design Impact Movement. Together with SPPU Research Park Foundation, TinkerLabs, Design Innovation Centre, and Titan Company Ltd, let's design a brighter and more impactful future!

Best regards,

**SPPU Research Park Foundation**

(A section 8 company fully owned by SPPU)

Opposite Health Centre,

Savitribai Phule Pune University,

Ganeshkhind, Pune -411007



**DIM QR code.png**  
239K



Tanaya Takale <tanayatakale16@gmail.com>

## Congratulations! Your Selection for the Design Impact Movement

DIC SPPU <dicsppu@gmail.com>

Wed, Feb 7, 2024 at 10:31 AM

Cc: info.sppurpf@gmail.com, rajashree.rpf@gmail.com

Bcc: tanayatakale16@gmail.com

Dear Participant/s,

We are thrilled to inform you that your project proposal has been selected for the Design Impact Movement. Congratulations on this achievement!

Your dedication to creating positive social change through design has truly impressed us, and we believe that your project has the potential to make a significant impact. We are excited to have you join us in this collaborative effort to harness the power of design for the greater good.

The workshop is scheduled to take place on **08/02/2024 & 09/02/2024 from 10:00 am to 4:00 pm on both days at Digital Classroom 1, SPPU Research Park Foundation, Opp. Health Centre, Savitribai Phule Pune University, Ganeshkhind, Pune.** Please mark your calendar accordingly, as attendance is mandatory for all selected participants. The workshop will provide a valuable opportunity for you to further develop and refine your project, collaborate with peers, and gain insights from industry experts.

Here are some key details about the workshop:

**Time: 10.00 am to 4.00 pm (both days)**

| Date                 | Agenda   | Description  |
|----------------------|--|--|
| Thursday, 08/02/2024 | Day 1- Problem Framing and Ideation                | - Behavioural deep dive for the selected insights<br>- Problem reframing and structuring<br>- Ideation and idea finalization |
| Friday, 09/02/2024   | Day 2-Ideation and Prototyping (In-Person Session) | - Developing prototype (mock-up, 3D print, CAD Renders)<br>- Feedback on iterated prototype                                  |

**Note: It is mandatory to attend physical in-person sessions to participate in the Design Impact Movement.**

To confirm your participation, please fill out the Google Form provided in the link below: <https://forms.gle/KaYgoEi8b6N7rF5p9>

**before 3:00 pm today only**

Your prompt response is greatly appreciated, as it will help us ensure the success of the workshop and better accommodate all participants.

Please note that during the workshop, no food or accommodation will be provided by the organizers. We kindly ask you to make your own arrangements for meals and lodging, if necessary.

**Also, it is requested that you carry a laptop with you. (Its necessary during workshop activities)**

If you have any questions or need further information, please don't hesitate to reach out to us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com) or [info.sppurpf@gmail.com](mailto:info.sppurpf@gmail.com)

8/26/24, 3:26 PM

Gmail - Congratulations! Your Selection for the Design Impact Movement

Once again, congratulations on your selection, and thank you for your dedication to using design as a catalyst for positive change. Together, let's make a difference!

Best regards,

Design Innovation Centre,

Savitribai Phule Pune University, Pune



Tanaya Takale <tanayatakale16@gmail.com>

## Preparation Details for Two-Day Workshop: Design Impact Movement

DIC SPPU <dicsppu@gmail.com>  
Bcc: tanayatakale16@gmail.com

Wed, Feb 7, 2024 at 7:05 PM

Dear Participants, We hope this email finds you well. As we prepare for our upcoming two-day workshop, we want to ensure that you and your team are fully prepared for the enriching experience ahead. Below are important details and requirements for the workshop:

**Workshop Details:** - Dates:08/02/2023 & 09/02/2023 - Time: 10:00 am to 4.00 pm (Both Days) - Location: Digital Classroom 1, SPPU Research Park Foundation, Opp. Health Center, Savitribai Phule Pune University, Pune. (<https://maps.app.goo.gl/FbJ6cLzsbE6NjsJJ9> )

**Preliminary Schedule :**

09:30 - 10:00 : *Tea & Refreshments*  
10:00 - 10:15: *Welcome Address & Keynote*  
10:15 - 4.00: *Workshop sessions*

**Time: 10.00 am to 4.00 pm (both days)**

| Date                    | Agenda  | Description   |
|-------------------------|---|---|
| Thursday,<br>08/02/2024 | Day 1- Problem Framing and Ideation                   | - Behavioural deep dive for the selected insights       |
|                         |   | - Problem reframing and structuring                     |
|                         |   | - Ideation and idea finalization                        |
| Friday,<br>09/02/2024   | Day 2-Ideation and Prototyping<br>(In-Person Session) | - Developing prototype (mock-up, 3D print, CAD Renders) |
|                         |   | - Feedback on iterated prototype                        |

**Facilitator Information:** We are pleased to introduce our esteemed facilitators who will be leading the workshop sessions:

**Mandeep Singh Toor:** Behaviour Design Lead, Tinkerlabs. & **Shrijana Upadhaya:** Innovation Manager, Tinkerlabs

**Workshop Materials:** To make the most of our workshop sessions, we kindly request that you and your team bring the following materials with you: 1. Laptop: Please bring a laptop or any other device you are comfortable working with. 2. Project Documentation: Prepare your project documentation in digital format, including: - PowerPoint presentation (PPT) - Written report - Photos and videos related to your project 3. Prototype (if applicable): If feasible, we encourage you to bring a prototype of your project. However, please ensure it is manageable and safe to transport.

**Team Attendance:** If you are attending the workshop as part of a team, please ensure that all team members are present. Collaboration and teamwork are integral to the success of our workshop activities. **Note: We kindly request that each project team consist of no more than two members. If you are participating individually, that is also perfectly acceptable.**

**Contact Information:**

If you have any questions or require further assistance, please do not hesitate to contact us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com) or Mr. Arun Aynodkar -- +91-9405228167. We appreciate your attention to these details and look forward to your team's active participation in the workshop. Together, let's make these two days productive and inspiring!

Best regards,  
Design Innovation Centre  
Savitribai Phule Pune University, Pune



Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

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## Thank You for Your Participation: Design Impact Movement

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**DIC SPPU** <dicsppu@gmail.com>  
Cc: info.sppurpf@gmail.com  
Bcc: tanayatakale16@gmail.com

Mon, Feb 12, 2024 at 1:51 PM

Dear Participant,

We hope this email finds you well. We want to express our heartfelt gratitude for your active participation in the recent Design Impact Movement workshop. Your contributions were instrumental in making the workshop a resounding success.

As promised, we are pleased to share with you the PowerPoint presentation (PPT) that was used during the workshop. This presentation encapsulates the key discussions, insights, and learnings shared throughout the event. Please find the attached PPT file. We encourage you to review the content at your convenience and revisit the valuable information exchanged during the workshop.

We sincerely hope that you found the workshop enriching and inspiring. Your dedication to using design as a force for positive change is truly admirable, and we are grateful to have had the opportunity to collaborate with you.

Once again, thank you for your participation and for being an integral part of the Design Impact Movement. We look forward to continuing our journey together and making a lasting impact through design.

If you have any questions or feedback, please feel free to reach out to us. We value your input and are always eager to hear from you.

Best regards,

Design Innovation Centre,  
Savitribai Phule Pune University, Pune

Attachment: Design Impact Movement Workshop Presentation

---

 **DIM - Savitribai Phule Pune University.pdf**  
5811K





Tanaya Takale <tanayatakale16@gmail.com>

**Welcome to DIM!**

dimsupport@titan.co.in <dimsupport@titan.co.in>  
To: tanayatakale16@gmail.com

Fri, Feb 9, 2024 at 1:13 PM



Hey Tanaya ,

We're thrilled to have you as part of the Design Impact Movement. Activate your account by clicking on

Your 6-digit One-Time Password (OTP) is **1 9 4 7 8 0**

Once done, you can log on to: <https://designimpactmovement.titan.in>

Regards,  
Team Design Impact



 [dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)

 [designimpactmovement.titan.in](https://designimpactmovement.titan.in)





Tanaya Takale <tanayatakale16@gmail.com>

## Here is your Certificate of Participation - Design Impact Movement !

**Design Impact Movement** <designimpact@titan.co.in>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Fri, May 17, 2024 at 4:53 PM



Dear Student,

Greetings!

Thank you for submitting your project on the Design Impact Movement platform. We appreciate your enthusiasm in addressing social issues.

We're sharing your Certificate of Participation in the Design Impact Movement 2023-24, congratulations on taking the first step!

We are currently in the process of evaluating the projects, and will share updates with you soon.

**Best wishes,**  
**Team DI Movement**



 [dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)

 [designimpactmovement.titan.in](http://designimpactmovement.titan.in)

---

 **Tanaya Takale.pdf**  
341K

**DESIGN IMPACT >>>>**  
**>>>>>>>> MOVEMENT**

# CERTIFICATE OF PARTICIPATION

Congratulations

Tanaya Takale

for successfully submitting the project as part of the  
**Design Impact Movement 2023-24**



A Social Initiative by  
**Titan Company Ltd.**



**TITAN**  
COMPANY

Savitribai Phule Pune University



Tanaya Takale <tanayatakale16@gmail.com>

## Design Impact Movement: Congratulations and Next Steps!

DI Movement <designimpact@titan.co.in>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Thu, Jun 6, 2024 at 10:45 AM



Dear Tanaya Takale,

Greetings from Design Impact Movement!

Thank you for submitting your project, we appreciate your enthusiasm in addressing social issues.

We are thrilled to announce that your team has moved to the final stage of the evaluation process. Congratulations, you should be proud!

As a next step, we **request you to kindly fill the below form**, designed to help us assess your mindset and better understand how we can assist you in achieving your full potential. **Please complete the form by 8th June, 2024. Also note that every team member has to fill this form individually. Your project will be considered only after we receive responses from all team members.** Your response will play a crucial role in shaping the next phase of the competition.

[Click here to fill the form](#)

Once again, congratulations on your success. We look forward to your continued participation and wish you the best of luck in the next stage.

Best wishes,  
Team DI Movement





[dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)



[designimpactmovement.titan.in](https://designimpactmovement.titan.in)



Tanaya Takale <tanayatakale16@gmail.com>

## Design Impact Movement: Congratulations and Next Steps!

**DI Movement** <designimpact@titan.co.in>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Tue, Jun 11, 2024 at 4:02 PM



Dear Tanaya Takale,

Greetings from Design Impact Movement!

**Your project Transforming Textile Waste Into 3D Printed Mud Block has moved to the final stage of the evaluation process.**

This is a gentle reminder to complete the form shared on this email thread, latest by **13th June, 2024**. Please ensure that every team member fills this form individually.

[Click here to fill the form](#)

Please disregard this reminder if you have already filled out the form.

We look forward to your continued participation and wish you the best of luck in the next stage.

**Best wishes,  
Team DI Movement**



 [dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)

 [designimpactmovement.titan.in](http://designimpactmovement.titan.in)







Tanaya Takale <tanayatakale16@gmail.com>

## Design Impact Movement: Congratulations and Next Steps!

**DI Movement** <designimpact@titan.co.in>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Mon, Jun 17, 2024 at 12:04 PM



Dear Tanaya Takale,

Greetings from Design Impact Movement!

**Your project Transforming Textile Waste Into 3D Printed Mud Block has moved to the final stage of the evaluation process.**

This is a final reminder to complete the form shared on this email thread, latest by **19th June, 2024**. Your project will not be considered for further evaluation if all members of the team do not fill the form by the deadline provided. Please ensure that every team member fills this form individually.

[Click here to fill the form](#)

Please disregard this reminder if you have already filled out the form.

We look forward to your continued participation and wish you the best of luck in the next stage.

**Best wishes,  
Team DI Movement**



 [dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)

 [designimpactmovement.titan.in](http://designimpactmovement.titan.in)





Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

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## Congratulations on Your Selection for the Titan Design Impact Movement Incubation Phase

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DI Movement <designimpact@titan.co.in>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Wed, Jul 17, 2024 at 4:49 PM



Dear Tanaya Takale,

We are thrilled to extend our warmest congratulations on your selection for the next phase of the Design Impact Movement! Your outstanding application **Transforming Textile Waste Into 3D Printed Mud Block** stood out among over 3,000 submissions, demonstrating your passion for social impact and your innovative approach to design.

The Design Impact Movement team was deeply impressed by your submission. Your work aligns seamlessly with our mission to foster social change through design and innovation.

As a participant in the incubation phase, you will have the unique opportunity to:

- Engage in a collaborative environment with fellow innovators and thought leaders.
- Receive mentorship and guidance from experienced professionals to develop and improve your prototypes.
- Refine your project concept and develop a roadmap for implementation.

We are eager to interact with you, learn more about your vision, and support your journey to make a meaningful difference in the world. **Please ensure that every member of your team has filled this form, if you haven't already, by 20th July, 2024. This is mandatory to proceed with the incubation process.**

The Design Impact Movement team is committed to providing you with the resources and guidance you need to succeed. To further support your project's development, we're excited to move forward with incubation. **Our partners from IKP Eden will be in touch soon to share a tailored incubation plan, designed to complement your academic schedule and provide you with a valuable learning experience.** We look forward to working with you as you take this next step!

Welcome to the Design Impact Movement family!

Best wishes,  
Team DI Movement



 [dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)

 [designimpactmovement.titan.in](https://designimpactmovement.titan.in)



Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

## Design Impact Movement Incubation Phase | Invitation to Protovillage Workshop

**DI Movement** <designimpact@titan.co.in>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Thu, Aug 1, 2024 at 4:56 PM

Dear Tanaya Takale,

Congratulations once again on the selection of your Transforming Textile Waste Into 3D Printed Mud Block to the next stage of Design Impact Movement! You should be proud of your achievement.

Since you are now part of the DI Movement family, we invite you to join the [LinkedIn Group](#), and engage with the other finalists and mentors.

As a first step in the incubation process, we **invite you to engage** in a collaborative environment with fellow innovators and thought leaders, **at the in-person protovillage workshop** (<https://g.co/kgs/VAoTFQ>). It is a **curated 5-day workshop** offering a transformative experience, guiding participants through a reflective journey to deepen their understanding of sustainability. Through introspective exercises, attendees explore personal motivations and values, fostering a profound connection with sustainability principles.

Accommodation and food will be covered for the entire five-day duration. Travel expenses, reimbursement policies vary by region:

- Western and Southern States: Train ticket fares will be fully reimbursed.
- Northern States: A maximum refund of INR 10,000 will be provided for travel expenses.

The workshop will be held in **three batches**, please fill this form to share your preference with us by 5th August, 2024: <https://forms.gle/9dx2ynDwnV3i2CZ58>

More details on the workshop are shared in the document attached, please read through it and write back to us in case you have any questions.

We're so excited to meet and host you all! Looking forward to your participation!

Warm regards,  
The DI Movement Team

Follow us on our social media channels to stay updated about our initiatives



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A Social Initiative By Titan Company Limited  
[designimpactmovement.titan.in](https://designimpactmovement.titan.in)



Titan Design Impact Movement Protovillage Workshop 2024.pdf  
155K

## DEEP CONNECT WORKSHOP

### ABOUT THE PROGRAMME

Design Impact Movement is a visionary social programme dedicated to guiding aspiring social designers in their journey of innovation for social impact. We help designers understand the intricacies of social innovation design through hands-on prototyping experiences. Moreover, we help facilitate connections with opportunities that enable you to apply design thinking principles effectively, empowering you to create positive and lasting changes in society.

### ABOUT THE WORKSHOP

Design Impact Movement, in collaboration with ProtoVillage, is proud to introduce a workshop aimed at catalyzing transformative change in rural communities. This workshop is curated specifically for the exemplary students who were part of the Design Impact Movement journey with us. Through this we aim to aspire social innovation and inculcate the curiosity of designing for social good. The venue was specifically chosen as it is a live example of how social design concepts can be implemented on-ground.

### WHAT'S IN IT FOR YOU

This workshop offers a transformative experience, guiding participants through a reflective journey to deepen their understanding of sustainability. Through introspective exercises, attendees explore personal motivations and values, fostering a profound connection with sustainability principles.

### WHEN IS IT?

The workshop will be held in three batches, please fill this form to share your preference with us: <https://forms.gle/9dx2ynDwnV3i2CZ58>

### WHERE IS IT?

[ProtoVillage](#) (~100 kms away from Bangalore)

### HOW MUCH DOES IT COST?

Food and accommodation is covered, travel expenses are partly refundable: If you are traveling from Western and Southern States, train ticket fares to Bangalore will be fully reimbursed.

If you are traveling from Northern States, a maximum refund of INR 10,000 will be provided for travel expenses

Head to the FAQ section for more details

## WORKSHOP SCHEDULE

|       |       | ARRIVAL   | DAY 1  | DAY 2   | DAY 3   | DAY 4   | DAY 5   |
|-------|-------|---|--|---|---|---|---|
| 5:15  | 5:45  |   | Herbal tea,<br>Banana,<br>Exercise,<br>Meditation<br>(OPTIONAL)  | Herbal tea,<br>Banana,<br>Exercise,<br>Meditation<br>(OPTIONAL)   | Herbal tea,<br>Banana,<br>Exercise,<br>Meditation<br>(OPTIONAL) | Herbal tea,<br>Banana,<br>Exercise,<br>Meditation<br>(OPTIONAL) | Herbal tea,<br>Banana,<br>Exercise,<br>Meditation<br>(OPTIONAL)     |
| 6:00  | 7:30  |   | PRACTICING<br>SELF<br>AWARENESS -<br>IDENTITIES AND<br>CONSTRUCTS -<br><b>IN BRUCELEE'S<br/>FOOTSTEPS!</b> | AWARENESS -<br>EXPERIENCES,<br>PERCEPTIONS,<br>MEMORIES,<br>THOUGHTS,<br>BELIEFS,<br>EMOTIONS; <b>FEAR</b><br>- <b>EMBRACING<br/>THE ENEMY!</b> | DESIRE,<br>AMBITION,<br>PURPOSE - <b>THE<br/>IKIGAI MATRIX</b>  | WONDER AND<br>GRATITUDE -<br><b>UBUNTU</b>                      | CONSOLIDATION<br>AND TOOLS -<br><b>WE ARE DEEPLY<br/>CONNECTED!</b> |
| 7:45  | 8:45  |   |  | Community Work  | Community Work  | Nature Walk and<br>nature journaling<br>activity                | Community Work  |
| 9:00  | 9:45  |   | Breakfast  | Breakfast   | Breakfast   | Breakfast   | Breakfast   |
| 10:00 | 10:45 |   | <b>PROTOVILLAGE<br/>EMPATHISE,<br/>DEFINE</b>  | <b>PROTOVILLAGE<br/>INQUIRE,<br/>IMAGINE</b>  | <b>PROTOVILLAGE<br/>PROTOTYPE</b>                               | MISSION TIME  | LEPAKSHI  |
| 11:00 | 11:45 |   | MISSION TIME   | MISSION TIME  | MISSION TIME  |   |   |
| 12:00 | 12:45 | Welcome,<br>Tea,<br>Accommoda<br>tions                                  |  |   |   |   |   |
| 13:00 | 13:45 | Lunch   | Lunch  | Lunch   | Lunch   | Lunch   | Lunch   |
| 14:00 | 14:45 | Rest!   | Rest   | Rest  | MISSION TIME  | MISSION TIME  | MISSION<br>REPORTS,<br>FEEDBACK                                     |
| 15:00 | 15:45 | Introduction<br>s, Logistical<br>Instructions<br>, Tour of the<br>place | INTERCONNECTE<br>DNESS -<br><b>ELEPHANT ON<br/>THE PLATE!</b>  | MISSION TIME  |   |   |   |
| 16:00 | 16:45 |   | HERBAL TEA,<br>DEPARTURE   |   |   |   |   |
| 16:45 | 17:00 | Herbal tea  | Herbal tea   | Herbal tea  | Herbal tea  | Herbal tea  | <b>TITAN FACTORY<br/>VISIT</b>                                      |



|       |       |   |                    |                    |                    |                    |  |
|-------|-------|---|--------------------|--------------------|--------------------|--------------------|--|
| 17:00 | 18:30 | INTRODUCTIONS AND CIRCLE OF TRUST       | Play/Chill/Mission | Play/Chill/Mission | Play/Chill/Mission | Play/Chill/Mission |  |
| 19:00 | 19:45 | Dinner                                  | Dinner             | Dinner             | Dinner             | Dinner             |  |
| 20:00 | 21:15 | Icebreaker and Mission Briefs, Team IDs | Reflection         | Reflection         | Reflection         | Reflection         |  |

## Frequently Asked Questions

### 1. Where is the workshop located?

The workshop will be a 5-day in-person event held in ProtoVillage [Tekulodu, Andhra Pradesh 515341](#)

After the completion of the workshop, there is a curated tour of the Titan Factory for all the participants on Day 5 in Chikballapur

### 2. Will accommodation and food be provided?

Yes, accommodation and food will be provided on all 5 days by the program team. Kindly note that this will be a shared accommodation between all participants

### 3. Will transport to the workshop venue be arranged?

Yes, transportation from Bangalore to the venue will be arranged from the program team. The specific details of it will be communicated shortly. We will be arranging two vehicles from the respective pickup points i.e., the airport and common pickup point (TBD) respectively to the venue.

### 4. Can I travel by my own vehicle to the venue?

While it is not suggested to travel on your own since we will be getting to know each other during the commute, we can consider specific cases on request. Kindly note that travel by your own vehicle is non-reimbursable

### 5. Can I attend only part of the workshop?

Unfortunately, no. This is an immersive workshop that is spread out for 5 days and we require active participation on all the days

### 6. Is there a participation or a registration fee for the workshop?

There is **no registration fee**, the workshop is exclusively for the teams selected for the next stage of Design Impact Movement

**7. Is there any preparation required prior to the workshop?**

We would suggest you visit the Design Impact Movement [website](#) to get a clear understanding of what we are trying to achieve through this workshop and bring any questions you may have to address.

If you have more questions, please respond to your email invite!

We are looking forward to hosting you!

**Team Design Impact Movement**



A Social Initiative  
by  
**Titan Company Ltd.**



Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

## Titan DI Movement | Confirmation of Protovillage Workshop Allotment and Required Actions

designimpact &lt;designimpact@titan.co.in&gt;

Tue, Aug 13, 2024 at 11:48 AM

Dear Student,

We hope this message finds you well.

We are writing to inform you that your team has been allotted the Protovillage workshop for the period from **25<sup>th</sup> August to 30<sup>th</sup> August**. We kindly request that you arrange your travel plans in accordance with the dates provided. For further guidance, please refer to **the attached FAQ document**.

If you are unable to attend the workshop during the allotted period, please notify us by replying to this email with the reason for your unavailability.

Kindly respond to this email with the required details (in the table below) by **16th August**. You may also use this email as documented proof to obtain any necessary permissions from your college.

|                                  |              |
|----------------------------------|--------------|
| Number of team members           | <Number>     |
| Name and gender of team member 1 | <Name (M/F)> |
| Name and gender of team member 2 | <Name (M/F)> |
| Name and gender of team member 3 | <Name (M/F)> |
| Name and gender of team member 4 | <Name (M/F)> |
| Mode of transport                | <Train/Bus>  |
| Time of arrival on <date>        |              |
| Time of departure on <date>      |              |

Should you have any further questions or require additional information, please feel free to reach out to us within this email thread.

Thank you for your prompt attention to this matter.

Best regards,

Team DI Movement

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\*\*\*\*\*



**FAQs Protovillage 2024.pdf**

24K

## FREQUENTLY ASKED QUESTIONS

### 1. IS IT NECESSARY FOR ALL TEAM MEMBERS TO ATTEND THE WORKSHOP?

Yes, it is suggested that **all team members attend** the workshop.

### 2. IS THE REIMBURSEMENT PER STUDENT OR PER TEAM MEMBER?

The reimbursement is **per student**. If you are traveling from Western and Southern States, train ticket fares to Bangalore will be fully reimbursed. If you are traveling from Northern States, a maximum refund of INR 10,000 will be provided for travel expenses.

### 3. WHERE SHOULD WE BOOK OUR TRAVEL TO?

Make your bookings **to Bangalore**. Travel will be arranged from the Bangalore Airport (KIA) and the KSR Railway Station in Bangalore to Protovillage.

Please plan to **reach Bangalore by 10am on the first day** of your allocated batch

### 4. WHERE AND WHEN SHOULD WE BOOK OUR TRAVEL FROM?

Make your bookings **from the Bangalore Airport (KIA) or the KSR Railway Station in Bangalore**, you will be dropped here before 9pm. Choose options with **time of departure after 9pm** on the last day of your batch (Day 5).



Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

---

**Fwd: Design for Good! Unleash Your Potential with the Design Impact Movement**

---

**shivali lalbige** <ar.shivalilalbige@gmail.com>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Sun, Feb 25, 2024 at 2:02 PM

----- Forwarded message -----

From: **SPPU Notifications** <no-reply@pun.unipune.ac.in>  
Date: Sun, Feb 25, 2024, 2:10 AM  
Subject: Design for Good! Unleash Your Potential with the Design Impact Movement  
To: <ar.shivalilalbige@gmail.com>



Hey there,

Do you dream of using your design skills to create positive change in the world? The **Design Impact Movement (DIM)** makes that dream a reality, offering a platform for talented individuals like you to tackle real-world social and environmental challenges through design thinking.

**About the Design Impact Movement:**

Design Impact Movement (DIM) is a social initiative by Titan Company Ltd that supports sustainable products that impact social change.

DIM is a platform that helps anyone with an aspiration to design for social needs. It offers resources like masterclasses, opportunity statements, support networks, and a way to start a project. DIM also helps aspiring innovators reach their potential while giving back to society.

DIM offers custom opportunities aimed at achieving the United Nations' Sustainable Development Goals (SDGs). Users can browse opportunities, choose one, or identify any that resonates with them, and join DIM to design a better world for everyone.

**There is no registration cost****Call for Student Projects:**

We are currently seeking project proposals from students who exemplify the spirit of social impact design. Whether you are passionate about the environment, Healthcare, Agriculture, Livelihood, or Education, we encourage you to submit projects that showcase the transformative potential of design in addressing pressing issues.

Solutions in the space of Social Impact in any of the following categories:

1. **Environment:** Waste management, Sustainability, Energy conservation, Improving public infrastructure (buses, walkways etc) for the society.
2. **Healthcare:** Device Innovations, Improving accessibility for differently-abled, elderly. Early detection of diseases, service redesign for hospitals, clinics, and healthcare centers.
3. **Agriculture:** Device innovations in farming tools, Agri-tech, Farming marketplace redesign
4. **Livelihood:** Improving livelihood of local vendors, artisans, and specially-abled groups.
5. **Education:** Improving learning access for underprivileged communities, children, people with learning disabilities

This is not an exhaustive list. If you have any other solution that fits in any of these themes, you can participate.

**What's in it for the students?**

**Selected teams/Individuals will be invited for a physical in-person session (Offline) on 4th and 5th March 2024 at SPPU Research Park Foundation.**

**Time: 10.00 am to 4.00 pm (both days)**

| <b>Date</b>             | <b>Agenda</b>   | <b>Description</b>   |
|-------------------------|---|--|
| Thursday,<br>04/03/2024 | Day 1- Problem Framing and Ideation                   | - Behavioural deep dive for the selected insights<br>- Problem reframing and structuring<br>- Ideation and idea finalization |
| Friday,<br>05/03/2024   | Day 2-Ideation and Prototyping<br>(In-Person Session) | - Developing prototype (mock-up, 3D print, CAD Renders)<br>- Feedback on iterated prototype                                  |

**Note: It is mandatory to attend physical in-person (offline) sessions to participate in the Design Impact Movement.**

**Rewards:**

Best team to win a 4-day sponsored workshop with Proto Village and a visit to Titan Watches in Bangalore

**National Rewards:**

1. Top 100 teams to get tech incubation support to develop their prototype
2. Top 25 teams to get business incubation support and invite to exclusive sessions.
3. Top 3 teams will go for an international design exchange program.

**Submission Guidelines:**

- Clearly outline your project's social impact goals.
- Provide a concise description of the problem you aim to solve.
- Present your envisioned impact for the proposed solution.

**Why Participate:**

- Contribute to meaningful social change through your design expertise.
- Showcase your creativity and design skills.
- Connect with a community of like-minded individuals passionate about social impact.
- Gain visibility and recognition for your work.

**Collaborative Partners:**

This initiative is made possible through the collaborative efforts of SPPU Research Park Foundation, TinkerLabs, and Design Innovation Centre, also support provided by Titan Company Ltd. Together, we aim to foster a community of changemakers committed to using design for positive societal transformation.

**How to Submit:**

Kindly open the below link and submit the form or scan the QR code. We encourage you to think innovatively – this is your chance to make a tangible impact through design!

**Link for registration:**

<https://forms.gle/YHHLtTdpWceeUxn96>

Also find attached QR code for your reference.

**Key Dates:**

- **Submission Deadline: 28/02/2024**
- **Announcement of Selected Projects: 01/03/2024**

Should you have any questions or require additional information, please don't hesitate to reach out to us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com) or [dic@unipune.ac.in](mailto:dic@unipune.ac.in) or Mr Arun Aynodkar at +91-9405228167

Thank you for considering being a part of the Design Impact Movement. Together with SPPU Research Park Foundation, TinkerLabs, Design Innovation Centre, and Titan Company Ltd, let's design a brighter and more impactful future!

Best regards,

Design Innovation Centre,

Savitribai Phule Pune University, Pune

P.S. Don't hesitate to reach out if you have any questions or need further information about the DIM. We're here to support you every step of the way.

---

**2 attachments**

**DIM 2 QR Code.png**  
138K



**DIM SPPU.pdf**  
3625K





# DESIGN IMPACT >>>> >>>>>>>>>>>>>>>> MOVEMENT

## Find your calling in **Designing with a Social Impact**

Calling all change-makers and visionaries! Submit your innovative project/s for a chance to drive social impact and make a difference.

### IS THIS FOR YOU?

Are you bursting with passion and have a product idea to tackle a social issue in the Indian Subcontinent?

Your time to shine is now – we want to hear from you!

#### Top 100 Projects

Technology Incubation >  
Mentoring & Support in  
prototyping your products



#### Top 25 Projects

Business Incubation > Exclusive  
Workshops & business plan  
development



#### Top 3 Projects

Get support to launch your  
product & an all expense paid  
trip to an international design &  
innovation hotspot to engage  
with global experts

**Last Date: 28 February 2024**

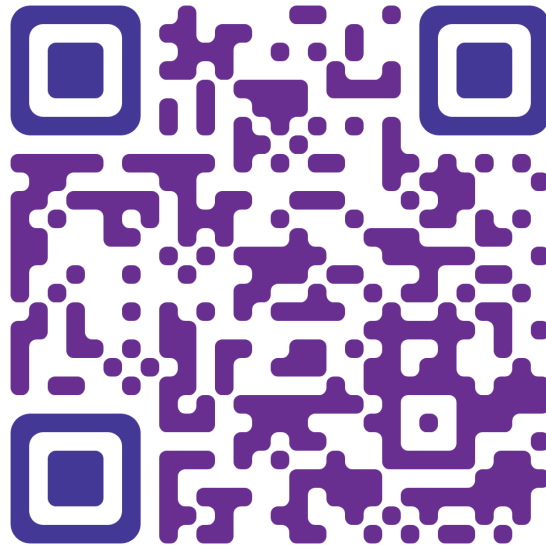




# DESIGN IMPACT >>>> >>>>>>>>>>>> MOVEMENT

**Innovator?**  
**Entrepreneur?**  
**You're who we need!**

**Scan here to apply!**



**or visit**

<https://forms.gle/4sv8CKovc2b7q6ZB7>

**Last Date: 28 February 2024**

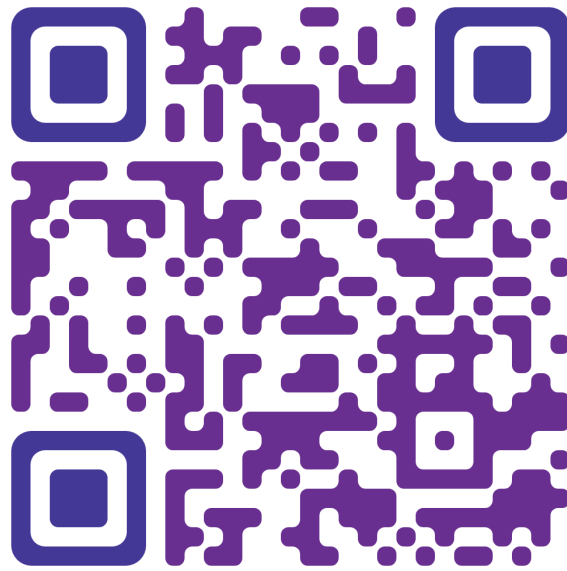




# DESIGN IMPACT >>>> >>>>>>>>>>>>>>>> MOVEMENT

**Attention Mavericks:  
Your Ideas Can Spark Change  
and  
Take You to Europe!**

**Scan here to apply!**



**or visit**

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**Last Date: 28 February 2024**





# DESIGN IMPACT >>>> >>>>>>>>>> MOVEMENT

**We're on the hunt for  
Social Impact Designers!**

**Scan here to apply!**



**or visit**

<https://forms.gle/4sv8CKovc2b7q6ZB7>

**Last Date: 28 February 2024**

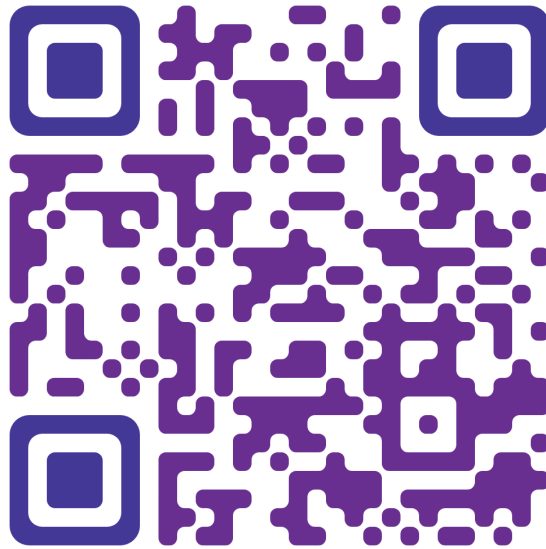




# DESIGN IMPACT >>>> >>>>>>>>>>>>>>>> MOVEMENT

**Do you believe your idea  
has the potential to make  
a difference?**

**Scan here to apply!**



**or visit**

<https://forms.gle/4sv8CKovc2b7q6ZB7>

**Last Date: 28 February 2024**





# DESIGN IMPACT >>>> >>>>>>>>>>>>>>> MOVEMENT

**Embark on your social  
entrepreneurship journey  
today!**

**Scan here to apply!**



**or visit**

**<https://forms.gle/4sv8CKovc2b7q6ZB7>**

**Last Date: 28 February 2024**



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## Design Innovation Centre

*In association with*

## SPPU Research Park Foundation & TinkerLabs, Mumbai

Empower students with mentorship, technical support, and a cutting-edge tech platform to amplify their innovations.

Join the Design Impact Movement, register now and embark on a transformative project journey.



### Design Innovation Centre

SPPU Research Park Foundation Building,  
Savitribai Phule Pune University,  
Ganeshkhind, Pune -411007

CONTACT US

dicsppu@gmail.com / +91-9405228167

Follow us



# Fwd: Congratulations! Your Selection for the Design Impact Movement

Vaishali Anagal <vaishali.anagal@bnca.ac.in>

Mon 8/26/2024 3:02 PM

To: Tanaya Takale <a20123.tanayat@bnca.ac.in>

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**From:** ARYA PUNSE <punsearya@gmail.com>

**Sent:** Friday, March 1, 2024 6:37:54 PM

**To:** Vaishali Anagal <vaishali.anagal@bnca.ac.in>

**Subject:** Fwd: Congratulations! Your Selection for the Design Impact Movement

----- Forwarded message -----

From: **DIC SPPU** <[dicsppu@gmail.com](mailto:dicsppu@gmail.com)>

Date: Fri, 1 Mar 2024 at 6:17 PM

Subject: Congratulations! Your Selection for the Design Impact Movement

To:

Cc: <[info.sppurpf@gmail.com](mailto:info.sppurpf@gmail.com)>

Dear Participant/s,

We are thrilled to inform you that your project proposal has been selected for the Design Impact Movement. Congratulations on this achievement!

Your dedication to creating positive social change through design has truly impressed us, and we believe that your project has the potential to make a significant impact. We are excited to have you join us in this collaborative effort to harness the power of design for the greater good.

The workshop is scheduled to take place on **08/03/2024 & 05/03/2024 from 10:00 am to 4:00 pm on both days at Digital Classroom 1, SPPU Research Park Foundation, Opp. Health Centre, Savitribai Phule Pune University, Ganeshkhind, Pune.** Please mark your calendar accordingly, as attendance is mandatory for all selected participants. The workshop will provide a valuable opportunity for you to further develop and refine your project, collaborate with peers, and gain insights from industry experts.

Here are some key details about the workshop:

**Time: 10.00 am to 4.00 pm (both days)**

| Date                  | Agenda                              | Description  |
|-----------------------|-------------------------------------|--|
| Monday,<br>04/03/2024 | Day 1- Problem Framing and Ideation | <ul style="list-style-type: none"> <li>- Behavioural deep dive for the selected insights</li> <li>- Problem reframing and structuring</li> </ul> |



Tuesday, 05/03/2024

Day 2-Ideation and Prototyping

- Ideation and idea finalization
- Developing prototype (mock-up, 3D print, CAD Renders)
- Feedback on iterated prototype

***Note: It is mandatory to attend physical in-person sessions to participate in the Design Impact Movement.***

To confirm your participation, please fill out the Google Form provided in the link below: <https://forms.gle/jRsKo3ivDskqLJUQ6>

***before tomorrow, Saturday 02/03/2024 till 1:00 pm only.***

Your prompt response is greatly appreciated, as it will help us ensure the success of the workshop and better accommodate all participants.

**Please note that during the workshop, no food or accommodation will be provided by the organizers. We kindly ask you to make your own arrangements for meals and lodging, if necessary.**

**Also, please carry a laptop with you. (It's necessary during workshop activities)**

**Note: For the workshop, While we encourage participation from teams of two members or individuals, rest assured that all team members will still enjoy the advantages of the program's resources and opportunities.**

If you have any questions or need further information, please don't hesitate to reach out to us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com)

Once again, congratulations on your selection, and thank you for your dedication to using design as a catalyst for positive change. Together, let's make a difference!

P.S. Don't hesitate to reach out if you have any questions or need further information about the DIM. We're here to support you every step of the way.

Best Regards,  
**Design Innovation Centre,**  
Savitribai Phule Pune University, Pune



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# DESIGN IMPACT >>>> >>>>>>>> MOVEMENT

## CERTIFICATE OF PARTICIPATION

Congratulations

Dr. Vaishalin Anagal

for successfully submitting the project as part of the  
**Design Impact Movement 2023-24**



Savitribai Phule Pune University



A Social Initiative by  
**Titan Company Ltd.**



**TITAN**  
COMPANY

# CERTIFICATE OF PARTICIPATION

Congratulations

**Nidhi Patil**

---

for successfully submitting the project as part of the  
**Design Impact Movement 2023-24**



Savitribai Phule Pune University



A Social Initiative by  
**Titan Company Ltd.**



**TITAN**  
COMPANY

## Fwd: Design Impact Movement: Congratulations and Next Steps!

Vaishali Anagal <vaishali.anagal@bnca.ac.in>

Mon 8/26/2024 2:59 PM

To: Tanaya Takale <a20123.tanayat@bnca.ac.in>

📎 1 attachments (488 KB)

1000181291.jpg;

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---

**From:** Vaishali Anagal <vaishali.anagal@bnca.ac.in>

**Sent:** Monday, June 17, 2024 3:29:54 PM

**To:** DI Movement <designimpact@titan.co.in>

**Subject:** Re: Design Impact Movement: Congratulations and Next Steps!

Dear sir/madam,

Please see attached herewith the response that I am getting while trying to fill in the form. I had written an email earlier too regarding the same. Kindly change the settings of your google form so that a person with multiple project entries can fill in the forms for their different projects.

It would be great, if you could change the settings to enable me to fill in the form.

Thanks and regards,

Dr Vaishali Anagal

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---

**From:** DI Movement <designimpact@titan.co.in>

**Sent:** Monday, June 17, 2024 12:04:43 PM

**To:** Vaishali Anagal <vaishali.anagal@bnca.ac.in>

**Subject:** Design Impact Movement: Congratulations and Next Steps!



Dear Dr. Vaishalin Anagal,

Greetings from Design Impact Movement!

**Your project Eco-Friendly & Affordable Cooler has moved to the final stage of the evaluation process.**

This is a final reminder to complete the form shared on this email thread, latest by **19th June, 2024**. Your project will not be considered for further evaluation if all members of the team do not fill the form by the deadline provided. Please ensure that every team member fills this form individually.

[Click here to fill the form](#)

Please disregard this reminder if you have already filled out the form.

We look forward to your continued participation and wish you the best of luck in the next stage.

**Best wishes,  
Team DI Movement**



[dimsupport@titan.co.in](mailto:dimsupport@titan.co.in)



[designimpactmovement.titan.in]designimpactmovement.titan.in

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**Fwd: Design Impact Movement Incubation Phase | Invitation to Protovillage Workshop**

Vaishali Anagal &lt;vaishali.anagal@bnca.ac.in&gt;

Mon 8/26/2024 3:01 PM

To: Tanaya Takale &lt;a20123.tanayat@bnca.ac.in&gt;

 1 attachments (155 KB)

Titan Design Impact Movement Protovillage Workshop 2024.pdf;

Get [Outlook for Android](#)**From:** Nidhi Patil <nidhidec112@gmail.com>**Sent:** Thursday, August 1, 2024 5:00:49 PM**To:** Vaishali Anagal <vkjere@gmail.com>; Vaishali Anagal <vaishali.anagal@bnca.ac.in>**Subject:** Fwd: Design Impact Movement Incubation Phase | Invitation to Protovillage Workshop

----- Forwarded message -----

From: **DI Movement** <[designimpact@titan.co.in](mailto:designimpact@titan.co.in)>

Date: Thu, 1 Aug 2024 at 4:56 PM

Subject: Design Impact Movement Incubation Phase | Invitation to Protovillage Workshop

To: Nidhi Patil <[nidhidec112@gmail.com](mailto:nidhidec112@gmail.com)>

Dear Nidhi Patil,

Congratulations once again on the selection of your Eco-Friendly & Affordable Cooler to the next stage of Design Impact Movement! You should be proud of your achievement.

Since you are now part of the DI Movement family, we invite you to join the [LinkedIn Group](#), and engage with the other finalists and mentors.

As a first step in the incubation process, we **invite you to engage** in a collaborative environment with fellow innovators and thought leaders, **at the in-person protovillage workshop** (<https://g.co/kgs/VAoTFQ>). It is a **curated 5-day workshop** offering a transformative experience, guiding participants through a reflective journey to deepen their understanding of sustainability. Through introspective exercises, attendees explore personal motivations and values, fostering a profound connection with sustainability principles.

Accommodation and food will be covered for the entire five-day duration. Travel expenses, reimbursement policies vary by region:

- Western and Southern States: Train ticket fares will be fully reimbursed.
- Northern States: A maximum refund of INR 10,000 will be provided for travel expenses.

The workshop will be held in **three batches**, please fill this form to share your preference with us by 5th August, 2024: <https://forms.gle/9dx2ynDwnV3i2CZ58>

More details on the workshop are shared in the document attached, please read through it and write back to us in case you have any questions.

We're so excited to meet and host you all! Looking forward to your participation!

Warm regards,  
The DI Movement Team

Follow us on our social media channels to stay updated about our initiatives



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[designimpactmovement.titan.in](https://designimpactmovement.titan.in)

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**DESIGN IMPACT >>>>**  
**>>>>>>>> MOVEMENT**

# CERTIFICATE **OF PARTICIPATION**

Congratulations

**Sayali Andhare**

---

for successfully submitting the project as part of the  
**Design Impact Movement 2023-24**

A Social Initiative by  
**Titan Company Ltd.**





Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

---

**Fwd: IMPACT Conclave 3.0**

---

**shivali lalbige** <ar.shivalilalbige@gmail.com>  
To: Tanaya Takale <tanayatakale16@gmail.com>

Wed, Feb 28, 2024 at 11:26 AM

----- Forwarded message -----

From: **SPPU Notifications** <no-reply@pun.unipune.ac.in>  
Date: Tue, Feb 27, 2024, 7:38 PM  
Subject: IMPACT Conclave 3.0  
To: <ar.shivalilalbige@gmail.com>

Dear Student,

Join us for the IMPACT Conclave 3.0!

Krishna Vishwa Vidyapeeth, SPPU-Research Park Foundation, and IIT Ropar are thrilled to invite you to the 3rd edition of the IMPACT Conclave. This transformative event aims to empower startups and innovators in Medical, Pharmaceutical, agri-tech, water technology and Allied Sciences, guiding them towards commercialization and research advancement.

Date: March 7 &amp; 8, 2024

Time: 09:00 AM

Venue: SPPU-Research Park Foundation, SPPU, Pune

Experience two days of insightful discussions, pitches, and showcases as entrepreneurs, researchers, and experts come together to explore the latest innovations. With a focus on Healthcare, Agri-Tech, Water Tech, AI/Emerging Tech, and more, the IMPACT Conclave promises to be a hub of creativity and collaboration.

You can engage in various capacities, including as Individual Attendees, Research/Innovator Pitch/Exhibition presenters, and Startup-Pitch/Exhibition presenters.

Showcase your innovations, as the top 5 innovative projects and 5 outstanding startups will receive the prestigious IMPACT Award along with funding support from IIT Ropar and investors.

Don't miss out on this chance to make a significant impact and propel your ideas to new heights!

Register now at [https://bit.ly/kvv\\_ic3](https://bit.ly/kvv_ic3) and stay tuned for updates on our website [www.kimsduimpact.com](http://www.kimsduimpact.com).

Let's shape the future together! #IMPACTConclave #Innovation #Startup #TechCommercialization

Regards,  
SPPU-RPF



Impact Conclave.jpeg  
271K

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# Krishna Vishwa Vidyapeeth

(DEEMED TO BE UNIVERSITY)

## SPPU Research Park Foundation, PUNE

&

## IIT Ropar (iHub - AWaDH)

*Presents*

# IMPACT Conclave<sup>©</sup> 3.0

Innovation in Medical, Pharmaceutical & Allied Sciences for Commercialization of Technology (IMPACT)

**HEALTHCARE**

Innovations and Emerging Technologies in Healthcare

**AGRI - TECH**

Pharmaceutical Innovations and Drug Discovery

**WATER TECH**

Innovations in Potable and Waste Water technology

**AI / Emerging Tech**

Precision farming and Agriculture automation

Regulatory & Ethical Considerations, Intellectual Property (IP), and Commercialization Strategies

THEME

What to Expect

7 & 8 MARCH 2024 | [www.kimsduimpact.com](http://www.kimsduimpact.com) | SPPU Research Park Foundation, Pune

**REGISTER** [bit.ly/kvv\\_ic3](http://bit.ly/kvv_ic3)

**PARTNERS** Join Us: [bit.ly/kvv\\_partner](http://bit.ly/kvv_partner)

**Registration Closes On: 02 MARCH 2024**



## Launch of Initiatives



**SPRINT (02 June 2023)** : Launched by **Shri Gajendra Singh Shekhawat** ji, Honourable Minister, Ministry of Jal Shakti, Department of Water Resources, RD & GR, Govt. of India

Our Honourable Minister **Shri Gajendra Singh Shekhawat**, launched flagship initiatives **SPRINT** and **SAMRIDHI** on 02 June 2023 at **iHub - AWaDH @ IIT Ropar** with an aim to stimulate research, innovation, and entrepreneurship in our country, with a specific focus on enhancing Cyber Physical Systems within the domains of agriculture and water.

**The purpose** of the **Krishi Vigyan Vidhi (KVV) 1.0** conclave is to bring together experts, researchers, Startups, and other stakeholders in the field of agriculture to explore and advance the application of agri-tech, smart farming, water management, and advanced irrigation techniques for sustainable agriculture. The conclave aims to facilitate knowledge sharing, collaboration, and innovation in order to address the challenges and maximize the potential of modern agricultural practices. Participants will have the chance to engage with industry leaders, explore innovative technologies, share experiences, and learn about successful case studies. The conclave aims to inspire and empower participants to apply transformative approaches in their own agricultural practices and contribute to the sustainable development of the agricultural sector.

### Theme:

The conclave is centered around the theme of "Advancing Agriculture: Transforming Agri-tech, Smart Farming, Water Management, and Advanced Irrigation Techniques for Sustainable Agriculture."



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# For Startups & Researchers

# IMPACT

# Conclave 3.0

*Innovation in Medical, Pharmaceutical & Allied Sciences for Commercialization of Technology (IMPACT)*

Live lab for implementation & clinical trials / studies

R&D prototype support

SPRINT and Investment amount of ₹28.75 L

IP Support

Holistic mentorship, corporate & investor connect

Incubation & Acceleration Support

Pitch / Exhibition, Prize money, awards & certifications to 10 Startups / Innovators

Funding Support & opportunity

From SPPU

**upto 2.25 Lakhs**  
Grant for top 3 startups

From KVV

**upto 01 Lakhs**  
Grant for top 3 startups

From iHub AWaDH

**0.5 Lakhs**  
Grant for top 3 Startup / Researcher / Individuals

**25 Lakhs**  
Grant / Equity per Edition

All the grants and the funds are subject to the further terms and conditions of each incubator / Accelerator

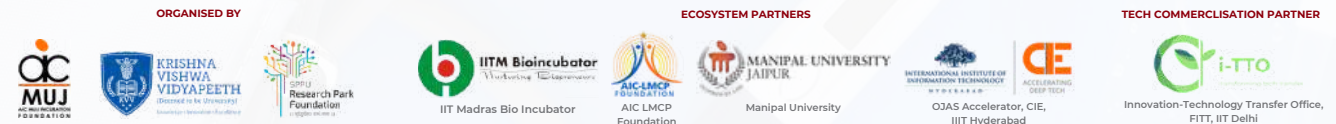
## IMPACT Conclave 3.0 Partners:



## IMPACT Conclave 2.0 Partners:



## IMPACT Conclave 1.0 Partners:



7 & 8 MARCH 2024

SPPU, Pune

REGISTER NOW

bit.ly/kvv\_ic3

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Maharashtra  
State Innovation  
Society



KRISHNA  
VISHWA  
VIDYAPEETH  
(Deemed to be University)  
Knowledge - Innovation - Excellence



AWaDH  
IIT Ropar - TIF



ATAL  
INCUBATION  
CENTRE  
NALANDA INSTITUTE OF TECHNOLOGY FOUNDATION

PRESENTED & JOINTLY ORGANISED BY

07-08 MARCH, 2024

# IMPACT CONCLAVE 3.0



**Sh. Amitabh Nag**

CEO, BHASHINI, MeITY Govt of India  
Chief Guest



**Dr. Praveen D.**

Director, Science and Technology Park, Pune  
Guest of Honor

## TRACK 1: Innovation and Policy Intervention for Startup and Research Ecosystem

### Panel Discussion



**DR. NIDHI SINGH**  
Senior Policy Fellow, DST



**DR. PERMINDER JIT KAUR**  
Senior Policy Fellow at Centre for  
Policy Research, IISc, Bangalore



**ER. MAMTA BHARDWAJ**  
COO at STPI - NEURON



**DR. SHRINIVAS SAVALE**  
CEO  
AIC-LMCP Foundation



**AJAY SINGH RAJAWAT**  
Manager (S&O) Bhashini Division, DIC  
Ministry of Electronics and Information



**SAURABH ARORA**  
Incubation Manager  
IIT Ropar TIF

## TRACK 2: Investment and Emerging Technologies in Health, Agri and Deeptech Ecosystem

### Panel Discussion



**ANUBHAV TIWARI**  
Chief Innovation Officer  
NIELIT-MeITY  
Government of India



**AKSHAY SHAH**  
CEO  
iWebTechno, Mumbai



**ADITI KUMAR**  
AVP  
Bio Angels



**KIRAN VUPPALA**  
Head Of Operations - TBI  
MS-MF TBI



**SATISH KUMAR**  
Assistant Director  
MSME



**MUKESH KESTWAL**  
CIO  
IIT Ropar TIF AWaDH

[bit.ly/kvv\\_ic3](https://bit.ly/kvv_ic3)



Deadline: 02 March 2024

09.00 AM - 04.00 PM



Savitribai Phule Pune University, Campus,  
Ganeshkhind, Pune, Maharashtra



## Theme:

The program structure is subject to change and may include additional activities and sessions based on participant interests and emerging topics in the field.

On 7<sup>th</sup> and 8<sup>th</sup> March 2024 at SPPU Research Park Foundation, Pune University

| Time  | Event   | Parallel to   |
|---|---|---|
| <b>DAY 1</b>  |   |   |
| <b>Launch of IMPACT Conclave 3.0 (07 March, 2024)</b> |   |   |
| 09:00 AM – 10:00 AM                                   | Registration  | <b>IMPACT Exhibition:</b><br>Showcasing Ideas by Participants |
| 10:00 AM – 12:00 PM                                   | Inauguration  |   |
| 12:00 PM – 01:00 PM                                   | <b>Track 1- Panel Discussion</b> on Innovation and Policy Intervention for Startup and Research Ecosystem       |   |
| 12:00 PM – 01:00 PM                                   | <b>Track 2- Panel Discussion</b> on Investment and Emerging Technologies in Health, Agri and Deeptech Ecosystem |   |
| 01:00 PM – 02:30 PM                                   | Lunch and Networking  |   |
| 02:30 PM – 04:00 PM                                   | Track 3- Pitch by Scholars and Researchers  | <b>IMPACT Exhibition:</b><br>Showcasing Ideas by Participants |
| 02:30 PM – 04:00 PM                                   | Track 4- Pitch by Start Ups   |   |
| 04:00 PM – 04:30 PM                                   | Tea   |   |
| <b>DAY 2</b>  |   |   |
| <b>Validatory of Impact Conclave (08 March, 2024)</b> |   |   |
| 10:00 AM – 10:30 AM                                   | Launch of BHASHINI Techathon by Chief Guest   |   |
| 10:30 AM – 11:15 AM                                   | Round table discussion  |   |
| 11:15 AM – 11:45 AM                                   | Felicitation of Women Scientist and Researchers   |   |
| 11:45 AM – 1:00 PM                                    | Announcement of Results & Validatory and Thank You  |   |
| 01:00 PM – 02:30 PM                                   | Networking Lunch and End of Event   |   |

## Deliverables to the Participants:

- Enhanced knowledge and understanding of agri-tech, smart farming, water management, and advanced irrigation techniques.
- Identification of potential collaboration opportunities among participants.
- Exchange of best practices, case studies, and success stories in sustainable agriculture.
- Funding Opportunity:** The top Individual / Researcher / Startup will get the funding upto 28.75 Lakhs as Grant / Equity (CCD / OCD) collaboratively by iHub AWaDH, Krishna Viswa Vidyapeeth, SPPU RPF.
- Networking and partnership opportunities for future research, projects, and initiatives.
- Certificate of Participation:** At the conclusion of the conclave, participants will receive certificates of participation. These certificates acknowledge their attendance, active participation, and successful completion of the conclave. Certificates can be valuable additions to their professional portfolios and demonstrate their commitment to continuous learning.
- Post-event Support:** Participants may receive post-event support in the form of access to an online platform, discussion forums, or email correspondence to address any follow-up questions, clarify doubts, or seek further guidance related to the conclave topics. This post-event support ensures continued learning and support for participants even after the program concludes.

**20**  
Feb

Application Start Date

**02**  
Mar

Registration Closes

**04**  
Mar

Shortlisting Declaration

**07**  
Mar

Event & Demo Day

From SPPU

upto **2.25**  
Lakhs

Grant for top 3 startups

From SPPU

upto **01**  
Lakhs

Grant for top 3 startups

From iHub AWaDH

upto **0.5**  
Lakhs

Grant for top 3 Startup / Researcher / Individuals

**25**  
Lakhs

Grant / Equity per Edition

\*Includes food and conference Kit

All the grants and the funds are subject to the further terms and conditions of each incubator / Accelerator





Maharashtra State Innovation Society



AWaDH IIT Ropar - TIF



# ORGANISING TEAM

## Chief Patrons and Patrons of KVV



Chief Patron

**Dr. Suresh Bhosale**

Hon'ble Chancellor, Krishna Vishwa Vidyapeeth



Chief Patron

**Prof. (Dr.) Suresh Gosavi**

Hon'ble Vice Chancellor, SPPU, Pune



Patron

**Dr. Pravin Shingare**

Hon'ble Pro-Chancellor, Krishna Vishwa Vidyapeeth



Patron

**Dr. Vedprakash Mishra**

Hon'ble Chief Advisor to Chancellor, Krishna Vishwa Vidyapeeth



Patron

**Dr. Neelam Mishra**

Hon'ble Vice Chancellor, Krishna Vishwa Vidyapeeth



Patron

**Dr. Parag Kalkar.**

Pro Vice Chancellor, SPPU

## Chief Advisory Committee



**Dr. Vijay Khare**

Registrar, SPPU



**Dr. M. V. Ghorpade**

Registrar, KVV, Karad



**Mr. P. D. John**

Executive Director, KVV, Karad



**Dr. Rajani Gaonkar**

Controller of Examinations, KVV, Karad



**Dr. S. R. Patil**

Director-IQAC, KVV, Karad



**Dr. Pushendra Singh**

Project Director IIT Ropar TIF AWaDH

## Organising Chair, Scientific Program Committee Chair, Organising Secretary & Joint Organiser

### Organising Chair



**Dr. A.D. Shaligram**

CEO, SPPU Research Park Foundation



**Dr. D. K. Agarwal**

Director - Innovation, Incubation and Entrepreneurship, KVV, Karad



**Ms. Rajashree Patankar**

Senior manager SPPU-RPF



**Dr. Jayant Pawar**

Assistant Director - Innovation, Incubation and Entrepreneurship, KVV, Karad

### Organizing Secretary

### Co-Organising Team IIT Ropar Technology and Innovation Foundation (iHub - AWaDH)



**Dr. Radhika Trikha**

COO  
IIT Ropar TIF AWaDH



**Mukesh Kestwal**

CIO  
IIT Ropar TIF AWaDH

## Partner (Team MPKV, Rahuri (Knowledge Partner) | Team GHRCEM, Pune (Academic Partner)

### Partner Organisations



**Ajay Singh Rajawat**

Manager (S&O)  
BHASHINI Division, DIC  
Ministry of Electronics and Information



**Kiran Vuppala**

Head Of Operations - TBI  
MS-MF TBI



**Durga Prasad Gouda**

COO at AIC-Nalanda  
Institute of Technology Foundation



**Saurabh Arora**

Incubation Manager  
iHub - AWaDH @ IIT Ropar

### SPOC



**Dr. Amar Mohite**

Research Associate  
KVV Karad  
9673766555



**Divyanshu Gupta**

Program Manager  
IIT Ropar TIF AWaDH  
9430372600



**Ajinkya Shyam Terkar**

Innovation Officer  
SPPU-RPF

## Objectives:

1. Provide a platform for exchanging ideas and best practices in Healthtech, Pharmaceuticals, allied sciences agri-tech, and water Technology.
2. Foster collaboration and networking among researchers, practitioners, Startups, policymakers, and industry professionals in the field of sustainable agriculture.
3. Promote awareness and understanding of the latest advancements and innovations.
4. Explore opportunities for technology transfer and adoption.
5. Identify key challenges and discuss strategies for development in Healthcare, Healthtech, Allied Sciences, Pharmaceutical, Agriculture and Water Management, with a focus on resource optimization, productivity enhancement, and environmental conservation.
6. Encourage interdisciplinary research and partnerships to develop cutting-edge solutions for agricultural sustainability.

## Eligibility:

1. **For IMPACT Conclave:** All undergraduate and postgraduate students of Medical Science, Agriculture Science, Soil Science, Biotechnology, Engineering and Technology, and Researchers, Academicians, Agricultural practitioners, Startups, Policymakers, and Industry professionals working in relevant fields.
2. **For SPRINT West Edition:** All researchers, early stage startup and as per eligibility set up by IIT Ropar TIF AWaDH. Separate agreement shall be signed with the potential candidates who are onboarded.

## The Conclave focus on:

The conclave on Advancing Agriculture: Transforming Agri-tech, Smart Farming, Water Management, and Advanced Irrigation Techniques for Sustainable Agriculture focuses on exploring innovative approaches and solutions to enhance agricultural practices and promote sustainability in the agricultural sector. This conclave brings together experts, researchers, practitioners, startups, policymakers, and industry professionals to discuss and share knowledge on the following key areas:

1. **Health Tech:** The conclave aims to showcase the latest advancements in Healthcare, Pharmaceutical and allied sciences and their potential to revolutionize medical science and health.
2. **Agri Tech:** The conclave will delve into the concept of smart farming, agricultural technology and their potential which integrates technology and data-driven approaches to optimize agricultural processes, natural resource management and organic farming. It will cover areas like smart sensors, farm management systems, data analytics, and decision support tools for improved productivity and resource management.
3. **Water Technologies:** Water is a crucial resource in agriculture, and the conclave will focus on effective water management strategies for sustainable agricultural practices. It will discuss topics such as efficient irrigation techniques, water conservation methods, watershed management, and water quality monitoring.
4. **AI / Emerging Tech:** The conclave will highlight innovative startups using deeptech as the core of innovation to solve the problem statement of the masses.

## Program Schedule

### Day 1:

- Inaugural session and keynote addresses by eminent speakers.
- Panel discussions on on Innovation and Policy Intervention for Startup and Research Ecosystem
- Panel discussions on on Investment and Emerging Technologies in Health, Agri and Deeptech Ecosystem
- Presentation of shortlisted research ideas
- Networking and industry exhibitions..

### Day 2:

- Launch of BHASHINI Techathon
- Roundtable discussions on policy and regulatory aspects of sustainable agriculture.
- Closing session with a summary of key takeaways and next steps
- Award ceremony and felicitation for Women Scientist and Researchers
- Valedictory and closing ceremony

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# KRISHNA VISHWA VIDYAPEETH (DEEMED TO BE UNIVERSITY) KARAD

SPPU-Research Park Foundation, SPPU, Pune (Incubation Partner), Maharashtra

In Association with

Indian Institute of Technology Ropar (iHub - AWaDH), Punjab

# IMPACT Conclave 3.0



# IIT ROPAR (iHub - AWaDH) SPRINT WEST EDITION AT MAHARASHTRA

## Learn . Create . Grow



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kvvcric.com

From SPPU

**upto  
2.25  
Lakhs**  
Grant for top 3 startups

From SPPU

**upto  
01  
Lakhs**  
Grant for top 3 startups

From iHub AWaDH

**0.5  
Lakhs**  
Grant for top 3 Startup /  
Researcher / Individuals

**25  
Lakhs**  
Grant / Equity per Edition

All the grants and the funds are subject to the further terms and conditions of each incubator / Accelerator

REGISTER NOW

[bit.ly/kvv\\_ic3](https://bit.ly/kvv_ic3)



**Registration Closes On:**  
02 MARCH 2024


PARTNERS

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 [www.kvv.edu.in](http://www.kvv.edu.in)

 [director.iie@kvv.edu.in](mailto:director.iie@kvv.edu.in)

 [people@ihub-awadh.in](mailto:people@ihub-awadh.in) [vv.edu.in](http://vv.edu.in)

 (+91) 9673766555

 SPPU Research Park Foundation, Savitribai Phule Pune University, Ganeshkhind  
Rd, Ganeshkhind, Pune -415539, Maharashtra, India



Tanaya Takale <tanayatakale16@gmail.com>

## Your Ticket for IMPACT Conclave 3.0 || Order# 13171984

**Townscript** <tickets@townscript.com>  
Reply-To: tickets@townscript.com  
To: Tanaya Rajendra Takale <tanayatakale16@gmail.com>

Sat, Mar 2, 2024 at 1:29 PM



Share Tweet

# Your Registration for IMPACT Conclave 3.0!

 **Organizer:**  
**R2E Technologies**

**Hi Tanaya Rajendra Takale,**

Thank you for purchasing 1 ticket(s) for **IMPACT Conclave 3.0**.

Your Registration details are as follows:

Booking Id : **13171984**

Booking Date : **03/02/2024 13:28(IST)**

| NAME                   | TYPE                                    | PRICE       |
|------------------------|---|-------------|
| Tanaya Rajendra Takale | Research / Innovator Pitch / Exhibition | INR 1000.00 |



### Event Details :

Organizer : R2E Technologies

Venue : **SPPU RESEARCH PARK FOUNDATION, HEALTH CENTRE, Campus, Ganeshkhind, Pune, Pune, India,**

 Event  
Date : 7 Mar 2024 : 9:00 AM - 8 Mar 2024 : 3:00 PM (IST)

 Event Link : **IMPACT Conclave 3.0**

### Message from organizer :

Research / Innovator Pitch / Exhibition : Secure this ticket if you're a researcher or innovator eager to showcase your research idea at the event. In the event of non-selection, the refunded amount will be returned to your account after deducting applicable taxes and platform charges of 10%.

(\*Note : Please bring the printout of this email to the event *OR* show this on your smart phone at event venue)

#### *Need any help?*

For Event Related Clarifications, please reach out to us at [connect@r2e.in](mailto:connect@r2e.in) .

For any Payment related issues, You can contact us at [help@townscript.com](mailto:help@townscript.com) .

### Create event of your own

You can also use townscript to manage registrations online!

Create Event

---

 **Confirmation.pdf**  
55K



Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

---

## Shortlisted for IMPACT Conclave 3.0 - Research

---

IMPACT Conclave 3.0 <announcements@townscript.com>  
Reply-To: divyanshu@ihub-awadh.in  
To: Tanaya Rajendra Takale <tanayatakale16@gmail.com>

Sun, Mar 3, 2024 at 4:48 PM



### Message From R2E Technologies

---

Dear Tanaya Rajendra Takale,

Congratulations!!

Your Innovation / Research Idea have been shortlisted for the Pitch and Exhibition at the IMPACT Conclave 3.0.

To facilitate the event smoothly, we kindly request you to share your updated pitch deck with us before March 5th, 2024, at the following email address:

Email to share pitch deck:

to: [divyanshu@ihub-awadh.in](mailto:divyanshu@ihub-awadh.in)

cc: [cio@ihub-awadh.in](mailto:cio@ihub-awadh.in); [jayantpawar26@gmail.com](mailto:jayantpawar26@gmail.com)

Subject: <Startup Name> - IMPACT Conclave 3.0 - Pitch Deck

***Your pitch deck should be as per the template shared with this mail.***

#### **Regarding accommodation arrangements,**

we will be providing shared rooms, accommodating two individuals per room, at the guest house of Savitribai Phule Pune University. Please plan your travel accordingly as rooms will be allocated to only two persons from each startup/ Innovation. **It is mandatory to request the rooms on the above mentioned emails with pitch deck submission latest by March 5th, 2024.** Any request after the deadline will not be considered.

Looking forward to your participation and wishing you the best of luck at the IMPACT Conclave 3.0 !

We are sharing:

1. Program Brichure for further information and agenda,

2. A creative for you to make some noise in your social media channels.
3. Pitch Deck Template for submission

Click here to access the shared files: [Brochure and Creatives](#)

For any query please reach out to:

Divyanshu Gupta - 9430372600.

Warm Regards,  
Divyanshu Gupta,  
Program Manager,  
iHub AWaDH - IIT Ropar Technology and Innovation Foundation

---


*This email was sent by the organizer of IMPACT CONCLAVE 3.0. You can contact the organizer at [connect@r2e.in](mailto:connect@r2e.in).*



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 **d7597045-de69-424c-b137-030fb7b7c531.pdf**  
1152K



Tanaya Takale &lt;tanayatakale16@gmail.com&gt;

---

## Certificate of Appreciation: IMPACT CONCLAVE 3.0

---

**Divyanshu Gupta** <divyanshu@ihub-awadh.in>  
To: Tanayatakale <tanayatakale16@gmail.com>

Thu, Mar 21, 2024 at 1:57 PM

Dear Tanaya Rajendra Takale,

We trust this message finds you well.

We extend my sincere gratitude for your participation in the **"IMPACT Conclave 3.0"** hosted by **Krishna Vishwa Vidyapeeth, SPPU - Pune**, and **IIT Ropar Technology and Innovation Foundation (iHub AWaDH)**.

Your invaluable contribution played a significant role in making our program successful and innovative. We hope the program added value towards your journey as a researcher or entrepreneur.

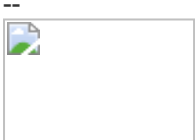
We are truly grateful for your engagement and dedication to fostering innovation in the startup and research community. Your presence added immense value to our discussions and endeavors.

We would like to present you the certificate of participation for your contribution in the program and wish you for your future endeavours.

***Please find attached your certificate of participation as a token of our appreciation.***

*For any support from the host organizations please feel free to contact. We would love to explore the ways we can support your efforts and try to magnify the impact it can create on society.*

Warm regards,



### **Divyanshu Gupta**

Program Manager

iHub AWaDH

IIT Ropar Technology and Innovation Foundation

**M:** +91-94303-72600

**E:** [divyanshu@ihub-awadh.in](mailto:divyanshu@ihub-awadh.in)

**L:** [www.linkedin.com/in/divyanshu-gupta-dev/](https://www.linkedin.com/in/divyanshu-gupta-dev/)



**(Bulk 3) Innovators certificate -4.pdf**  
494K



# Certificate

Of Recognition

SUPPORTED BY



Maharashtra  
State Innovation  
Society

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KRISHNA  
VISHWA  
VIDYAPEETH  
(Deemed to be University)  
Knowledge • Innovation • Excellence



AWaDH  
IIT Ropar - TIF



This certificate is awarded to

# Tanaya Rajendra Takale

For **Pitch Presentation** at **Innovation in Medical, Pharmaceutical & Allied Sciences for Commercialization of Technology (IMPACT) Conclave 3.0**, jointly hosted by Krishna Medical Sciences "Deemed to be University" Karad, SPPU Research Park Foundation Pune & IIT Ropar Technology and Innovation Foundation during 07-08 March 2024, at Pune University, Pune, Maharashtra

**Dr Pushendra P Singh**

Dean R&D, IIT Ropar  
Project Director, iHub - AWaDH

**Dr. A.D. Shaligram**

CEO  
SPPU Research Park Foundation

**Dr. D.K. Agarwal**

Director, (Innovation, Incubation and Entrepreneurship), KVV

**Fwd: Certificate of Appreciation: IMPACT CONCLAVE 3.0**

Vaishali Anagal &lt;vaishali.anagal@bnca.ac.in&gt;

Mon 8/26/2024 3:04 PM

To: Tanaya Takale &lt;a20123.tanayat@bnca.ac.in&gt;

 1 attachments (494 KB)

(Bulk 3) Innovators certificate -5.pdf;

Get [Outlook for Android](#)**From:** Divyanshu Gupta <divyanshu@ihub-awadh.in>**Sent:** Thursday, March 21, 2024 1:57:22 PM**To:** Vaishali Anagal <vaishali.anagal@bnca.ac.in>**Subject:** Certificate of Appreciation: IMPACT CONCLAVE 3.0

Dear Dr. Vaishali Anagal,

We trust this message finds you well.

We extend my sincere gratitude for your participation in the **"IMPACT Conclave 3.0"** hosted by **Krishna Vishwa Vidyapeeth, SPPU - Pune**, and **IIT Ropar Technology and Innovation Foundation (iHub AWaDH)**.

Your invaluable contribution played a significant role in making our program successful and innovative. We hope the program added value towards your journey as a researcher or entrepreneur.

We are truly grateful for your engagement and dedication to fostering innovation in the startup and research community. Your presence added immense value to our discussions and endeavors.

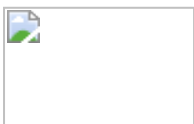
We would like to present you the certificate of participation for your contribution in the program and wish you for your future endeavours.

***Please find attached your certificate of participation as a token of our appreciation.***

*For any support from the host organizations please feel free to contact. We would love to explore the ways we can support your efforts and try to magnify the impact it can create on society.*

Warm regards,

--

**Divyanshu Gupta**

Program Manager  
iHub AWaDH  
IIT Ropar Technology and Innovation Foundation  
**M:**+91-94303-72600  
**E:** [divyanshu@ihub-awadh.in](mailto:divyanshu@ihub-awadh.in)  
**L:** [www.linkedin.com/in/divyanshu-gupta-dev/](https://www.linkedin.com/in/divyanshu-gupta-dev/)

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# Certificate Of Recognition

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AWaDH  
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This certificate is awarded to

## Dr. Vaishali Anagal

For **Pitch Presentation** at **Innovation in Medical, Pharmaceutical & Allied Sciences for Commercialization of Technology (IMPACT) Conclave 3.0**, jointly hosted by Krishna Medical Sciences "Deemed to be University" Karad, SPPU Research Park Foundation Pune & IIT Ropar Technology and Innovation Foundation during 07-08 March 2024, at Pune University, Pune, Maharashtra

**Dr Pushendra P Singh**

Dean R&D, IIT Ropar  
Project Director, iHub - AWaDH

**Dr. A.D. Shaligram**

CEO  
SPPU Research Park Foundation

**Dr. D.K. Agarwal**

Director, (Innovation, Incubation and  
Entrepreneurship), KVV

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# Arya Anil Punse

For **Pitch Presentation** at **Innovation in Medical, Pharmaceutical & Allied Sciences for Commercialization of Technology (IMPACT) Conclave 3.0**, jointly hosted by Krishna Medical Sciences "Deemed to be University" Karad, SPPU Research Park Foundation Pune & IIT Ropar Technology and Innovation Foundation during 07-08 March 2024, at Pune University, Pune, Maharashtra

**Dr Pushendra P Singh**

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Project Director, iHub - AWaDH

**Dr. A.D. Shaligram**

CEO  
SPPU Research Park Foundation

**Dr. D.K. Agarwal**

Director, (Innovation, Incubation and  
Entrepreneurship), KVV

## Re: Congratulations! Your Selection for the Design Impact Movement

Tanaya Takale <tanayatakale16@gmail.com>

Wed 07-02-2024 18:46

To:Swati Sahasrabudhe <swati.s@bnca.ac.in>

On Wed, 7 Feb 2024 at 10:27 AM, DIC SPPU <[dicsppu@gmail.com](mailto:dicsppu@gmail.com)> wrote:

Dear Participant/s,

We are thrilled to inform you that your project proposal has been selected for the Design Impact Movement. Congratulations on this achievement!

Your dedication to creating positive social change through design has truly impressed us, and we believe that your project has the potential to make a significant impact. We are excited to have you join us in this collaborative effort to harness the power of design for the greater good.

The workshop is scheduled to take place on **08/02/2024 & 09/02/2024 from 10:00 am to 4:00 pm on both days at Digital Classroom 1, SPPU Research Park Foundation, Opp. Health Centre, Savitribai Phule Pune University, Ganeshkhind, Pune.** Please mark your calendar accordingly, as attendance is mandatory for all selected participants. The workshop will provide a valuable opportunity for you to further develop and refine your project, collaborate with peers, and gain insights from industry experts.

Here are some key details about the workshop:

### **Time: 10.00 am to 4.00 pm (both days)**

| <b>Date</b>             | <b>Agenda</b>   | <b>Description</b>   |
|-------------------------|---|--|
| Thursday,<br>08/02/2024 | Day 1- Problem Framing and Ideation                   | <ul style="list-style-type: none"><li>- Behavioural deep dive for the selected insights</li><li>- Problem reframing and structuring</li><li>- Ideation and idea finalization</li></ul> |
| Friday,<br>09/02/2024   | Day 2-Ideation and Prototyping<br>(In-Person Session) | <ul style="list-style-type: none"><li>- Developing prototype (mock-up, 3D print, CAD Renders)</li><li>- Feedback on iterated prototype</li></ul>                                       |

***Note: It is mandatory to attend physical in-person sessions to participate in the Design Impact Movement.***

To confirm your participation, please fill out the Google Form provided in the link below: <https://forms.gle/KaYgoEi8b6N7rF5p9>

***before 3:00 pm today only***

Your prompt response is greatly appreciated, as it will help us ensure the success of the

workshop and better accommodate all participants.

Please note that during the workshop, no food or accommodation will be provided by the organizers. We kindly ask you to make your own arrangements for meals and lodging, if necessary.

**Also, it is requested that you carry a laptop with you. (Its necessary during workshop activities)**

If you have any questions or need further information, please don't hesitate to reach out to us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com) or [info.sppurpf@gmail.com](mailto:info.sppurpf@gmail.com)

Once again, congratulations on your selection, and thank you for your dedication to using design as a catalyst for positive change. Together, let's make a difference!

Best regards,

Design Innovation Centre,

Savitribai Phule Pune University, Pune

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## Fwd: Designing a Better World: Your Invitation to the Design Impact Movement!" – Call for Student Projects

Tanaya Takale <tanayatakale16@gmail.com>

Wed 07-02-2024 18:54

To: Swati Sahasrabudhe <swati.s@bnca.ac.in>

📎 1 attachments (272 KB)

DIM QR code.png;

----- Forwarded message -----

From: **shivali lalbige** <[ar.shivalilalbige@gmail.com](mailto:ar.shivalilalbige@gmail.com)>

Date: Tue, Feb 6, 2024 at 3:50 PM

Subject: Fwd: Designing a Better World: Your Invitation to the Design Impact Movement!" – Call for Student Projects

To: <[tanayatakale16@gmail.com](mailto:tanayatakale16@gmail.com)>

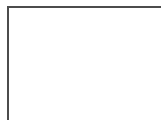
----- Forwarded message -----

From: **SPPU Notifications** <[no-reply@pun.unipune.ac.in](mailto:no-reply@pun.unipune.ac.in)>

Date: Mon, Feb 5, 2024, 8:37 PM

Subject: Designing a Better World: Your Invitation to the Design Impact Movement!" – Call for Student Projects

To: <[ar.shivalilalbige@gmail.com](mailto:ar.shivalilalbige@gmail.com)>



Dear Student/s,

I trust this message finds you in good spirits. We are thrilled to extend an invitation for your participation in the Design Impact Movement, a collaborative initiative brought to you by SPPU Research Park Foundation & TinkerLabs.

### **About the Design Impact Movement:**

Design Impact is a social initiative of Titan Company Ltd., that aims at providing a platform and ecosystem to student projects to develop and thrive.

Short-term solutions don't cut it. The world needs **sustainable change** — and social design is the way. If you've got an idea, we've got the platform to help you realize it. With full access to relevant support and to the **social design and entrepreneurship ecosystem**. Basically, everything you need to take your idea **from good to #goals**.



Our collective mission is to harness the creative energy of students like you to drive positive change through innovative design projects.

### **There is no registration cost**

### **Call for Student Projects:**

We are currently seeking project proposals from students who exemplify the spirit of social impact design. Whether you are passionate about the environment, Healthcare, Agriculture, Livelihood, or Education, we encourage you to submit projects that showcase the transformative potential of design in addressing pressing issues.

Solutions in the space of Social Impact in any of the following categories:

1. **Environment:** Waste management, Sustainability, Energy conservation, Improving public infrastructure (buses, walkways etc) for the society.
2. **Healthcare:** Device Innovations, Improving accessibility for differently-abled, elderly. Early detection of diseases, service redesign for hospitals, clinics, and healthcare centers.
3. **Agriculture:** Device innovations in farming tools, Agri-tech, Farming marketplace redesign
4. **Livelihood:** Improving livelihood of local vendors, artisans, and specially-abled groups.
5. **Education:** Improving learning access for underprivileged communities, children, people with learning disabilities

This is not an exhaustive list. If you have any other solution that fits in any of these themes, you can participate.

### **What's in it for the students?**

**Selected teams/Individuals will be invited for a physical in-person session on 8th and 9th February 2024 at SPPU Research Park Foundation.**

**Time: 10.00 am to 4.00 pm (both days)**

| <b>Date</b>             | <b>Agenda</b>   | <b>Description</b>   |
|-------------------------|---|--|
| Thursday,<br>08/02/2024 | Day 1- Problem Framing and Ideation                   | <ul style="list-style-type: none"> <li>- Behavioural deep dive for the selected insights</li> <li>- Problem reframing and structuring</li> <li>- Ideation and idea finalization</li> </ul> |
| Friday,<br>09/02/2024   | Day 2-Ideation and Prototyping<br>(In-Person Session) | <ul style="list-style-type: none"> <li>- Developing prototype (mock-up, 3D print, CAD Renders)</li> <li>- Feedback on iterated prototype</li> </ul>  |

***Note: It is mandatory to attend physical in-person sessions to participate in the Design***

## **Impact Movement.**

### **Rewards:**

Best team to win a 4-day sponsored workshop with Proto Village and a visit to Titan Watches in Bangalore

### **National Rewards:**

1. Top 100 teams to get tech incubation support to develop their prototype
2. Top 25 teams to get business incubation support and invite to exclusive sessions.
3. Top 3 teams will go for an international design exchange program.

### **Submission Guidelines:**

- Clearly outline your project's social impact goals.
- Provide a concise description of the problem you aim to solve.
- Present your envisioned impact for the proposed solution.

### **Why Participate:**

- Contribute to meaningful social change through your design expertise.
- Showcase your creativity and design skills.
- Connect with a community of like-minded individuals passionate about social impact.
- Gain visibility and recognition for your work.

### **Collaborative Partners:**

This initiative is made possible through the collaborative efforts of SPPU Research Park Foundation, TinkerLabs, and Design Innovation Centre, also support provided by Titan Company Ltd. Together, we aim to foster a community of changemakers committed to using design for positive societal transformation.

### **How to Submit:**

Kindly open the below link and submit the form or scan the QR code. We encourage you to think innovatively – this is your chance to make a tangible impact through design!

### **Link for registration:**

<https://forms.gle/R5JfD5MqKyMpy4fu8>

Also find attached QR code for your reference.

### **Key Dates:**

- **Submission Deadline: 05/02/2024**
- **Announcement of Selected Projects: 06/02/2024**

Should you have any questions or require additional information, please don't hesitate to reach out to us at [dicsppu@gmail.com](mailto:dicsppu@gmail.com) or [dic@unipune.ac.in](mailto:dic@unipune.ac.in) or [info.sppurpf@gmail.com](mailto:info.sppurpf@gmail.com) or Mr Arun Aynodkar at +91-9405228167

Thank you for considering being a part of the Design Impact Movement. Together with SPPU Research Park Foundation, TinkerLabs, Design Innovation Centre, and Titan Company Ltd, let's design a brighter and more impactful future!

Best regards,

**SPPU Research Park Foundation**

(A section 8 company fully owned by SPPU)

Opposite Health Centre,

Savitribai Phule Pune University,

Ganeshkhind, Pune -411007

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MAHARSHI KARVE STREE SHIKSHAN SAMSTHA



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University Affiliation No.: PU/PN/ARCH/109/1994.  
Approved by:  
\*Council of Architecture.(COA),New Delhi  
\*All India Council for Technical Education (AICTE)  
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DR.BHANUBEN NANAVATI  
COLLEGE OF ARCHITECTURE

FOR WOMEN

Gate No:04, BNCA Campus,  
Cummins College Road,  
Karve Nagar, Pune 411 052.  
Ph: +91 20 25474062 / 25476966  
E-mail:mail@bnca.ac.in, www.bnca.ac.in

## 1. Workshop on “Entrepreneurship and Innovation as Career Opportunity”

**Collaboration details (if any):** An Academia-industry consortium formed among Liverpool John Moores University, UK; MKSSS’s Dr. B. N. College of Architecture, Pune, Pune Construction Engineering Research Foundation, and Rohan Developers Pvt. Ltd.

**Event Supported / sponsored by:** British Council



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**BNCA**

DR.BHANUBEN NANAVATI  
COLLEGE OF ARCHITECTURE

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Gate No:04, BNCA Campus,  
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**Career in Built Environment - Seminar**  
**MONDAY**  
**25 SEP 2023**  
**2.30 PM- 5.00 PM**

**Employer's Day - Interview**  
**MONDAY**  
**9 OCT 2023**  
**9.00 AM- 2.30 PM**

**DR. ANDREW ROSS**  
 EMERITUS PROFESSOR LIVERPOOL JOHN MOORES UNIVERSITY, UK

**AR. RAJESH CHOUDHARY**  
 VICE PRESIDENT CREDAI, PUNE

**AR. VINAYAK THORAT**  
 ARCHITECT VENKATARAMANAN ASSOCIATES, PUNE

[iacbe@bnca.ac.in](mailto:iacbe@bnca.ac.in)  
 +91-9172266096

**Event / Activity title:** Enterprenuership and Innovation : Career Guidance Program for Students of Architecture and Civil Engineering with Liverpool John Moores University, UK, PCERF, Pune open to all colleges

**Date & Time:** 25th Sept 2023.

**Venue:** MKSSS's Dr. Bhanuben Nanavati College of Architecture for Women (BNCA)



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 **BNCA**

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COLLEGE OF ARCHITECTURE**

**FOR WOMEN**

Gate No:04, BNCA Campus,  
Cummins College Road,  
Karve Nagar, Pune 411 052.  
Ph: +91 20 25474062 / 25476966  
E-mail:mail@bnca.ac.in, www.bnca.ac.in

**Faculty In-charge:** Dr. Vaishali Anagal

**NAAC Criteria (if any):** Criteria 3- Research and innovation, extension activities, workshops, grants, collaborations

### **Objective of this Event:**

The Enterpreneurship and Innovation : career guidance program successfully achieved its objective of disseminating knowledge about current trends in architecture and construction while highlighting career opportunities in the built environment. The collaboration between academic institutions, industry professionals, and organizations facilitated a comprehensive understanding of the subject matter. Such initiatives play a crucial role in guiding and inspiring the next generation of architects and construction professionals.

### **Summary of the event:**

The Enterpreneurship and Innovation : career guidance program organized by the BNCA (Bharati Vidyapeeth's College of Architecture) under the British Council's Going Global Partnerships program, in collaboration with Liverpool John Moores University, UK; Pune Construction and Engineering Research Foundation, and Rohan Builders Pvt. Ltd., Pune, aimed to disseminate knowledge about current trends in architecture and construction, as well as highlight career opportunities in the built environment. The event took place at BNCA on 25th September 2023, from 9.30 pm to 5.30 pm, targeting students, fresh graduates of architecture and civil engineering, and early career professionals.

**Speakers:** Eminent speakers included Dr. Andrew Ross, Emirates Professor at Liverpool John Moores University, UK; Ar. Rajesh Choudhary, a leading developer and Vice-President of CREDAI, Pune; and Ar. Vinayak Thorat, Head of the West region at Venkataramana Associates, a prominent architectural firm in India. Dr. Anupa Manewa and Dr. Mohan Siriwardena from Liverpool John Moores University, UK, also graced the event online.

**Program Highlights:** Dr. Vaishali Anagal presented the research project's highlights and the curriculum of the PG Diploma in Built Environment. Emeritus Professor Andrew Ross spoke online, focusing on managing collaboration for impact. He discussed construction education, co-designed research projects, and the success of construction apprenticeships. Architect Rajesh Choudhary shared his journey from architectural consultancy to real estate development, highlighting challenges and competencies required in the real estate business. Architect Vinayak Thorat presented various projects covering different asset classes and emerging typologies of buildings, discussing architectural design challenges and technical aspects of construction.



MAHARSHI KARVE STREE SHIKSHAN SAMSTHA

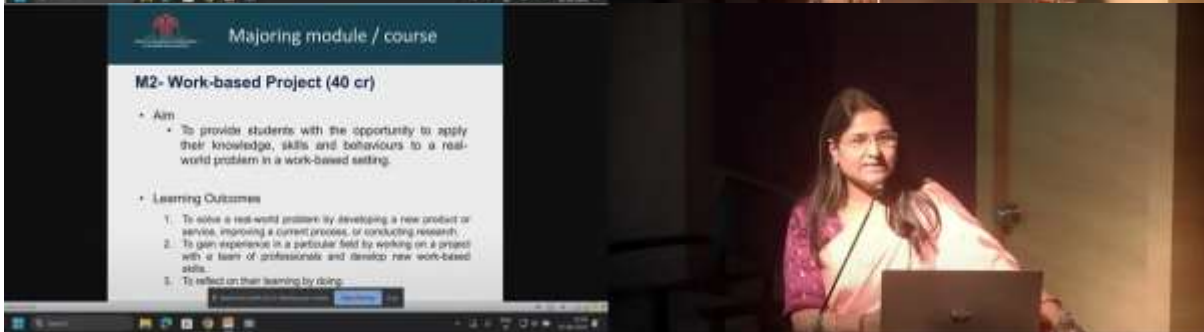
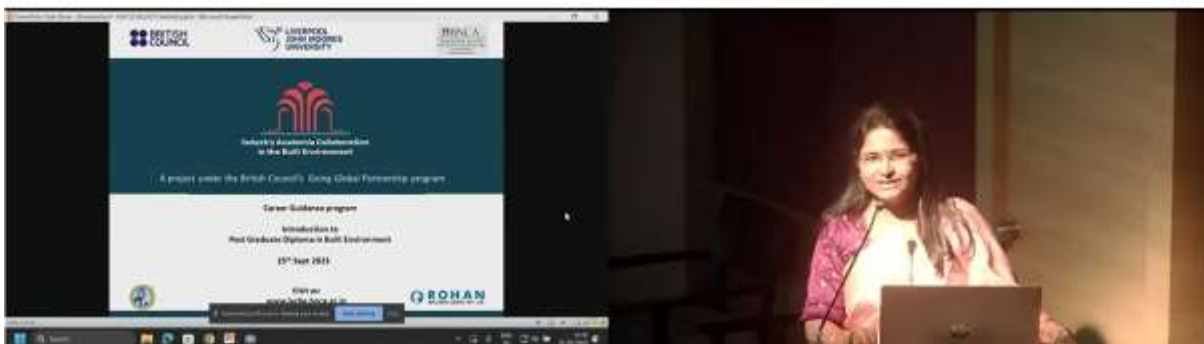
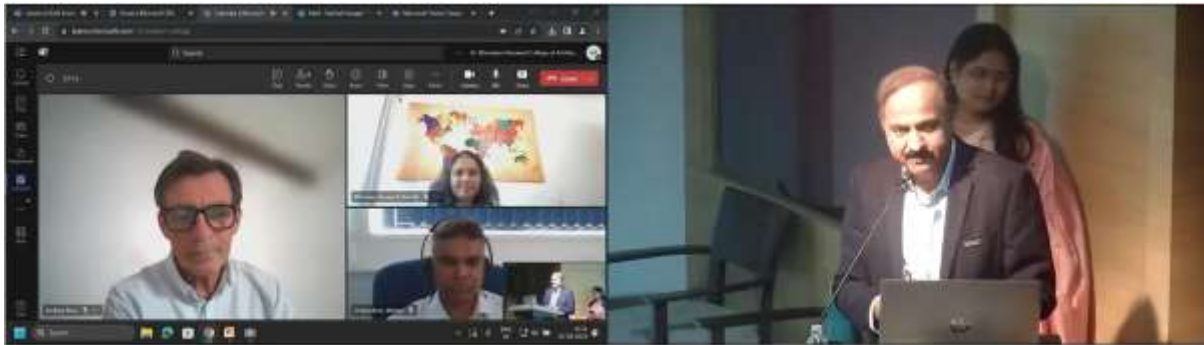


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**Outcome of the workshop:** The program received a positive response from over 100 students and fresh graduates from Pune. Attendees appreciated the insights provided by the



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FOR WOMEN

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Ph: +91 20 25474062 / 25476966

E-mail: mail@bnca.ac.in, www.bnca.ac.in

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speakers and found the event beneficial for understanding career prospects in architecture and construction.

Attendance:

Attendance sheet for a workshop. The table has columns for Sr. No., Name, College/Institute, E-mail ID, Phone no., Session Attendance, and Sign. It lists numerous participants from various architectural colleges across India, with their respective contact details and attendance marks.





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| Sr. No. | Name             | College/Institute | E-mail ID                 | Phone no.  | Session Attending | Signature   |
|---------|------------------|-------------------|---------------------------|------------|-------------------|-------------|
| 1       | Aditya Bhatnagar | BNCA, Pune        | adityabhatnagar@gmail.com | 9127201531 | Both              | [Signature] |
| 2       | Aashika Patil    | BNCA              | aashikaashika@gmail.com   | 9822061294 | Both              | [Signature] |
| 3       | Kadha Kale       | BNCA              | kadha.kale@gmail.com      | 9822061294 | Both              | [Signature] |
| 4       | Debarshi Apte    | BNCA              | debarshi.apte@gmail.com   | 9822061294 | Both              | [Signature] |
| 5       | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 6       | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 7       | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 8       | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 9       | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 10      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 11      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 12      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 13      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 14      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 15      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 16      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 17      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 18      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 19      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 20      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 21      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 22      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 23      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 24      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 25      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 26      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 27      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 28      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 29      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |
| 30      | Prachi Patil     | BNCA              | prachipatil123@gmail.com  | 9822061294 | Both              | [Signature] |

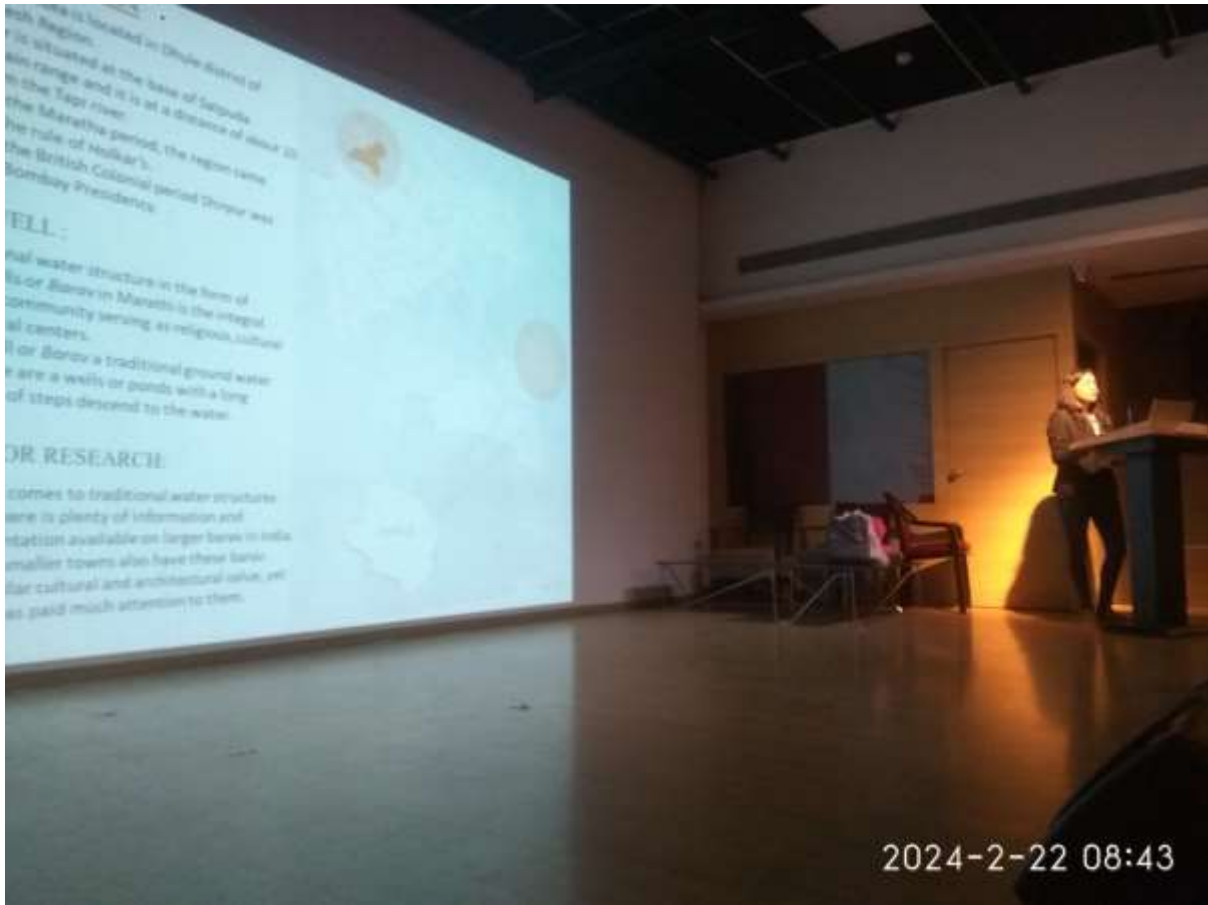
| Sr. No. | Name            | College/Institute | E-mail ID                 | Phone no.  | Session Attending | Signature   |
|---------|-----------------|-------------------|---------------------------|------------|-------------------|-------------|
| 1       | Leetika Pandhan | BNCA              | leetika.pandhan@gmail.com | 9822061294 | Both              | [Signature] |
| 2       | Muskan Satpute  | BNCA              | muskan.satpute@gmail.com  | 9822061294 | Both              | [Signature] |
| 3       | MUSKAN ZOHRI    | BNCA              | muskan.zohri@gmail.com    | 9822061294 | Both              | [Signature] |
| 4       | SALAMI BAKWALE  | BNCA              | salami.bakwale@gmail.com  | 9822061294 | Both              | [Signature] |
| 5       | Nousha Gad      | BNCA              | nousha.gad@gmail.com      | 9822061294 | Both              | [Signature] |
| 6       | GARGI RATHANSA  | BNCA              | gargi.rathansa@gmail.com  | 9822061294 | Both              | [Signature] |
| 7       | Siddha Kadam    | SB.Patil          | siddha.kadam@gmail.com    | 9822061294 | Both              | [Signature] |

| Sr. No. | Name             | College/Institute | E-mail ID                  | Phone no.  | Session Attending | Signature   |
|---------|------------------|-------------------|----------------------------|------------|-------------------|-------------|
| 1       | Nand Bhatia      | BNCA              | nand.bhatia@gmail.com      | 9822061294 | Both              | [Signature] |
| 2       | Shravan Joshi    | BNCA              | shravan.joshi@gmail.com    | 9822061294 | Both              | [Signature] |
| 3       | Jaha Bhatia      | BNCA              | jaha.bhatia@gmail.com      | 9822061294 | Both              | [Signature] |
| 4       | Umeshali Khatke  | BNCA              | umeshali.khatke@gmail.com  | 9822061294 | Both              | [Signature] |
| 5       | Sateesh Barot    | BNCA              | sateesh.barot@gmail.com    | 9822061294 | Both              | [Signature] |
| 6       | Rutuja Jadhavkar | BNCA              | rutuja.jadhavkar@gmail.com | 9822061294 | Both              | [Signature] |
| 7       | Aranya Dhumal    | BNCA              | aranya.dhumal@gmail.com    | 9822061294 | Both              | [Signature] |
| 8       | Yashodh Keshub   | BNCA              | yashodh.keshub@gmail.com   | 9822061294 | Both              | [Signature] |
| 9       | KIDDIKI KOSHI    | BNCA              | kiddiki.koshi@gmail.com    | 9822061294 | Both              | [Signature] |
| 10      | Arshita Patil    | BNCA              | arshita.patil@gmail.com    | 9822061294 | Both              | [Signature] |
| 11      | Prachi Patil     | BNCA              | prachipatil123@gmail.com   | 9822061294 | Both              | [Signature] |
| 12      | Renu Dhawale     | BNCA              | renu.dhawale@gmail.com     | 9822061294 | Both              | [Signature] |

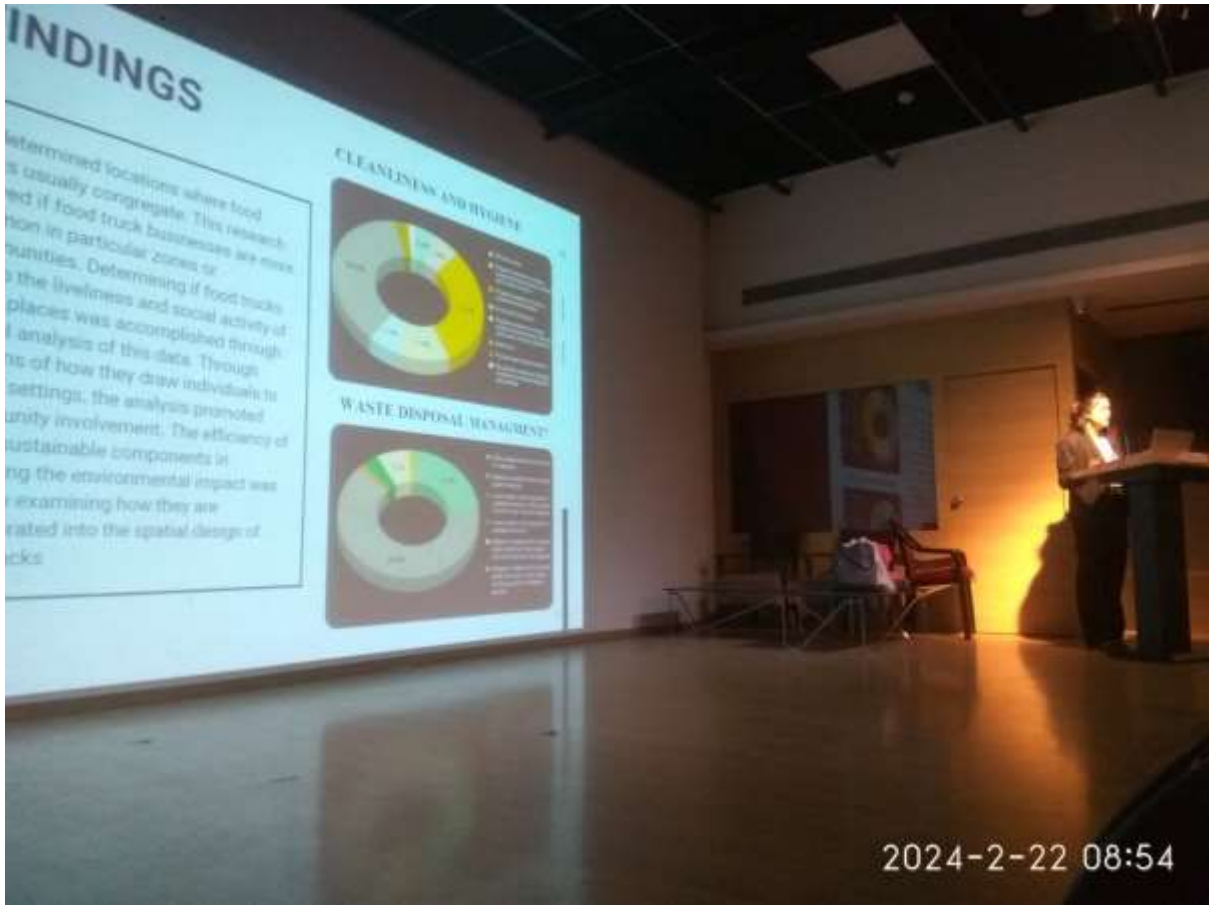
**AVISHKAAR WINNING ENTRIES - 6 OF THEM FROM UNDERGRADUATE PROGRAMME, POST-GRADUATE PROGRAMME AND PH.D PROGRAMME WERE INVITED TO PRESENT THEIR INNOVATIONS TO STUDENTS OF THIRD YEAR UNDER THE SUBJECT RESEARCH IN ARCHITECTURE. 136 STUDENTS AND 8 FACULTY ATTENDED THIS EVENT.**



**Use of VR in Design of meditation hall**



Traditional Water structures and use of technology in modern times



Waste disposal integration and management in food trucks



Ph.D Student – Shivali Lalbige presenting on degraded quarry landscapes



Tanaya Takale – Winner of State level competition presenting her innovation project







## 1. NATIONAL TECHNOLOGY DAY

This year, the National Technology Day would be celebrated on 11th May 2024 with the theme 'Promoting Clean and Green Technologies for a Sustainable Future'. The Rastriya Vigyan Puraskar is announced on National Technology Day. Since students will be busy in exams in may, this day was celebrated before term end . i.e on 28 March 2024.

# 🔥HANDS-ON WELDING WORKSHOP🔥

|   |  |   |
|---|--|---|
|   | <p>Join us for an electrifying hands-on workshop for welding.</p> <ul style="list-style-type: none"><li>🔥 Ignite your passion for craftsmanship and fabrication.</li><li>💡 Explore the limitless possibilities of welding.</li><li>👥 Connect with like-minded peers and mentors in the field.</li></ul> <p>Whether you're a beginner eager to light the torch this workshop is your gateway to a world of possibilities in metalworking.</p> <p>Don't miss out on this opportunity to turn sparks into success! Register now and let's weld our way.</p> |   |
|  |  | <p>Date: 28th March 2024<br/>Time: 10.00 am Onwards<br/>Location: Construction Yard</p> <p><b>Supported by:</b><br/>Dr. Anurag Kashyap<br/><b>Faculty Co-ordinators</b><br/>Sujata Mehta<br/>Kanchan Atnurkar<br/>Preeti Namjoshi</p> |



BNCA Pune | mksss's dr. bhanuben nanavati college of architecture | bncaofficial | mail@bnca.ac.in

Event / Activity title: **Hands-on Welding Workshop**

Date & Time: 28.03.2024 | Thursday

Venue: BNCA's Construction Yard

Faculty In-charge: Dr. Sujata Mehta, Dr. Poorva Kulkarni

Faculty Co-ordinator: Ar. Kanchan Atnurkar and Prof. Preeti Namjoshi

Students' In-charge:

NAAC Criteria (if any):

Guest Speakers: -

Chief Guest (if any): -

Objective of this Event: To understand steel as a material and its connections

Summary of the event (150-200 words):

Learning Welding Workshop was conducted on 28th March, 2024 was organised by and Structures Cell at Dr. B.N.College of Architecture for Women for the students of Second Year B.Arch to celebrate National Technology day.

The hands-on workshop aimed at the teaching aid to provide fundamental information on bolting and welding to structural steel and its workability. Students learnt the art of welding, allowing them to ignite their creativity and passion for craftsmanship. The benefits of welding workshop extended far beyond the development of technical skills. It was an effort for cultivation of sense of discipline, attention to detail, and problem-solving abilities in the students. The hands-on learning allowed students to apply theoretical knowledge in a practical setting, bridging the gap between classroom learning and real-world application. This experiential learning approach helps students develop a deeper understanding of the subject matter and enhances their critical thinking skills and also promotes creativity and innovation.

The workshop received a great response with over 120 students from Second Year participating in batches and mentored by Dr. Sujata Mehta, Prof. Preeti Namjoshi and Prof. Kanchan Atnurkar. This workshop gave students an opportunity to handle, understand and experiment with metal and bolts with it being a significant learning experience.



# Welding Workshop Attendance S.Y. A (TOS)

S.Y.B.Arch | Division A

| Faculty : |                               | Subject: |  |  |  |
|-----------|-------------------------------|----------|--|--|--|
| Sr. No    | Names                         | 28/3/24  |  |  |  |
| 1         | ATTAL SIDDHI KIRAN            |          |  |  |  |
| 2         | BELDARE SEJAL SANDIP          |          |  |  |  |
| 3         | BELGIKAR MEERA UNMESH         | P        |  |  |  |
| 4         | BODHE NUPOOR SACHIN           | P        |  |  |  |
| 5         | BOOKWALA SHEHREBANOO RIYAZ    |          |  |  |  |
| 6         | CHAUDHARI SHREYA VIJAY        |          |  |  |  |
| 7         | CHOUKSEY SANCHITA DHARMENDRA  |          |  |  |  |
| 8         | DANDEKAR TANMAI NITEEN        |          |  |  |  |
| 9         | DESHPANDE VEDANTI SHRIKRUSHNA | P        |  |  |  |
| 10        | DHUMNE SHRAVANI ABHAY         |          |  |  |  |
| 11        | DUGAD SNEHA ASHISH            |          |  |  |  |
| 12        | GANORKAR GIRIJA PRAVIN        | P        |  |  |  |
| 13        | GHODESWAR PRABHAT DEVIDAS     |          |  |  |  |
| 14        | INDALKAR NUPUR PRAMOD         | P        |  |  |  |
| 15        | JAGADALE VAISHNAVI HRUSHIKESH |          |  |  |  |
| 16        | JAIN KIRTI SANJAY             | P        |  |  |  |
| 17        | JOSHI ANUSHKA VIJAY           |          |  |  |  |
| 18        | KADU MRUNAL RAMDAS            | P        |  |  |  |
| 19        | KANADE HASTIKSHA PRADEEP      | P        |  |  |  |
| 20        | KOLAPKAR SANIKA SANTOSH       |          |  |  |  |
| 21        | KUMBHAR HARSHAL SUNIL         |          |  |  |  |
| 22        | MALPANI RIDDHI VIJAYKUMAR     |          |  |  |  |
| 23        | MORE AASTHA SACHIN            |          |  |  |  |
| 24        | PAGE MRUNAMAYEE ABHIJEET      | P        |  |  |  |
| 25        | PANCHAMIYA ACHAL ASHEET       |          |  |  |  |
| 26        | PATIL MANASVI OMPRAKASH       |          |  |  |  |
| 27        | PATIL Sampada RAJENDRA        | P        |  |  |  |
| 28        | PAWAR SHRUTI PRASHANT         |          |  |  |  |
| 29        | POTNIS AARYA KEDAR            | P        |  |  |  |
| 30        | RAUT VAISHNAVI SANTOSH        | P        |  |  |  |
| 31        | SALUNKE TANISHKA SHAILENDRA   |          |  |  |  |
| 32        | SHAH SMRITI MANOJ             | P        |  |  |  |
| 33        | SHINDE SEJAL MANIK            |          |  |  |  |
| 34        | SOMKUWAR DHANASHREE BABAROA   |          |  |  |  |
| 35        | SUTAR JUI PRAVIN              | P        |  |  |  |
| 36        | THAPA TRUPTI TRILOKSINGH      | P        |  |  |  |
| 37        | THORVE PRACHI PANDURANG       | P        |  |  |  |
| 38        | UDGIRKAR SHREYA PARAG         |          |  |  |  |
| 39        | VEDEPATIL DHRUVITA RAJENDRA   | P        |  |  |  |
| 40        | AASTHA PANDE                  |          |  |  |  |
| 41        | YASHADA KATE                  |          |  |  |  |
| 42        | ABHILASHA THUMBRE             |          |  |  |  |

Attendance for Fabrication Workshop  
TR-B.

| S.NO. | Roll Number | STUDENT NAME               | 28/04/24 |  |  |
|-------|-------------|----------------------------|----------|--|--|
| 1     | A21053      | AARUSHI RAJESH ASKHEDKAR   | P        |  |  |
| 2     | A21041      | ADITI BANDU THOMBAL        | P        |  |  |
| 3     | A21091      | ANANYA PRAVIN JOSHI        | P        |  |  |
| 4     | A21075      | ANKITA ASHOK SONALKAR      | P        |  |  |
| 5     | A21174      | ANOOJA ANIL SURYAWANSHI    |          |  |  |
| 6     | A21175      | ANUSHKA ABHIJEET KALE      | P        |  |  |
| 7     | A21077      | ASHLESHA AJAY BHOSALE      |          |  |  |
| 8     | A21156      | AVANTIKA G NARAWADE        | A        |  |  |
| 9     | A21080      | DHANSHRI PANKAJ KELA       | P        |  |  |
| 10    | A21138      | GARIMA SUNILKUMAR BARDIA   | P        |  |  |
| 11    | A21150      | ISHA GIRISH CHAUDHARI      | P        |  |  |
| 12    | A21022      | ISHA MAHESH ABHONKAR       | P        |  |  |
| 13    | A21039      | JANHAVI NITIN KARNAVAR     | P        |  |  |
| 14    | A21137      | KHUSHI AJIT PARAKH         | P        |  |  |
| 15    | A21126      | KHUSHI OMPRAKASH MANTRI    | P        |  |  |
| 16    | A21014      | NIDHI CHETAN PATNE         | P        |  |  |
| 17    | A21172      | NIKITA SANJAY THORAVE      | P        |  |  |
| 18    | A21043      | PRANITI SHRINIVAS URUNKAR  | P        |  |  |
| 19    | A21106      | PRERANA RAJENDRA PAWAR     | A        |  |  |
| 20    | A21127      | RAGESHRI RAJENDRA MORE     | P        |  |  |
| 21    | A21034      | RENU ANKIT DHARIYA         | A        |  |  |
| 22    | A21019      | REVTI C NAGARKAR           | P        |  |  |
| 23    | A21117      | RIDDHI PRITAM NAHAR        | P        |  |  |
| 24    | A21047      | RUJUTA GAUTAM JOSHI        | P        |  |  |
| 25    | A21088      | RUTUJA BALASO BHAPKAR      | P        |  |  |
| 26    | A21015      | SAKSHI VIJAY JAJU          | P        |  |  |
| 27    | A21120      | SAKSHI VISHAL PORE         | A        |  |  |
| 28    | A21143      | SAMIKSHA GIRISH FIRODIYA   | P        |  |  |
| 29    | A21042      | SEJAL SANTOSH SARDA        | P        |  |  |
| 30    | A21001      | SHARAYU SHAILENDRA GADEKAR | P        |  |  |
| 31    | A21136      | SHRAVANI MAHESH RASANE     | P        |  |  |
| 32    | A21140      | SHRUTI ABHAYSINH BHISE     | P        |  |  |
| 33    | A21076      | SHRUTIKA NITIN CHONDHE     | P        |  |  |
| 34    | A21096      | SNEHAL KIRAN GANDHI        | P        |  |  |
| 35    | A21057      | SRUSHTI VINOD SANGTANI     | P        |  |  |
| 36    | A21084      | TEJAL PRADEEP KHAIRE       | P        |  |  |
| 37    | A21161      | TEJASWINI UMESH LIDHADE    | P        |  |  |
| 38    | A21025      | VAIBHAVI SANTOSH SONAWALE  | P        |  |  |
| 39    | A21071      | VAIDEHI BAPUSING RAJPUT    | A        |  |  |
| 40    | A21103      | VAISHNAVI BHAUSAHEB SONDGE | A        |  |  |
| 41    | A21021      | VIDISHA DINESH CHOPADA     | P        |  |  |

| S.NO. | Roll Number | STUDENT NAME | Caste Category | Section No | Total Fees |
|-------|-------------|--------------|----------------|------------|------------|
|-------|-------------|--------------|----------------|------------|------------|

| IPR STATUS REPORT BY INNOVATION CELL HEAD |                | DR SHUBHADA KAMALAPURKAR   |  |      |  |   |
|---|----------------|--|--|------|--|---|
| SR. NO                                    | IPR TYPE       | FACULTY NAME   | PATENT DETAILS   | YEAR | FUNDING BY BNCA (IN RS)                                    | STATUS  |
| 1   | PROCESS PATENT | PROF AMAR SHETTY   | CASTING OF CONCRETE ON WOVEN CABLENET FORMWORK               | 2022 | Rs 2 LACS FOR PATENT FEES, GOVT FEES AND EXPERIMENTATION   | SUBMITTED FOR EXAMINATION                           |
| 2   | PROCESS PATENT | PROF AMAR SHETTY, DR ANURAG KASHYAP                              | METHODS FOR PREPARATION OF 3D PRINTED MESH                   | 2024 | Rs 1.5 LACS FOR PATENT FEES, GOVT FEES AND EXPERIMENTATION | PROVISIONAL PATENT FILED AND EXPERIMENTS IN PROCESS |
| 3   | PROCESS PATENT | PROF AMAR SHETTY, DR ANURAG KASHYAP                              | METHOD FOR CASTING CONCRETE ON 3D PRINTED MESH STRUCTURES    | 2024 | Rs 1.5 LACS FOR PATENT FEES, GOVT FEES AND EXPERIMENTATION | PROVISIONAL PATENT FILED AND EXPERIMENTS IN PROCESS |
| 4   | PRODUCT PATENT | STUDENT TANAYA TAKALE AND PROF VAISHALI ANGAL                    | 3D PRINTED FABRIC MUD BLOCKS                                 | 2024 |  | PROVISIONAL PATENT FILED AND EXPERIMENTS IN PROCESS |
| 5   | PRODUCT PATENT | STUDENT PRERANA CHOPDE AND PROF VAISHALI ANGAL                   | COW DUNG BLOCKS FOR CONSTRUCTION                             | 2024 | Rs 85000 FOR PATENT FILING, GOVT FEES AND EXPERIMENTATION  | PROVISIONAL PATENT FILED AND EXPERIMENTS IN PROCESS |
| 6   | PRODUCT PATENT | STUDENT SHRUTIKA BHOSALE, PROF SUJATA KARVE, PROF SAYALI ANDHARE | EXPLORATION OF BAMBOO BLOCKS AS AN ALTERNATIVE TO AAC BLOCKS | 2024 | Rs 19,300 FOR PATENT FILING AND GOVT FEES                  | SANCTION GIVEN FOR FUNDING                          |
| 7   | DESIGN PATENT  | STUDENT SAKSHI MAHAJAN AND PROF KIRAN NICHALE                    | CAT PLAY STATION   | 2024 | Rs 18160 FOR PATENT FILING AND GOVT FEES                   | PATENT FILED  |
| 8   | DESIGN PATENT  | STUDENT SAYALI ANDHARE, PROF NAMRATA DHAMANKAR                   | CONSTRUCTION LABOUR STAY UNIT                                | 2024 | Rs 18160 FOR PATENT FILING AND GOVT FEES                   | SANCTION GIVEN FOR FUNDING                          |

## Signatures



IQAC Co-ordinator

Dr. Chetan Sahasrabudhe



PRINCIPAL  
MKSSS's DR. BHAMUBEN NANAVATI  
College of Architecture For Women  
Karvenagar, Pune-411 052.

Prof. (Dr.) Anurag Kashyap, Principal

|   |                       |                              |                             |   |               |
|---|-----------------------|------------------------------|-----------------------------|---|---------------|
| <b>FORM 1</b><br>THE PATENTS ACT, 1970 (39 of 1970)<br>and<br>THE PATENTS RULES, 2003<br><b>APPLICATION FOR GRANT OF PATENT</b><br>(See Section 7, 54, 135, and Sub-Rule (1) of 20) |                       |                              |                             | (FOR OFFICE USE ONLY)<br><br>Application No.:<br>Filing date:<br>Amount of fee paid:<br>CBR No.:<br>Signature |               |
| APPLICANT'S REFERENCE/ IDENTIFICATION NO.<br>(AS ALLOTTED BY OFFICE)  |                       |                              |                             |   |               |
| <b>1. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]</b>   |                       |                              |                             |   |               |
| Ordinary (✓)  |                       | Convention ()                |                             | PCT-NP ()   |               |
| Divisional ()   | Patent of Addition () | Divisional ()                | Divisional ()               | Patent of Addition ()   | Divisional () |
| <b>3A. APPLICANT(S)</b>   |                       |                              |                             |   |               |
| <b>Name in Full</b>   |                       | <b>Nationality</b>           | <b>Country of Residence</b> | <b>Address of the Applicant</b>   |               |
| MKSSS's Dr. Bhanuben Nanavati College of Architecture for Women   |                       | Indian                       | India                       | MKSSS campus, Cummins College Rd, Dnydeep Colony, Hingne Budruk, Karve Nagar, Pune, Maharashtra 411052        |               |
| Amar Prakash Shetty   |                       | Indian                       | India                       | 4th floor, flat no- 14, Akash Ganga D - building, Tadiwala road, Pune – 411001, Maharashtra                   |               |
| <b>3B. CATERGORY OF APPLICANT [Please tick (✓) at the appropriate category]</b>   |                       |                              |                             |   |               |
| Natural Person ()   |                       | Other than Natural Person () |                             |   |               |
|   |                       | Small Entity ()              | Startup ()                  | Educational Institution (✓)   | Others ()     |
| <b>4. INVENTOR(S) [Please tick (✓) at the appropriate category]</b>   |                       |                              |                             |   |               |
| Are all the inventor(s) same as the applicant(s) named above?   |                       |                              |                             | Yes ()  | No (✓)        |

|   |                    |   |   |   |   |
|---|--------------------|---|---|---|---|
| If “No” furnish the details of the inventor(s)  |                    |   |   |   |   |
| Name in Full  |                    | Nationality   | Country of Residence  | Address of the Inventors  |   |
| Amar Prakash Shetty   |                    | Indian  | India   | 4th floor, flat no- 14, Akash Ganga D - building, Tadiwala road, Pune – 411001, Maharashtra |   |
| <b>5. TITLE OF THE INVENTION</b>  |                    |   |   |   |   |
| <b>PROCESS FOR CASTING OF CONCRETE ON WOVEN CABLE NET FORMWORK</b>  |                    |   |   |   |   |
| <b>6. AUTHORIZED REGISTERED PATENT AGENT(S)</b>   |                    | IN/ PA No.  | 2058  |   |   |
|   |                    | Name  | Prafulla Wasudevrao Wange.  |   |   |
|   |                    | Mobile No.  | 9552003071  |   |   |
| <b>ADDITIONAL PATENT AGENTS</b>   |                    | Ashwini Jagdish Kelkar (IN/PA-2461),<br>Sima Shreyas Katikar (IN/PA-2298),<br>Ragitha K (IN/PA-2832),<br>Rohit Ratnakar Bari (IN/PA–2936),<br>Priyanka Premdas Ramteke (IN/PA–3222) |   |   |   |
| <b>7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA</b>   |                    | Name  | Prafulla Wange  |   |   |
|   |                    | Postal Address  | M/S BHATE & PONKSHE<br>12, Venumadhav Apts, 104/7, Off Lane No.14, Prabhat Road, Pune-411 004, Maharashtra State, India |   |   |
|   |                    | Telephone No.   | 020- 25437022   |   |   |
|   |                    | Mobile No.  | 7888040799  |   |   |
|   |                    | Fax No.   | 020- 25437023   |   |   |
|   |                    | E-mail ID   | <a href="mailto:ipr@bhateponkshe.com">ipr@bhateponkshe.com</a>  |   |   |
| <b><del>8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF THE CONVENTION APPLICATION</del></b> |                    |   |   |   |   |
| Country   | Application Number | Filing date   | Name of the Applicant   | Title of the invention  | IPC (as classified in the convention country) |
| NA  | NA                 | NA  | NA  | NA  | NA  |



**9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF THE INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY**

|                                   |                               |
|-----------------------------------|-------------------------------|
| International application no.: NA | International filing date: NA |
|-----------------------------------|-------------------------------|

**10. IN CASE OF DIVISIONAL APPLICATION FILED UNER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION**

|                                      |   |
|--------------------------------------|---|
| Original (first) application no.: NA | Date of filing Original (first) application: NA |
|--------------------------------------|---|

**11. IN CASE OF PATENT OF ADDITION FILED UNER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT**

|                                    |                                     |
|------------------------------------|-------------------------------------|
| Main application or patent no.: NA | Date of filing main application: NA |
|------------------------------------|-------------------------------------|

**12. DECLARATIONS**

**(i) Declaration by the inventor(s)**

**(In case the applicant is an assignee:** the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).

I/We, the above-named inventor(s) is/are the true & first inventor(s) for this Invention and declare that the applicant(s) herein is my assignee or legal representative.

| Name                | Date | Signature |
|---------------------|------|-----------|
| Amar Prakash Shetty |      |           |

**(ii) Declaration by the applicant(s) in the convention country-NA**

~~(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)~~

~~I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative. Date Signature(s) Name(s) of the signatory~~

**(iii) Declaration by the applicant(s)**

I/We the applicant(s) hereby declare(s) that: -

- ✓ I am/We are in possession of the above-mentioned invention.
- ✓ The provisional/~~complete~~ specification relating to the invention is filed with this application.
- ~~✓ The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.~~
- ✓ There is no lawful ground of objection(s) to the grant of the Patent to me.
- ✓ I am/we are the true & first inventor.
- ✓ I am/we are the assignee or legal representative of true & first inventor(s).
- ~~✓ The application or each of the applications, particulars of which are given in Paragraph 8, was the first application in convention country/countries in respect of my/our invention(s).~~
- ~~✓ I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.~~
- ~~✓ My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph 9.~~
- ~~✓ The application is divided out of my /our application particulars of which is given in Paragraph 10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act.~~
- ~~✓ The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph 11.~~

### 13. FOLLOWING ARE THE ATTACHMENTS WITH THIS APPLICATION

a) Provisional specification on Form 2

| Item  | Details                                     | Fee | Remarks |
|---|---|-----|---------|
| <del>Complete</del> / Provisional specification | No. of pages: 08                            |     |         |
| No. of claim(s)                                 | No. of claim(s): N.A.<br>No. of pages: N.A. |     |         |
| Abstract  | No. of pages: N.A.                          |     |         |

|                   |                                       |  |  |
|-------------------|---------------------------------------|--|--|
| No. of drawing(s) | No. of drawings: 5<br>No. of pages: 4 |  |  |
|-------------------|---------------------------------------|--|--|


# In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

- ~~(a) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies) N.A~~
- ~~(b) Sequence listing in electronic form N.A~~
- ~~(c) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies) N.A~~
- ~~(d) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS. N.A~~
- ~~(e) Translation priority document/Specification/International Search Report/ International Preliminary Report on Patentability N.A~~
- ~~(f) Statement and Undertaking on Form 3~~
- ~~(g) Declaration of Inventorship on Form 5~~
- (h) Power of Authority

Total fee Rs. /-~~in Cash~~/ **Banker's Cheque /Bank Draft** bearing No.....  
**Date.....on..... Bank.**

I hereby declare that to the best of my knowledge, information and belief the fact and matters stated herein are correct and I request that a patent may be granted to me for the said invention.

Dated this on 12<sup>th</sup> day of July 2022

  
 Prafulla Wange  
 (Agent for Applicant)  
 IN-PA/2058

To,  
 The Controller of Patents  
 The Patent Office, at Mumbai / ~~Delhi / Kolkata / Chennai.~~

Welcome PRAFULLA WASUDEVRAO WANGE. [Sign out](#)

Controller General of Patents, Designs &amp; Trade Marks

सत्यमेव जयते

G.A.R.6

[See Rule

22(1)]

RECEIPT

Docket No 41107

Date/Time 2022/07/12 17:07:51

**PRAFULLA WASUDEVRAO WANGE. BHATE & PONKSHE 12, Venumadhav Apts, 104/7, Off Lane No.14, Prabhat Road, Pune, M.S, India Email: prafullawange@gmail.com**

| Sr. No. | Ref. No./Application No. | App. Number             | Amount Paid | C.B.R. No. | Form Name | Fee Payment | Remarks   |
|---------|--------------------------|-------------------------|-------------|------------|-----------|-------------|---|
| 1       | 202221039952             | TEMP/E-1/45156/2022-MUM | 1600        | 17930      | FORM 1    | Full        | PROCESS FOR CASTING OF CONCRETE ON WOVEN CABLE NET FORMWORK |
| 2       | E-106/1709/2022/MUM      | 202221039952            | 0           | -1         | FORM28    | Full        |   |

| TransactionID | Payment Mode         | Challan Identification Number | Amount Paid | Head of A/C No   |
|---------------|----------------------|-------------------------------|-------------|------------------|
| N-0000992378  | Online Bank Transfer | 1207220021444                 | 1600.00     | 1475001020000001 |

Total Amount : ₹ 1600.00

Amount in Words: Rupees One Thousand Six Hundred Only

Received from PRAFULLA WASUDEVRAO WANGE. the sum of ₹ 1600.00 on account of Payment of fee for above mentioned Application/Forms.

\* This is a computer generated receipt, hence no signature required.

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## Innovation Project ( BNCA, Pune ) at Digital Lab at BNCA

### **Project ( ongoing) “DEVELOPING TOOLS FOR A ROBOTIC ARM”**

#### Introduction

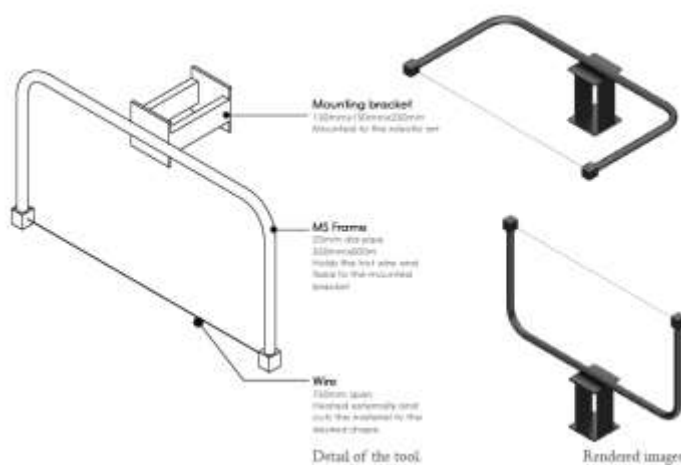
Tools for Robotic arm KR\_30 are developed by the DFL team, BNCA, led and developed (design and built) by faculty in charge Deva Prasad. The development has led to many explorations and helped in achieving different fabrication techniques like cutting, milling, weaving, extruding of materials. The output results in achieving precision and consistent throughout the process. The tools promote students to implement different fabrication process in their design process and experiment with the materials and techniques.

#### Stages and yearwise Progress of work is as follows:

##### 2016-

##### Hot wire cutter

The tool was developed to explore the precise cutting using the robotic arm. The tool uses simple heating technique to cut the material. This can be used to cut materials like thermocol, foams - Polystyrene foam, Styrofoam.



##### Acrylic Sheet Bending Tool

##### 2017-

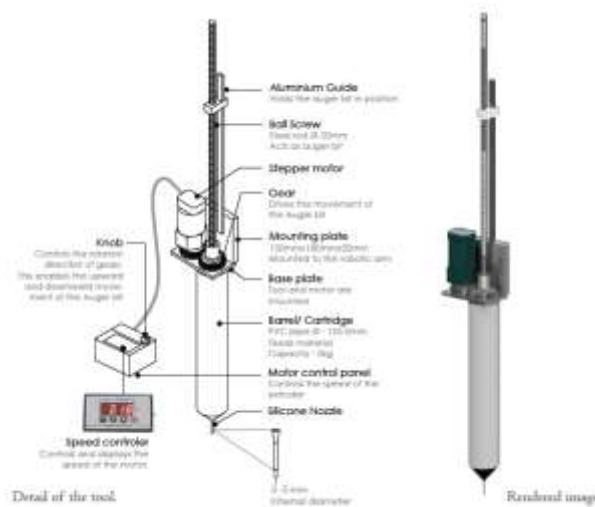
##### Clay extruders

Clay extruders are developed to research clay extrusion technologies or clay 3d printing. Two extruders are developed: Pneumatic and Motor driven extruder for small and large scale printing. Typical extrusion width of the extruders is 2mm - 10mm and the barrels holds

approximately 3.4kg wet clay. Attaching simple relays and proximity sensors makes the extrusion process semi-automatic.

## 1. Clay extruder Motor Powered

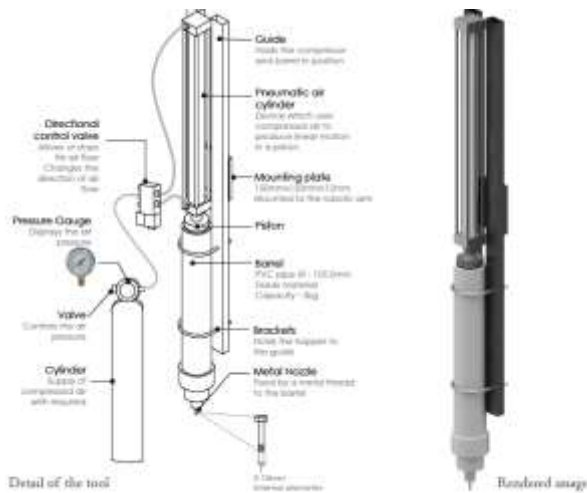
The tool is operated by electric power to drive the extrusion of the clay. The mechanism involves the power supply which helps in the movement of material resulting in extrusion. The power supply and the robot speed have to be calibrated for a consistent extrusion of clay.



Tool has Barrel is filled with the clay mixture of proper consistency for extrusion, Stepper motor with gear which helps in the mechanism of extrusion. The power supply exerts the linear motion of the ball screw which acts as auger bit. The direction of the motion is controlled by the rotation of the gears. The control panel connected to the stepper motor controls the power supply and also controls the rotation of gears. Silicone Nozzle is used for the extrusion. Based on the extrusion thickness required, the nozzle can be varied.

## 2. Clay Extruder \_Pneumatic Powered

Tool operates by Pneumatic mechanism - compressed air is supplied and produces the linear motion in the piston. The direction of the motion is controlled by the directional control valve by changing the direction of air flow. The piston movement results are the extrusion of the material in the barrel. A pressure gauge is fixed to the cylinder to monitor the air pressure supplied. Variable nozzle of different diameter can be used as per the thickness of the extrusion required.



2018 –

### 1. Pneumatic Grinder/ milling for soft material.

The tool demonstrates the pick and place tool in action using Pneumatic mechanism. This tool operates with 4 bar pressure and has variable clamping range. This assembles the objects in a programmed pattern.



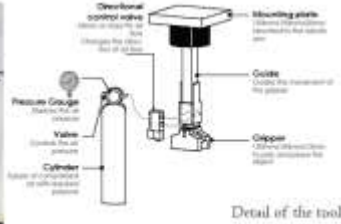
Grinding tool @ DFL, BNCA

### 2. Pneumatic Gripper for Pick & Place.

The tool demonstrates the pick and place tool in action using Pneumatic mechanism. This tool operates with 4 bar pressure and has variable clamping range. This assembles the objects in a programmed pattern.



Assembly of plywood planks @ DFL, BNCA



Detail of the tool



View of the tool @ DFL, BNCA

## 2019 –

### **Metal Sheet Forming (Single point incremental forming) tool.**

This tool is a Single Point Incremental Forming (SPIF). This tool is developed for the collaborative workshop with IAAC (GSS) in July 2019, themed Robot in Architecture. This is explored to design and fabricate using strategies of robotic single point incremental forming in making of doubly curved or complex surfaces.



SPIF on a Aluminum sheet @ DFL, BNCA



SPIF tool with different tips ranging from 2mm-20mm @ DFL, BNCA



Assembled SPIF tool @ DFL, BNCA



**2020 –**

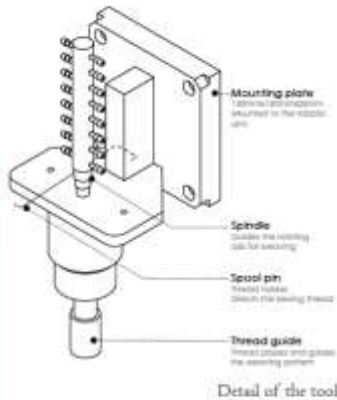
**Pneumatic Pick & Place (with suction cups)**

**2021 – Weaving tools**

Weaving tool is complete made out of scrap of DFL it has nozzle size to receive different thickness of fibres



Assembly of plywood planks @ DFL, BNCA



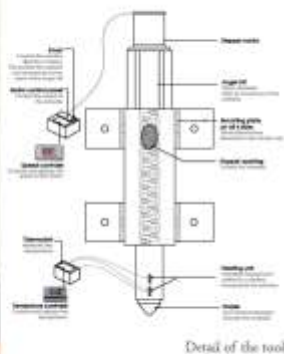
**2022 –**

- 1. Robotic metal bending**
- 2. Concrete Extruder**
- 3. Plastic Pellet Extruder**

The tool is capable of printing small and large architecture components and objects. It can take any kind of plastic as a raw material. It is capable of printing on various surfaces and non-planar layers. Calibrating this extruder for printing is more involved than a conventional 3d printer because it is loaded with high watt heating band to melt tough plastics.



Assembly of plywood planks @ DFL, BNCA



## Gallery

Prototypes made using tools developed in Digital Fabrication Lab



## Team

### **1. Deva Prasad**

*Faculty In charge, Digital Fabrication Lab ( DFL)*

### **2. Dhanashree Sardeshpande**

*Course Coordinator M.Arch (Digital Architecture)*

### **3. Yogesh Kulkarni**

*Head Technician, DFL*

### **4. Nilesh Jadhav**

*Assistant Technician, DFL*



MAHARASHTRA KARVE STREE SHIKSHA SAMSTHA



Affiliated to Savitribai Phule Pune University (SPPU)  
University Affiliation No. PU/PN/MARCH/105/1954  
Approved by:  
\*Council of Architecture (COA)  
\*All India Council for Technical Education (AICTE)  
\*National Assessment & Accreditation Council (NAAC)

**BNCA**

DR. BHANUBEN NANAVATI  
COLLEGE OF ARCHITECTURE

FOR WOMEN

Gate No:04, BNCA Campus,  
Cummins College Road,  
Karve Nagar, Pune-411 052  
Ph: +91 20 25474062 / 25479968  
E-mail: mail@bnca.ac.in, www.bnca.ac.in

BNCA/ 318 /2021

Date : 12/10/2021

### TO WHOM SOEVER IT MAY CONCERN

We are happy to announce that, BNCA Research Hub (BRH) which is established on 12/10/2021 Tuesday, under BNCA under the guidance of Dr. Anurag Kashyap with the intent of nurturing, developing and facilitating research and related activities at BNCA in Architecture and allied discipline in lieu with objectives of higher education.

The following members were unanimously appointed as steering committee members.

Dr. Anurag Kashyap : Hon. Chairperson

Dr. Swati Sahasrabuddhe : Hon. Convener

Mrs. Harshada Gadgil : Co- Convener (Administration Representative)

Dr. Meera Shirolkar : Member (BNCA Ph.D. Research Center, Representative)

Dr. Amita Pradhan : Member (Research Repository, BNCA library, Representative)

Dr. Anurag Kashyap  
Principal



*Handwritten note:*





MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S  
**DR. BHANUBEN NANAVATI**  
**COLLEGE OF ARCHITECTURE**  
**FOR WOMEN**

BNCA New Campus,  
Siddhivinayak College Gate  
Karve Nagar Pune, India 411052  
+91 20 25474062, 25476966, Fax. 020 2547443  
Email:mail@bnca.ac.in, www.bnca.ac.in

**CENTER FOR CULTURAL STUDIES**

**BNCA.**



**B N C A**  
Center for Cultural Studies

**Proposed Activities and Seminars:**


- Workshops
- Heritage Walks
- Field Visits
- Guestlectures
- Seminars
- Short Courses


---

**The team:**


Dr. Vaishali Latkar  
 Ar. Sourabh Marathe  
 Ar. Sidhi Joshi  
 Ar. Yash Joshi

✉ [ccs@bnca.ac.in](mailto:ccs@bnca.ac.in)  
 ☎ + 9120 25474062  
 🌐 [www.bnca.ac.in](http://www.bnca.ac.in)





Center for Cultural Studies



**Rationale:**


Culture as a lens encompasses both subtle and obvious cues of the traditions, human behaviours, codes, beliefs passed over generations that are integral for the present day societies to be resilient and sustainable. Often when limited to certain predefined lenses of study, the astute knowledge of cultural systems cannot be comprehended.

CCS aims to develop this association, build on the expertise, collaborations through joint research opportunities, exploration, experimentation, publications and public outreach.

**Vision:**

It aims to act as a repository of existing knowledge systems and generate awareness and develop resources to contribute through education, theories and practice.

It intends to develop a platform to connect with surroundings, societies to bridge the gap between theories, practices and policies to create sustainable and equitable solutions.



**About the Center:**

BNCA's Center for Cultural Studies (CCS), established in the year 2022 intends to study, integrate and explore multidimensional aspects of Culture and become the focal point in research, advisory and capacity building.

CCS intends at providing a platform to explore aspects of culture through multidisciplinary lens of heritage, conservation, urbanism, sustainability, anthropology, Indology, archaeology that address its physical and meta-physical existence.

With the SDG's focusing on various tangible and intangible aspects of Resilience and Sustainability, Culture is established as the 4th pillar. The discourse of architecture often is perceived through the lens of built environment but cannot be constrained to it. With blurring of boundaries between environments, society and human dimension, the discourse of Culture also presents avenues to be explored through multiple dimensions.

## ACTIVILTY CALENDER

- 19<sup>TH</sup> January 2024 – 3D Film Screening ‘Gadancha Raja- Rajgad’.
- 
- 4<sup>th</sup> February 2024- Lime Workshop at Historic Purandare Wada, Saswad.
- 
- 18<sup>th</sup> April 2024 – World Heritage Day Celebration.
- 
- 5<sup>th</sup> October 2024 – Heritage Documentation Workshop at Meruling Temple, Satara
- 

## CCS Team Members Activities and participation

- **Prof. Sourabh Marathe**
- Series of Marathi articles on occasion of Navaratri published in Marathi Daily “Maharashtra Times’ from 3<sup>rd</sup> October to 12<sup>th</sup> October 2024.
- **Prof. Vaishali Latkar**
- Participation in Heritage Documentation Workshop by NASA (National Association of Students of Architecture).
- Participation in organising AGM of CIF (International Committee of Heritage Education and Training of ICOMOS) as Vice President Asia held on 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> November 2024 in Venice, Italy)

**.19<sup>th</sup> January 2024 – 3D Film Screening  
'Gadancha Raja- Rajgad'.**

## BNCA | Events and Activity Reports

Event / Activity title: Screening of 3D documentary 'Gadancha raja'

Date & Time: 19<sup>th</sup> January 2024; 02:00 – 03:00 pm

Venue: Auditorium, BNCA.

Faculty In-charge: Dr. Vaishali Latkar and Ar. Ninad Jog

Students' In-charge: Sachi Yadav

Students' volunteer: Priya Gharjare, Abhidnya Atawane, Shivani Mehera

NAAC Criteria (if any):

Guest Speakers: Mr. Ganesh Dhalpe

Chief Guest (if any): -

Objective of this Event: Awareness about the built heritage of hill forts through screening of 3 D documentary.

### **Summary of the event (150-200 words):**

Hill forts have been an exemplary type of built heritage scattered along the Sahyadri ranges of western Ghats. Many forts are difficult to climb. Rajgad Has been an important fort in the history of Maharashtra. It has been the capital of Shivaji Maharaj and has been one of the best example of hill forts. 3 D film has been made by history enthusiast Mr. Ganesh Dhalpe. In an attempt to spread the awareness about the same, screening of 3 D documentary was organised. It was well attended by the students.

### **Attachments:**

Collaboration details (if any): Nil

Event Supported by: - Center for Cultural Studies, BNCA.

Event Category: Academic / Co-curricular / Extra-curricular: Extra -Curricular

### **Signatures**



Events Co-ordinator

Dr. .Vaishali Latkar



IQAC Co-ordinator

Dr. Chetan Sahasrabudhe

**Attachments:**

**01. Photos**



Mr. Dhalpe sharing his journey.



Mr. Ganesh Dhalpe felicitated by Dr. Sharvey Dhongde





4th February 2024- Lime Workshop at  
Historic Purandare Wada, Saswad.

## BNCA | Events and Activity Reports

Event / Activity title: **Re- Exploration of Lime**

Date & Time: 3<sup>rd</sup> February 2024; 09:00 – 04:00 pm

Venue: Purandare Wada, Saswad

Faculty In-charge: Dr. Vaishali Latkar and Ar. Ninad Jog

Students' In-charge: Sachi Yadav

Students' volunteer: Priya Gharjare, Abhidnya Atawane, Shivani Mehera

NAAC Criteria (if any):

Guest Speakers: Ar. Shivraj Dangat, Sontra Karanjikar

Chief Guest (if any): -

Objective of this Event: Awareness about use of lime in construction industry

Summary of the event (150-200 words):

Considering the use of lime in literature, a special workshop on 'Reuse of lime in construction' was held recently at the famous Purandare Wada in Saswad. Maharshi Karve Women's Education Institute Dr. The workshop was organized in association with Sanskriti Study Center at Bhanuben Nanavati College of Architecture for Women (BNCA), Pune and Kolhapur Division of 'INTAC' (Indian National Trust for Art and Culture), Nayantara Foundation and Sardar Shrimant Purandare family of Saswad. came BNCA Principal Dr. Cultural studies in BNCA organized this workshop with the encouragement of Anurag Kashyap

Response to the workshop

Head of the centre Dr. Vaishali Latkar, Amarja Nimbalkar, head of Kolhapur 'INTAC' and Supriya Mahabaleshwarkar and Jui Tawde of 'INTAC', along with Shivraj Dangat, architect of Nayantara Foundation, participated. The students participating in the workshop were guided by experts Sontra Karanjikar, Ninad Jog and Swapnil Doshi. Purandare family members were also present on this occasion.

### Attachments:

Collaboration details (if any): INTACH (Pune), INTACH (Kolhapur), Nayantara foundation

Event Supported by: - Purandare family

Event Category: Academic / Co-curricular / Extra-curricular: Academic & Co-Curricular

**Signatures**

Events Co-ordinator

Dr. .Vaishali Latkar

**Attachments:**

**01. Photos**



**Participants in front of the gate.**



**Workshop session in progress**



Hands on Activity



Workshop session in progress.



Workshop session in progress.



**Workshop session in progress.**

## 02. Event Poster



MKSSS's BNCA in collaboration with INTACH, Pune is organising a Hands on Workshop



INTACH  
INTACH Pune Chapter

# Re-Exploration of Lime

Lime construction has existed for centuries, all over the world. We are fortunate to experience and draw from thousands of years of traditional building knowledge in our country and regard it as a huge resource. This Workshop: Re-explores the use of lime in masonry construction and plasters for building in modern times.

**Date:** 04<sup>th</sup> February 2024  
**Time:** 9:00AM – 4:00PM  
**Venue:** Purandare Wada, Saswad  
(Inc. of food & Travel, BNCA Saswad - BNCA)  
**Registration Fees:** Rs. 2000/-  
**Gpay No.:** +91 9359510517  
**Limited Seats -** 20 Nos.

**Registration Form:**  
<https://forms.gle/7XcLTJxNA1czQxXR9>

**Resource Experts:**  
Ar. Ninad Jog  
Ar. Sonal Karanjikar  
Ar. Shivraj Dangat

### Workshop Highlights

Travel to Saswad  
Hands-on Activity  
Heritage Walk

Details will be shared after Registration



**\*Event is Open for Students of Architecture**

#### Supported By:

Dr. Anurag Kashyap – Principal, BNCA  
Dr. Vaishali Lalkar – Head, CCS  
Dr. Sharvey Dhongde – Convenor, INTACH, Pune

#### Supported By:

Ar. Amarja Nimbalkar, Kolhapur  
Nayantara Foundation, Pune  
Purandare Family, Saswad

#### Coordinated By:

Ar. Ninad Jog  
+91-9975709226



BNCA

BNCA Pune | mkss's dr. bhanuben nanavati college of architecture | bncaofficial | mail@bnca.ac.in  
Poster by : Ninad Jog



| Sr. No. | Name of the student      | Name the Institute / Organization   | Year of Study      | Division | Contact Number | Email Id                        |
|---------|--------------------------|---|--------------------|----------|----------------|---------------------------------|
| 1       | Sarth Kankaria           | Kamla Raheja Vidyavidyalaya Institute of Architecture and Environmental Studies | Fifth / Final Year |          | 9145320701     | sarthrkankaria@gmail.com        |
| 2       | Dhiraj honap             | Anantrao pawar college of architecture  | Second Year        | Div A    | 9614155001     | dhiraj.honap@gmail.com          |
| 3       | Vaishnavi Mahamuni       | Anantrao Pawar College Of Architecture  | Fourth Year        | Div A    | 9309729387     | Mahamunivaishnavi20@gmail.com   |
| 4       | KIMAYA KHILARE           | Indira college of Architecture  | Fifth / Final Year | Div B    | 9511638521     | Khilarekimaya@gmail.com         |
| 5       | Shivani Gokulnath Mohite | Dr.P.A Inamdar University, Allana College Of Architecture, Pune                 | Masters / PG       |          | 8010318637     | shivanimohite007@gmail.com      |
| 6       | Ruchika Salunke          | School of planning and architecture   | Masters / PG       |          | 9403989697     | salunkeruchikad@gmail.com       |
| 7       | Om ramesh gadhe          | Smt. Kashibai Navale College of Architecture                                    | Fourth Year        | Div A    | 9011544379     | gadheom17@gmail.com             |
| 8       | Sakshi rokade            | Smt. Kashibai navale college of architecture                                    | Fourth Year        | Div B    | 9356688124     | Sakshirokade727@gmail.com       |
| 9       | Samiksha Shinde          | Marathwada mitramandals college of architecture                                 | Fourth Year        | Div B    | 9022267631     | Samikshaashinde@gmail.com       |
| 10      | Vishwajeet Shinde        | MARATHWADA MITRA MANDAL COLLEGE OF ARCHITECTURE                                 | Fourth Year        | Div B    | 9850708200     | Vishwajeet.shinde@mmcoa.edu.in  |
| 11      | Prutha Kshirsagar        | Marathwada Mitra Mandal College of Architecture                                 | Fourth Year        | Div B    | 9850863950     | pruthakshirsagar2002@gmail.com  |
| 12      | Jui Mahesh Bartakke      | BKPS COLLEGE OF ARCHITECTURE, PUNE  | Second Year        |          | 9067382489     | juimb2312@gmail.com             |
| 13      | AISHWARYA CHORDIYA       | MMCOA   | Fourth Year        | Div A    | 9579808917     | aishwarya.chordiya@mmcoa.edu.in |
| 14      | Ketaki Kulkarni          | MKSSSS'S Dr Bhanuben Nanavati College of Architecture                           | Fifth / Final Year | Div D    | 7588432093     | ketaki21122000@gmail.com        |
| 15      | Manasi Aglawe            | MKSSSS'S Dr Bhanuben Nanavati College of Architecture                           | Fifth / Final Year | Div D    | 9423055895     | aglawemanasi@gmail.com          |
| 16      | Anuja Pawgi              | MKSSSS'S Dr Bhanuben Nanavati College of Architecture                           | Fifth / Final Year | Div D    | 9172125434     | anujappawgi@gmail.com           |
| 17      | Manav Kotphode           | S.B Patil College of Architecture and Design                                    | Second Year        | Div C    | 7709670929     | vkmanav25@gmail.com             |
| 18      | Dhruv chalode            | Mmcoa   | Fourth Year        | Div A    | 9403058818     | dhruv.chalode@mmcoa.edu.in      |
| 19      | Ishita Sawant            | MMCOA   | Fourth Year        | Div B    | 9004025689     | ishitasawant12@gmail.com        |
| 20      | Vardhan vadgave          | Singhad college of architecture   | Masters / PG       |          | 9175975097     | vardhan3411@gmail.com           |
| 21      | Madhura Bangal           | PVPCOA, Pune  | Third Year         |          | 7249043001     | madhu1892003@gmail.com          |
| 22      | Jayesh Mangesh Varma     | PVPCoA  | Third Year         | Div B    | 9175358137     | jayesh.varma.2021@pvpcopune.edu |
| 23      | Sumeet ravindra koli     | School of architecture kasaba bawada kolhapur                                   | Second Year        | Div A    | 8668329696     | sumitkoli.srp@gmail.com         |



## Feedback

Lime Workshop feedback form1 (Responses) ☆ 📄 🌐

File Edit View Insert Format Data Tools Extensions Help

100% 123 Default... 10 B I A

No suggestion just grateful and feeling fortunate being part of this workshop. Looking forward for more participation

| Name of the student | Email Id                   | Name of the institute/ org | Quality of contents in the | Experience of Hands on | Food and other arranger | Suggestions if any.   |
|---------------------|----------------------------|----------------------------|----------------------------|------------------------|-------------------------|---|
| Sumit koli          | sumitkoli.srp@gmail.com    | School of architecture ka  | Excellent                  | Excellent              | Excellent               |   |
| Shivani Mehare      | shivanimehare102@gmail.com | BNCA                       | Excellent                  | Excellent              | Excellent               |   |
| Jui Mahesh Bartakke | juimb2312@gmail.com        | BKPS COLLEGE OF AR         | Excellent                  | Excellent              | Excellent               | No suggestion just grateful and feeling fortunate being part of this worksh |
| Om gadhe            | gadheom17@gmail.com        | Smt. Kashibai Navale Co    | Excellent                  | Excellent              | Excellent               |   |
| Sakshi              | Sakshirokade727@gmail.com  | SKNCOA                     | Excellent                  | Excellent              | Average                 |   |
| Vardhan vadgave     | Vardhan3421@gmail.com      | Sinhgad college of archit  | Excellent                  | Excellent              | Excellent               |   |
| Manasi Aglawe       | aglawemansii@gmail.com     | MKSS'S Dr Bhanuben f       | Excellent                  | Excellent              | Excellent               |   |

## Certificate Format



# CERTIFICATE

This certificate is presented to

for volunteering in one day workshop on  
**"Re-Exploration of Lime"**  
 at Purandare Wada, Saswad on 4th February 2024.

**Dr. Vaishali Latkar** Head CCS, BNCA  
**Dr. Shavrey Dhongde** Convenor, INTACH, Pune  
**Ar. Amarja Nimbalkar** Convenor, INTACH, Kolhapur  
**Purandare Family** Saswad  
**Nayantara Dangat** Nayantara Foundation, Pune

**Collaboration details (if any):** INTACH Pune Chapter, Nayantara Foundation, Purandare Family Trust

**Event Supported / sponsored by:** Food Sponsored by Nayantara Trust

**Event Category:** Academic / Co-curricular / Extra-curricular:

- 18th April 2024 – World Heritage Day Celebration.

## BNCA | Events and Activity Reports

Event / Activity title: Calender Publication on the Occasion of the World Heritage Day 2024

Date & Time: 18<sup>th</sup> April 2024 Time- 3 pm to 4pm

Venue: Room no 108 ,BNCA

Faculty In-charge: Dr. Vaishali Latkar

Faculty Co-ordinator: Prof. Yash Joshi and Prof. Siddhi Joshi

Students' In-charge: Abhidnya Atawane and Priya Gharjare

NAAC Criteria (if any):

Guest Speakers: - Prof. Amita Sinha

Chief Guest (if any): - Nil

Objective of this Event: To celebrate the World Heritage Day on 18 April 2024

Summary of the event (150-200 words):

18<sup>th</sup> April is celebrated as the World Heritage Day across the world. India is known for its rich and diverse cultural heritage. It includes tangible as well as intangible heritage. In an attempt to make students aware of the religious component of heritage, they were asked to choose and explore one for of Shakti and portray the same in traditional painting style. Final year students who chose Architectural Conservation as their elective subject were given this assignment. Students came up with manifestations of Shakti in traditional Indian form. These are compiled to make a Hindu Calender that is published at the hands of a renowned expert Prof. Amita Sinha. Her expertise lies in the field of Indian Cultural/ spiritual landscape. On this occasion a talk on ' The great Goddess and the sacred landscape with a focus on the World Heritage Site of Champaner- Pavagarh, Gujrat.'by Prof. Sinha was arranged.

It was attended by and well received by the students and faculty members.

Event Supported / sponsored by: Center For Cultural studies, BNCA

Event Category: ~~Academic~~/ Co-curricular / ~~Extra-curricular~~:

### Signatures



Events Co-ordinator

Dr. .Vaishali Latkar



IQAC Co-ordinator

Dr. Chetan Sahasrabudhe

**Attachments:**

Poster

On the occasion of

**World Heritage Day**

**18th April 2024.**

**MKSSS's BNCA's  
Center for Cultural Studies**

Invites you  
To the publication of

**‘दिनदर्शिका’  
शके १९४६**

the Hindu calendar prepared by  
the students of BNCA.

At the hands of eminent Scholar

**Prof. Amita Sinha**

Followed by her talk on

**“The Great Goddess and the  
sacred landscape, with a focus  
on the World Heritage Site of  
Champaner-Pavagadh, Gujrat”**

**Venue** – Room no. 108, BNCA

**Date** – 18<sup>th</sup> April 2024

**Time** – 3:00 – 4:00 PM

**Supported By:**

Dr. Anurag Kashyap  
Dr. Vaishali Latkar

**Coordinated By:**

Prof. Yash Joshi  
Prof. Siddhi Joshi



**BNCA**



BNCA Pune



mksss's dr. bhanuben nanavati college of architecture



bncaofficial



mail@bnca.ac.in

Poster by Prof. Yash Joshi



BNCA  
Center for Cultural Studies

Event Photographs





**GPS Map Ca**



Pune, Maharashtra, India  
 10/2/2/4, Karve Nagar Lane No 1, Dnydeep Colony, Hin  
 Budruk, Karve Nagar, Pune, Maharashtra 411052, Ind  
 Lat 18.488183°  
 Long 73.817942°  
 18/04/24 03:29 PM GMT +05:30

Media Coverage

# अमूर्त सांस्कृतिक गोष्ठींचा समावेशही ऐतिहासिक वारशात शक्य: डॉ. अमिता सिन्हा

पुणे : भूतकाळात केलेली मानवी बांधकामे ही ऐतिहासिक वारसा म्हणून प्रत्यक्ष दिसू शकतील अशी मूर्त स्थळे आहेत; पण सांस्कृतिक व धार्मिक प्रतिके असणाऱ्या प्राचीन भारतीय परंपरा, देवी-देवतांवरील ऐतिहासिक, पूरातत्वाच्या भूमिकेतून असणाऱ्या अमूर्त गोष्टीही या वारशात येतात. गुजरातमधील पावागड डोंगर हा याच परंपरेतला आहे व त्याची गणना आता युनेस्कोच्या जागतिक वारसा स्थळात झाली आहे, असे प्रतिपादन सांस्कृतिक भूशास्त्र वास्तुकार प्रा. डॉ. अमिता सिन्हा यांनी केले. त्यांच्या हस्ते महर्षी कर्वे स्त्रीशिक्षण संस्थेच्या डॉ. भानूबेन नानावटी कॉलेज ऑफ आर्किटेक्चर फॉर वूमन (बीएनसीए) मधील संस्कृती अध्ययन केंद्रातर्फे विद्यार्थिनींनी भारतीय महिन्यानुसार



तयार केलेल्या दिनदर्शिकेचे प्रकाशन संस्थेच्या अकादमिक प्रमूख डॉ. शुभदा कमलापूरकर यांच्यासह केले.

बीएनसीएचे प्राचार्य डॉ. अनुराग कश्यप यांच्या प्रेरणेतून सुरू झालेल्या सांस्कृतिक अध्ययन केंद्राच्या प्रमूख डॉ. वैशाली लाटकर यांच्यासह सहआयोजक प्रा. यश जोशी, आणि प्रा. सिद्धी जोशी यांनी दिनदर्शिका शके १९४६ (एप्रिल २०२४ ते एप्रिल २०२५) हे टेबल कॅलेंडरच्या स्वरूपात तयार केली.

'स्त्रीत्वाची शक्ती' हा या कॅलेंडरचा विषय असून त्यामध्ये संस्कृती अध्ययन केंद्राच्या सोळा विद्यार्थिनींनी सक्रीय सहभाग घेतला. त्यापैकी अभिघ्ना आठवणे आणि प्रिया घरजरे प्रकाशनासाठी उपस्थित होत्या. या कॅलेंडरमध्ये दुर्गामाता, सरस्वती, महाकाली, एकविरा देवी, सिद्धीदात्री देवी, अंबिका, सप्तशृंगी, चामुंडा, काली आणि रेणुका देवी यांच्या प्रतिमांचा त्यांच्यावरील माहितीसह समावेश करण्यात आला आहे.

## बीएनसीएतील संस्कृती अध्ययन केंद्रातर्फे भारतीय दिनदर्शिका प्रकाशित

पुणे : भूतकाळात केलेली मानवी बांधकामे ही ऐतिहासिक वारसा म्हणून प्रत्यक्ष दिसू शकतील अशी मूर्त स्थळे आहेत; पण सांस्कृतिक व धार्मिक प्रतिके असणाऱ्या प्राचीन भारतीय परंपरा, देवी-देवतांवरील ऐतिहासिक, पूरातत्वाच्या भूमिकेतून असणाऱ्या अमूर्त गोष्टीही या वारशात येतात. गुजरातमधील पावागड डोंगर हा याच परंपरेतला आहे व त्याची गणना आता युनेस्कोच्या जागतिक वारसा स्थळात झाली आहे, असे प्रतिपादन सांस्कृतिक भूशास्त्र वास्तुकार प्रा. डॉ. अमिता सिन्हा यांनी केले. त्यांच्या हस्ते महर्षी कर्वे स्त्रीशिक्षण संस्थेच्या डॉ. भानूबेन नानावटी कॉलेज ऑफ आर्किटेक्चर फॉर वूमन (बीएनसीए) मधील संस्कृती अध्ययन केंद्रातर्फे विद्यार्थिनींनी भारतीय महिन्यानुसार तयार केलेल्या दिनदर्शिकेचे प्रकाशन संस्थेच्या अकादमिक प्रमूख डॉ. शुभदा कमलापूरकर यांच्यासह केले.

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# CCS Team Members Activities and participation

- Prof. Sourabh Marathe
- Series of Marathi articles on occasion of Navaratri published in Marathi Daily “Maharashtra Times’ from 3rd October to 12th October 2024.



# महालक्ष्मीचे प्राकट्य

सौरभ मराठे

का

ल आपण महाकालीच्या उत्पत्तीची कथा बघितली.

प्रथमचरित्रात तामस गुण असलेली महाकाली उत्पन्न झाली. मधू आणि कैटभ या असुरांचा वध पहिल्या अध्यायात बघितला. आज आपण पुढील अध्याय बघू.

आज आपण सप्तशतीचे मध्यचरित्र बघत आहोत. तमोगुणी महाकालीच्या उत्पत्तीनंतर रजोगुणी महालक्ष्मी प्रकट झाली. तिचे आख्यान दुसऱ्या अध्यायात येते. ही महालक्ष्मी कशी आहे, तिचे ध्यान कसे आहे, हे बघू. अक्षमाळा, परशू, गदा, बाण, वज्र, पद्म, धनुष्य, कुंडिका (कर्मंडलू), दंड, शक्ती, खड्ग (तलवार), ढाल, शंख, घंटा, मधुपात्र, शूल, पाश, चक्र अशी अठरा आयुधे धरण केलेली, प्रसन्न मुख असलेली, प्रवाळ किंवा



देवी  
माहात्म्य

पोवळ्याप्रमाणे कांती असलेली, महिषाचा (रेडा) वध करणारी, कमळावर बसलेली देवी, असे तिचे वर्णन केले आहे. फार पूर्वी देवता आणि असुरांमध्ये घनघोर युद्ध झाले. जवळपास शंभर वर्षे हे युद्ध चालले. देवतांकडून इंद्र, तर असुरांकडून महिषासुर युद्धभूमीवर नेतृत्व करीत होते. जवळपास सर्व देवतांवर विजय मिळवून महिषासुर इंद्रपद घेऊन बसला होता, असे म्हणावे लागेल. सर्व देवदेवता भगवान विष्णू आणि शिव यांच्याकडे धावले. भगवान विष्णूच्या मुखातून महान तेज प्रकट झाले. असेच तेज ब्रह्मा, इंद्र, शंकर आदी देवतांच्या शरीरातून उत्पन्न झाले. ते तेज एकत्र हाऊन त्याने एका स्त्रीचे रूप धरण केले. या तेजाने तिन्ही

लोक व्यापून टकले. विविध देवतांच्या तेजापासून त्या शक्तीचे विविध अवयव तयार झाले. नंतर सर्व देवदेवतांनी एक एक करीत आपले एक एक आयुध/शस्त्र त्या शक्तीला अर्पण केले. क्षीरसमुद्राने उज्ज्वल हार, कधीही जीर्ण न होणारी दोन वस्त्रे, चूडामणी, कुंडले भेट दिली. त्याचबरोबर विविध वस्त्रे, रत्ने, अलंकार, अनेक प्रकारची अस्त्र-शस्त्रे, कवच त्या शक्तीला भेट दिले. हिमालयाने सिंह भेट दिला. कुबेराचे पानपात्र दिले. सर्व अस्त्र-शस्त्र आणि आभूषणाने सज्ज झालेल्या देवीने भयंकर गर्जना केली. समुद्रकंप झाला, पृथ्वी कापायला लागली, पर्वत हलू लागले. सर्व देवदेवतांनी त्या भगवतीचा जायजयकार केला. ही देवी म्हणजेच महालक्ष्मी.

महिषासुर युद्धास तयार झाला. आपल्या सेनेला त्याने युद्धास तयार केले. देवीही युद्धाला तयार झाली. चिह्नुर नामक महिषासुराचा सेनापती देवीशी युद्ध करू लागला. देवीबरोबर अनेक दैत्य युद्ध

करू लागले. स्वतः महिषासुर युद्धभूमीवर उभा राहिला. कोटी - सहस्र रथ, हत्ती, घोडे, सेना घेऊन तो युद्धाला उतरला. सर्व मिळून विविध आयुधांनी देवीवर हल्ला चढवत होते. देवीला हरवण्याचा प्रयत्न करीत होते. क्रोधित देवीही त्यांच्यावर अस्त्रांचा वर्षाव करीत होती. देवीच्या चेहऱ्यावर कणमात्र थकवा दिसत नव्हता. देवी विनासायास असुरांचा नाश करीत होती. सिंहावर आरूढ झालेल्या देवीने भयंकर संहार केला. रक्तपात झाला, रक्ताच्या नद्या वाहू लागल्या. काही क्षणांत असुरांच्या विशाल सेनेला नष्ट केले. स्वर्गातून देवदेवता संतुष्ट होऊन पुष्यवर्षाव करू लागल्या.

(क्रमशः)

# मार्कंडेय पुराण

सौरभ मराठे



देवी  
माहात्म्य

सर्वमंगल मांगल्ये शिवे सर्वार्थ साधिके। शरण्ये त्र्यंबके गौरी नारायणि नमोऽस्तुते।।

१८ महापुराणांमधील महत्त्वाचे असे एक महापुराण म्हणजे मार्कंडेय पुराण. इसवीसनाच्या तिसऱ्या शतकातले हे पुराण आहे. मार्कंडेय ऋषींनी सांगितल्यामुळे या पुराणाला 'मार्कंडेय पुराण' असे म्हटले जाते. याच संस्कृत वाङ्मय आदिशक्तीच्या विविध अवतारांचा, विविध रूपांचा संदर्भ येतो. या पुराणातला एक भाग म्हणजे देवी माहात्म्य. या स्तुतीला आपण दुर्गा सप्तशती किंवा चंडिपाठ म्हणूनही ओळखतो. या पुराणात चौदा मनुंची आख्याने येतात. त्यातील आठवा मनु म्हणजे सावर्णी मनुचे आख्यान हा भाग देवी सप्तशतीशी संबंधित आहे. या मनुची पूर्वजन्माची कथा इथे सांगितली आहे आणि तो देवीच्या माहात्म्य पठणाने पुढे मनु झाला असेही सांगितलेले आहे. मग हा मनु पूर्वी कोण होता? तर सुरथ नावाचा तो एक राजा होता. त्याच्या राज्यावर शत्रूंनी आक्रमण केले आणि सर्व राज्य बळकावले. आपले सगळे राज्य गमावल्यामुळे तो पुढे एका वनात गेला. तिथे फिरत असताना त्याला एक आश्रम दिसला. मेधा ऋषींच्या या आश्रमात तो राजा आला. या आश्रमात त्याला समाधी नावाचा एक वैश्य भेटला. आपल्या पत्नीने आणि मुलांनी धनापोटी आपल्याला स्वतःच्या घरातून घालवून दिल्याने तो आश्रमात आला होता. हे दोघे जारी आपापल्या प्रापंचिक दुःखाला कंटाळून गेले होते, तरी ते आपल्या कुटुंबाची चिंता करीत होते. पुढे हे दोघे आश्रमातील प्रमुख ऋषी म्हणजे मेधा ऋषींना म्हणाले, 'आम्हाला अशी चिंता का वाटते, आम्हाला या दुःखातून बाहेर यायला मदत करील आणि मनाला आधार मिळेल असे तत्त्वज्ञान आम्हाला सांगावे.' यावर मेधा ऋषींनी सांगितलेले आख्यान, किंवा माहात्म्य म्हणजेच देवी माहात्म्य.

महामाया ही सर्व प्राण्यांच्या ठिकाणी स्नेह, मोह, ममता निर्माण करते. तिचे अवतार कसे होतात, तिचे माहात्म्य काय हे ऋषींनी पुढे

कथन केले. तेच माहात्म्य म्हणजे देवी माहात्म्य.

आता या देवी माहात्म्याची रचना कशी आहे ते बघू या. हे आख्यान एकूण १३ अध्यायांचे आहे. या माहात्म्यातील मंत्रांची संख्या सातशे (७००) असल्याने याला 'सप्तशती' म्हणून ओळखले जाते. दुर्गेशी निगडित असल्याने दुर्गा सप्तशती म्हणूनही आपण जाणतो. हे शक्तीशी, चंडीशी, चंडिकेशी संबंधित असल्याने ते चंडिपाठ म्हणूनही आपण जाणतो.

तेरा अध्यायांच्या सुरुवातीला जो भाग आहे त्याला पूर्वांग असे म्हणतात आणि त्यात चंडीकवच, अर्गलास्तोत्र आणि कौलक समाविष्ट आहेत. दुर्गा सप्तशती म्हणण्यापूर्वी यांचा पाठ केला जातो. सप्तशतीनंतर येणारे भाग म्हणजे उत्तरांग. यात प्रधानिकरहस्य, वैकृतिकरहस्य आणि मूर्तिरहस्ये येतात.

आता या १३ अध्यायांची रचना कशी आहे ते बघू :

पहिल्या अध्यायात देवी महामाया रूपात आपल्याला दिसते. मधू-कैटभांचा वध याच अध्यायात येतो. महाकाली अवतार इथे आपल्याला दिसतो.

दुसरा, तिसरा आणि चौथा अध्याय हा महालक्ष्मीच्या अवतारासंबंधित आहे. महालक्ष्मीचे प्राकट्य, महिषासुराचा वध आणि देवीची स्तुती यात आपल्याला दिसते. पाच ते दहा अध्याय हे महासरस्वतीशी निगडित आहेत. महासरस्वतीचा अवतार, धूमलोचनाचा वध, चंड-मुंडांचा वध, रक्तबीजाचा वध, शुभ-निशुभाचा वध यात आपल्याला बघायला मिळतो. या नंतरच्या म्हणजेच अकराव्या अध्यायात देवीच्या पुढील अवतारांचे कथन केलेले दिसते आणि पुढील दोन अध्यायांत पूजाविधान, सुरथ-समाधी (राजा आणि वैश्य) यांना दिलेले वरदान किंवा वरप्राप्ती आणि कथेचा समारोप असे दिसून येते.

पुढील काही दिवसांत हे माहात्म्य एक एक करून जाणून घेऊ.

(क्रमशः)

# मधू-कैटभ वध



हिला अध्याय मधू-कैटभांचा वध आणि तमोरूपा महाकालीच्या चरित्राशी संबंधित आहे. मार्कंडेय ऋषी पुराणातील देवी माहात्म्य सांगत आहेत, असा या अध्यायाचा प्रारंभ आहे. पुढे सुरथ राजा, समाधी नामक वैश्य आणि मेधा ऋषी यांच्यातील संवाद येतो. त्यातून पुढे ऋषी देवीचे माहात्म्य सांगतात. या अध्यायात ते देवीचा महाकाली अवतार कसा झाला, याची कथा सांगतात. हे विश्व शून्यावस्थेत असताना एकमात्र परमात्मा नारायण रूपात होता. हा परमात्मा नारायण योगनिद्रेत असताना, त्यांच्या कानातील मळापासून दोन भयंकर

राक्षस निर्माण झाले. मधू आणि कैटभ नावाचे हे राक्षस सर्वत्र उच्छाद घालू लागले. पुढे ते ब्रह्मदेवावर हल्ला करण्यासही सिद्ध झाले.

नारायणाच्या नाभीकमलात विराजमान असलेले ब्रह्मदेव भयभीत झाले. त्यांनी पाहिले, तर नारायण योगनिद्रेत आहेत, त्यांचा पाठीराखा कोणी नाही. देव (नारायण) सावध व्हावे, जागे व्हावेत; म्हणून त्यांनी योगनिद्रेचे स्तवन करण्यास सुरुवात केली. तमोगुणात्मिका आदिशक्तीचे स्तवन केले, रात्री देवीची प्रार्थना केली. ती स्तुती रात्री सूक्त म्हणून आपल्याला माहिती आहे. 'तूच स्वाहा, तूच स्वधा, तूच वषट्कार' म्हणत ब्रह्मदेव आदिशक्तीची स्तुती करतात. 'यथाशक्ती केले स्तवन। आता असुरासी करी मोहन। सावध करावा नारायण। असुरवधाकारणे।' स्तुती ऐकून, नारायणाला अंतर्बाह्य व्यापून राहिलेली महामाया त्यांच्यापासून विलग झाली. तमोगुणी देवी तत्काळ प्रकट झाली. एका विशाल रूपात, म्हणजेच महाकाली रूपात प्रकट झाली. दशमुखी, दशपाद आणि दहा हात अशी ही देवी होती. काजळसारखा काळा वर्ण



देवी  
माहात्म्य

सौरभ मराठे

असल्याने, तिला महाकाली हे नाव मिळाले. तिच्या कपाळी असलेला कुमकुमतिलक अतिभयंकर दिसत होता. तिच्या हातात विविध आयुधे होती. खड्ग, बाण, गदा, शूळ, चक्र, शंख, धनुष्य, भृशुंडी, परीघ आणि दहाव्या हातात शिर/नर कपाल पात्र अशी आयुधे तिने धरण केली होती.

अशी ही महाकाली नारायणापासून वेगळी झाली आणि नारायण जागे झाले. नारायण

'देवी

माहात्म्य' म्हणजेच दुर्गा सप्तशतीचा इतिहास आपण थोडक्यात पहिला आहे. त्याची रचना १३ अध्याय, तीन पूर्वांग आणि तीन उत्तरांग अशी आहे. प्रत्येक अध्यायात काय काय आहे, याचा गोषवारा आपण जाणून घेतला. आजपासून त्यातील एक एक गोष्ट थोड्या विस्ताराने पाहू.

चा। ल। ले.; पण निर्णय काही होईना. मग महामाया पुढे आली. तिने आपल्या

मायेने मधू आणि कैटभाला मोहित केले. मोहितावस्थेत ते नारायणाला म्हणाले, 'आम्ही तुझ्यावर प्रसन्न आहोत, हवा तो वर माग!' यावर देव बोलते झाले, 'तुमच्या दोघांचा वध माझ्या हातून व्हावा हा वर द्यावा.' असुर शब्द देऊन बसले; पण त्यांनी एक अट घातली. ही सृष्टी पाण्याने व्यापली होती हे जाणून, जिथे पाणी नाही अशा ठिकाणी आमचा वध कर, असा वर त्यांनी देवाला दिला. त्या वेळी नारायणांनी विशाल रूप धारण केले आणि आपल्या मांड्यांवर असुरांना ठेवून, चक्राने त्यांचा वध केला.

या संपूर्ण अवतार चरित्रात महत्त्वाची भूमिका होती तमोगुणी, मोहून टाकणाऱ्या महामायेची. जिने संपूर्ण जगाला मोहून टाकले आहे, अशा महाकाली देवीची उत्पत्ती कथा पहिल्या अध्यायात आज आपण पाहिली.

(क्रमशः)

# महिषासुर वध आणि देवी स्तुती



देवी  
माहात्म्य

सौरभ मराठे



देवी महालक्ष्मीने असुरांचे प्रचंड सैन्य मारले.

हे बघून चिक्षुर नावाचा सेनापती देवीवर धावून गेला. देवीवर त्याने बाणांचा वर्षाव केला. एखाद्या पर्वतावर प्रचंड पाऊस पडावा; पण त्या पर्वताला पडणाऱ्या पावसाची भीती वाटत नसते; तसेच देवीला बाणांच्या पावसाचे काहीही वाटत नव्हते. चिक्षुराने सोडलेले सर्व बाण देवीने आपल्या बाणाने मोडून टाकले. त्याचे घोडे आणि सारथी मारून टाकले. त्याचा धनुष्य मोडला आणि ध्वजही.

एवढे सगळे गमावून बसल्यावर तो असुर शेवटी ढाल आणि तलवार घेऊन देवीवर धावून गेला. त्याने सिंहावर हल्ला केला. देवीवर हल्ला करताच त्याची तलवार तुटून गेली. क्रोधित झालेल्या असुराने मग शूल हातात घेतले आणि युद्ध करू लागला. देवीनेही हल्ला चढवला. देवीने त्याचे शूल तोडले आणि शेवटी त्याला ठार मारले.

चिक्षुरचा मृत्यू झाल्यावर चामर नावाच्या असुराने देवीवर हल्ला चढवला. शक्तीचा प्रहार केला. देवीने केवळ आपल्या हुंकाराने त्याला निग्रभ केले. देवीच्या सिंहाने त्याच्यावर हल्ला केला. दोघांच्यात तुंबळ युद्ध झाले. शेवटी सिंहाने त्याचे डोकें शरीरापासून वेगळे केले. त्यानंतर युद्धाला आलेल्या उदय, कराल, उदकाक, ताम्र आणि अंधक अशा महान असुरांना देवीने यमसदनी पाठवले. अशा प्रकारे आपल्या सेनेचा संहार झालेला बघून, महिषासुर महिषाचे (रेड्याचे) रूप धारण करून देवीशी लढायला आला. त्याने प्रचंड पराक्रम केला. अनेक देवदेवतांना त्रास दिला. अनेक गण मारले. देवीच्या सिंहावर त्याने हल्ला चढवला. पृथ्वीला उकळून काढू लागला. आता मात्र देवी क्रोधित झाली. तिनेही हल्ला चढवला. देवीने त्या रेड्यावर पाश टाकला. त्याला पकडले. त्याच वेळेस असुराने महिषाचे रूप सोडून सिंहाचे रूप धरण केले. त्याचा शिरच्छेद करण्यासाठी देवीने खड्ग उगारले; तोच त्याने खड्गधारी पुरुषाचे रूप घेतले. मग मात्र देवीने बाणांचा वर्षाव केला. त्याने शेवटी हत्तीचे रूप घेतले आणि देवीच्या सिंहाला सोडने ओढू लागला. देवीने तलवारीने त्याची सोड कापली, तेव्हा त्याने परत महिषाचे रूप

घेतले.

देवी क्षणभर थांबली. तिने मधुपान केले. तिचे डोळे लाल झाले. ती अट्टहास करू लागली. तिकडे महादेव्य गर्जना करू लागला. त्यावर देवी त्याला म्हणाली, 'अरे मूर्ख! जोपर्यंत मी मधुपान करीत आहे, तोपर्यंत गर्जना करू न घे. तुझा मृत्यू माझ्या हाती निश्चित आहे. लवकरच तुझा मृत्यू होईल आणि सर्व देवदेवता गर्जना करतील.'

असे बोलून देवी उडी घेऊन त्या असुराच्या अंगावर आरूढ झाली. पायाखाली त्याला दाबले. हातातल्या शूलाने तिने असुराच्या गळ्यावर आघात केला. ती त्याला शूलाने ठार मारणार, तोच तो रेड्याच्या शरीरातून मानवी शरीराने बाहेर पडू लागला. तो बाहेर येण्याधीच देवीने आपल्या तलवारीने त्याचे मस्तक कापले. हे बघून त्याचे उरलेले सैन्य सर्व दिशांना पळून गेले. सर्व देवगण प्रसन्न झाले. आनंदी झाले.

अत्यंत पराक्रमी महिषासुर आणि त्याच्या सैन्याला देवीने हरवले. मग इंद्र आणि इतर देवदेवता विनम्रपणे भागवतीचे स्तवन करू लागले. तिची स्तुती करू लागले, 'देवी सर्वत्र आहे. विविध जाणिवामध्ये ती विविध शक्तीच्या रूपात स्थित आहे. अशा देवीला आम्ही भक्तिपूर्वक नमस्कार करतो. जिच्या शक्तीचे वर्णन खुद्द ब्रह्मदेव, महादेव करण्यास समर्थ नाहीत, अशा चंडिकेने संपूर्ण जगाचे पालन करावे. पुण्यवान लोकांच्या घरात लक्ष्मीरूपात, पापी लोकांच्या ठिकाणी दरिद्राच्या रूपात, शूद्र अंतःकरण असणाऱ्यांकडे बुद्धीरूपात सत्पुरुषांकडे श्रद्धा रूपात, तर शीलवान लोकांकडे लज्जा रूपात निवास करणाऱ्या भागवतीला नमस्कार असो ! तू या जगाच्या उत्पत्तीचे कारण आहेस. तू सत्यगुणी, तू रजोगुणी, तू तमोगुणी आहेस. तूच स्वाहा, आहेस तूच स्वधा आहेस, असे म्हणत देवीची स्तुती केली. देवी तुझ्या पराक्रमाची तुलनाच होऊ शकत नाही. शत्रूला भीतीदायक; पण अत्यंत सुंदर, मनोहर असे रूप तुझ्याशिवाय कोणाचेच नाही. शत्रूचा नाश करून या विश्वाचे रक्षण तू केले आहेस. अम्बिके, तू आमचे रक्षण कर.'

पुढे मेधा ऋषी सांगतात : अशी स्तुती करून देवदेवतांनी देवीचे पूजन केले. तिला गंध, चंदन, पुष्पे अर्पण केली. प्रसन्न होऊन देवीने देवतांना वर मागायला सांगितले. त्यावर देव म्हणाले, 'जो मनुष्य तुझ्या या स्तोत्राचा श्रद्धापूर्वक पाठ करील, त्यांचे तू रक्षण कर' तथास्तु. म्हणून देवी अंतर्धान पावली.

(क्रमशः)



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वी युद्धाशिवाय वश होणार नाही हे समजताच, धूम्रलोचन नामक दैत्याला आपली सेना घेऊन, देवीला केसाने पकडून ओढत घेऊन ये, अशी आज्ञा दिली. तिला वाचवण्यासाठी देवता, गंधर्व मध्ये आल्यास त्यांना टार कर, असेही सांगितले.

आज्ञा मिळताच धूम्रलोचन ६० हजार असुर घेऊन निघाला. मुकाट्याने आपल्याबरोबर यावे, नाही तर केसाला धरून ओढून नेईन, असे त्याने देवीला

## धूम्रलोचन, चंड-मुंड वध

दुर्गा सप्तशतीच्या उत्तरचरित्राला काल सुरुवात केली. महासरस्वती देवीची उत्पत्ती काल पाहिली. मनोहर रूप असलेल्या देवीला प्राप्त करण्यासाठी शुंभ-निशुंभ या असुरांनी दूत पाठवून देवीला स्वाधीन होण्यास संगितले. देवीने नकार दिला. त्या दूताने देवीचा निरोप यथातथ्य दैत्यराजांना सांगितला.

सांगितले. देवी त्याला म्हणते, 'तुला दैत्यराजाने पाठवले आहे. तूही तितकाच बलवान आहेस आणि बरोबर सेनाही घेऊन आला आहेस. मग मी करू तरी काय शकते?' असे म्हणताच तो देवीवर धावून गेला. अम्बिकेने 'हुं

शब्द उच्चारला. त्या हुंकाराने तिने त्याला भस्मसात केले. त्याचे सैन्य हे बघून क्रोधित झाले आणि देवीवर धावून गेले. तिच्यावर बाणांचा वर्षाव सुरू केला. देवीचे वाहन असलेला सिंह क्रोधाने गर्जना करून सैन्यावर

तुटून पडला. त्याने अनेक दैत्य मारले. क्रोधित सिंहाने काही क्षणांत असुरांच्या सेनेचा संहार केला. ही बातमी शुंभ-निशुंभाला कळताच त्यांनी दात-ओठ खात क्रोध केला आणि चंड-मुंड नामक दैत्यांना मोठी सेना घेऊन जाऊन देवीला पकडून लवकरात लवकर आणण्याची आज्ञा केली.

हे महादैत्य देवीवर धावून गेले. देवीने भयंकर संताप व्यक्त केला. क्रोधित झालेल्या देवीचे मुख काळे झाले. कपाळावरील भुवया वाकड्या झाल्या आणि त्यातून काली प्रकट झाली. तिने तलवार आणि पाश धरण केले होते. तिने विचित्र खट्टांग धारण केले होते. तिने व्याघ्र चर्माची साडी परिधान केली होती. गळ्यात नरमुंड माळ होती. तिचे शरीर मांसहीन, हडकुळे होते. देवीचे डोळे लांबवुंद होते. विशाल

मुख आणि बाहेर आलेली जीभ तिचे रूप अतिभयंकर दिसत होते. अशी देवी असुरांच्या सैन्यावर तुटून पडली. अनेक भयंकर असुरांचा तिने नाश केला. अनेक असुरांचे तिने पक्षण केले. काहींचे तलवारीने तुकडे केले, तर काही खट्टांगाने मारले. सेनेचा झालेला संहार बघून चंड-मुंड कालीवर धावून गेले. मोठ्या तलवारीने देवीने त्या दैत्यांचे केस पकडून, त्यांच्या गळ्यावर वार केला. त्यांची मस्तके धडापासून वेगळी केली. चंड-मुंड दैत्यांचा मृत्यू बघून उरलेली सेना पळून गेली. त्यानंतर काली चंडमुंडाचे शिर घेऊन चंडिकेकडे गेली आणि अडह्रास केला. महादैत्यांना बघून काली देवीला म्हणाली, 'तू चंड आणि मुंड यांचा वध केल्याने तुला चामुंडा या नावाने ओळखले जाईल.'

(क्रमशः)



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तापर्यंत आपण मधू-कैटभ आणि महिषासुराचा संहार देवीने केला हे बघितले. त्यासाठी ती महाकाली, महालक्ष्मी रूपात प्रकटली. आता आपण देवी सप्तशतीचे उत्तरचरित्र बघू या. पाचव्या अध्यायापासून हे चरित्र सुरू होते. इथे आपण महासरस्वतीच्या अवताराची कथा आणि इतर असुरांच्या वधाची कथा जाणून घेणार आहोत.

फार पूर्वीची गोष्ट आहे. शुंभ आणि निशुंभ नामक प्रचंड बलवान असुर होते. त्यांनी साक्षात शचीपती इंद्राकडून तिन्ही लोकांचे राज्य काढून घेतले. त्रैलोक्य जिंकून ते यज्ञाचा हविर्भाग स्वतः ग्रहण करू लागले. सर्व देवदेवतांचे ते अधिकार घेऊन बसले. त्यांची पदेही बळकावली. देवदेवतांना अपमानित, राज्यभ्रष्ट, पराजित आणि अधिकारहीन करून स्वर्गातून काढून टाकले.

सर्व देवतांनी अपराजिता देवीचे स्मरण केले. संकट / आपत्तीकाळात माझे स्मरण केले, तर मी त्या संकटाचे नाश करीन, या देवीने दिलेल्या वरदानाची आठवण त्यांना झाली. देवीला प्रसन्न करण्यासाठी, तिची मदत मागण्यासाठी सर्व जण हिमालय परिसरात एकत्र आले आणि भगवतीची स्तुती करू लागले, 'देवीला नमस्कार असो! नित्या, गौरीला नमस्कार असो! ज्योत्सनामयी, चंद्ररूपिणी, सुखस्वरूपा

## सरस्वती प्रकटली

देवीला नमस्कार असो. दुर्गा, दुर्गपारा, सारा, सर्वकारिणी, अत्यंत्य सौम्य, अत्यंत रौद्ररूपा देवीला नमस्कार असो.

या देवी सर्वभूतेषु  
विष्णुमायेति शब्दिता  
नमस्तस्यै नमस्तस्यै  
नमस्तस्यै नमो नमः ॥

सर्व प्राणिमात्रांमध्ये चेतना म्हणून जी आहे; जी बुद्धी, निद्रा, क्षुधा, शक्ती, तृष्णा, क्षांती, लज्जा, शांती, श्रद्धा, कांती, वृत्ती, स्मृती, दया, तुष्टी, मातृ अशा रूपात स्थित आहे, तिला आमचा नमस्कार असो,' असे म्हणून देवीची स्तुती करित होते. देव भगवतीची स्तुती करित असताना पर्वती हिमलयी गंगास्नानासाठी आली होती. 'तुम्ही इथे कोणाची स्तुती करित आहात,' असे तिने विचारताच, तिच्या शरीरापासून एक देवी प्रकट झाली. ती देवी म्हणजे सरस्वती.

पार्वतीच्या शरीरकोशापासून 'कौशिकी' प्रकट झाल्याने, पार्वतीचे शरीर काळे पडले. तिला कलिका नाम प्राप्त झाले. सरस्वतीने दिव्य रूप धारण केले. अम्बिकेचे मनोहर रूप चंड-मुंड नामक शुंभ-निशुंभाच्या मंत्र्यांनी पाहिले. ते रूप त्यांनी आपल्या राजाला कथन केले. हिमालयाला उजळून टाकणारी स्त्री अत्यंत सुंदर आहे. आपण तिन्ही लोकांतील सर्व रत्ने (पारिजात वृक्ष, ऐरावत हत्ती, उच्चैःश्रवा घोडा, ब्रह्मदेवाचे विमान, कुबेराचा निधी, समुद्राची माला इ.) प्राप्त केले आहेत. हे स्त्रीरत्नही प्राप्त करावे, असे त्यांनी दैत्यराजाला सुचवले.

चंड-मुंडाकडून स्तुती ऐकल्यावर, सुग्रीव नामक दूत त्यांनी सरस्वतीकडे पाठवला. तो म्हणाला, 'दैत्यराज शुंभ-निशुंभ त्रैलोक्याचे राजे आहेत. त्यांची आज्ञा सर्व देवही मानतात. तू त्यांना स्वाधीन हो.' दूताचे हे बोलणे ऐकून कल्याणमयी भगवती, दुर्गादेवी बोलली, 'हे दूता, तू सांगितलेले सगळे मान्य आहे. शुंभ-निशुंभ तिन्ही लोकांचे स्वामी आहेत. त्यांच्याइतके पराक्रमी कोणी नाही; पण मी पूर्वी एक प्रतिज्ञा केली आहे, जो माझ्याशी युद्ध करील, मला संग्रामात जिंकून घेईल, माझ्या अभिमानाचे हरण करील आणि माझ्या इतकाच जो बलवान असेल, त्यालाच मी स्वाधीन होईन, तोच माझा स्वामी असेल. प्रतिज्ञा केली असल्याने, आता माझ्याकडे काही पर्याय नाही. महादैत्यांनी स्वतः इथे यावे.'

दूत म्हणाला, 'सर्व देवदेवता आमच्या स्वामींचे ऐकतात, तुला एवढी घमेंड कसला? माझे ऐक आणि तू माझ्याबरोबर शुंभ-निशुंभांकडे चल. त्यात तुझे हित आहे; नाही तर केसाला ओढून तुला घेऊन जावे लागेल.' देवी शांतपणाने म्हणाली, 'तुमचे बरोबर आहे; पण माझी प्रतिज्ञा आहे. ती मी आधीच कथन केली आहे. तू आता जा, दैत्यराजांना माझा निरोप सांग. मग त्यांना जे उचित वाटेल, तसे त्यांना करू दे.'

या अध्यायात महासरस्वतीची उत्पत्ती पहिली. उत्तर चरित्रात देवी अनेक दैत्यांचा संहार करते. ते पुढील काही दिवसांत बघू.

(क्रमशः)

चंड-मुंडाच्या वधानंतर आणि बऱ्यापैकी सेनेच्या संहारानंतर दैत्यराजाने मोठा क्रोध केला. आपल्या संपूर्ण सेनेला देवीवर हल्ला करण्यास सांगितले.

## रक्तबीज-निशुंभ वध

सौरभ मराठे

दे

वीशी मोठे युद्ध करायचे आहे; सर्वांनी तयार राहा, असे दैत्यराजाने सांगितले. उदायुध, कंबू, कोटीवीर्य, धौम्र, कालक, दौर्हद, मौर्य, कालकेय या कुळातील असुरांना जमा करून देवीवर चाल करण्यास सांगितले. अत्यंत भयानक सेना बघून चंडिकेने धनुष्याचा टणत्कार केला. आकाश दुमदुमले. पृथ्वी कंपायमान झाली. देवीच्या सिंहाने जोरात गर्जना केली. देवीने घंटानाद केला.

असुरसेनेने देवीला घेरले. त्याच वेळी ब्रह्मा, शिव, कर्तिकेय, विष्णू, इंद्र इत्यादी देवतांच्या शक्ती त्यांच्यापासून वेगळ्या होऊन चंडिकेकडे आल्या. ब्रह्माणी, महेश्वरी, कौमारी, वैष्णवी, वाराही, नारसिंही, इंद्राणी रणांगणात देवीच्या मदतीला प्रकट झाल्या.

देवीने महादेवाला दूत बनवून शुंभ-निशुंभकडे पाठवले.



देवी  
माहात्म्य

महादेवांनी दैत्यराजांना देवीचा निरोप दिला, 'तुम्हाला तुमचे प्राण प्रिय असतील, तर तुम्ही पाताळात परत जा, इंद्राला त्रैलोक्याचा राजा करा, देवतांना त्यांचा हविर्भाग ग्रहण करू द्या. तुम्हाला युद्धाला सामोरे जायचे असेल, तर या प्रकट झालेल्या योगिनी तुमच्याशी युद्ध करतील. तुमच्या कच्च्या मांसाने त्या तुप्त होतील.' हा संदेश ऐकून ते दैत्य अतिक्रोधित झाले. कात्यायनी बसली होती, तिथे धावून गेले. युद्ध सुरू झाले. प्रकट झालेल्या मातृकांनी नाना प्रकारे असुरांचा संहार केला.

मातृकांना घाबरून असुर पळून जात आहेत, हे बघून रक्तबीज नामक दैत्य युद्ध करायला पुढे आला. त्या दैत्यावर आघात होताच त्याचे रक्त पडत असे आणि प्रत्येक रक्ताच्या थेंबापासून त्या असुरासमान नवीन असुर निर्माण होत असे. अशा प्रकारे अनेक असुर

निर्माण झाले. त्या वेळेस चंडिकेने कालीला सांगितले, 'चामुंडे, तुझे तोंड मोठे उघड आणि पडणारे रक्त तू ग्रहण कर.' काली अशा प्रकारे महादैत्याचे भक्षण करू लागली. अजिंक्य असा रक्तबीज क्षीण होत गेला, रक्तहीन झाला आणि शेवटी त्याचा मृत्यू झाला. मातृगण रक्तपान करून आनंदी झाल्या.

युद्धभूमीवर झालेला संहार अतिभयंकर होता. दैत्यराज प्रचंड क्रोधित झाले. आपल्या सेनेचा संहार बघून निशुंभ देवीवर धावून गेला. महापराक्रमी शुंभही मातृकांशी युद्ध करू लागला. देवीचे या दोन असुरांशी तुंबळ युद्ध झाले. देवीने असुरांवर बाणांचा पाऊस पाडला. निशुंभाने तलवारीने देवीच्या सिंहावर प्रहार केला. हे बघताच देवीने आपल्या शस्त्राने त्याची तलवार मोडून टाकली. असुराने शक्तीचा प्रहार केला, त्याचे देवीने चक्राने तुकडे केले. निशुंभ धाराशायी झाला. निशुंभ पडलेला बघून शुंभ आठ हातात आठ शस्त्रे घेऊन देवीवर धावून गेला. देवीने शंखनाद, घंटानाद केला,

सर्व असुरांना घाबरवून टाकले. शुंभ आणि देवीमध्ये घनघोर युद्ध रंगले. दोघांनी एकमेकांवर बाण सोडले. शक्तीशाली बाण एकमेकांचे तुकडे करीत होते. प्रचंड क्रोधित देवीने शुंभला आपल्या शूलाने मारले. तो मुच्छिंत होऊन पृथ्वीवर पडला. तेवढ्यात निशुंभ पुन्हा चेतनास्वरूप झाला. त्याने देवीशी परत युद्ध चालू केले. सिंहावर वार केला. देवीने त्याच्या गदेवर तलवारीने वार करून तिला मोडून टाकले. शूलाच्या साह्याने त्याची छाती कापली. तोच त्यातून दुसरा महाबली दैत्य प्रकट झाला. त्याचे मुंडके तलवारीने उडविले. सिंहाने असुराच्या मानेचे लचके तोडले. कौमारी, माहेश्वरी, वाराही, ब्रह्माणी आदि शक्ती अनेक असुरांशी लढल्या. त्यांना मारून टाकले. कैक असुर नष्ट झाले, तर अनेक पळून गेले.

(क्रमशः)

## देवीचरित्राचे महत्त्व

शुंभ-निशुंभाच्या वधानंतर देवी पुढे बोलती झाली... जी कोणी व्यक्ती एकाग्रचित्ताने प्रतिदिन या स्तुतीने माझे स्तवन करील, त्याचे मी कल्याण करीन, त्याच्या सर्व बाधा दूर करीन. जो मधू-कैटभ, महिषासुर, शुंभ-निशुंभ वधाच्या प्रसंगाचे पठण करील; तसेच अष्टमी, नवमी आणि चतुर्दशीला हे माहात्म्य श्रवण करील, त्याच्यावर कोणतीही आपत्ती येणार नाही. त्याच्या घरी कधीच दारिद्र्य येणार नाही. त्याला कसलेच भय असणार नाही. हे माहात्म्य सर्व उपद्रवांना शांत करणारे आहे.



देवी  
माहात्म्य

सौरभ मराठे

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मंदिरांमध्ये या माहात्म्याचा पाठ प्रतिदिन विधिपूर्वक होईल, ते स्थान मी कधीच सोडणार नाही. बलिदान, पूजा, होम; तसेच उत्सवकाळी याचा पाठ नियमित व्हावा. शरद ऋतूतील वार्षिक महापूजेच्या समयी जे कोणी हे माहात्म्य भक्तीपूर्वक ऐकेल, त्याच्यावर माझा कृपाप्रसाद सदैव असेल. त्याच्या शत्रूंचा नाश होईल. ग्रहपीडा दूर होईल, त्याला कल्याणप्राप्ती होईल. हे माहात्म्य तुम्हाला माझ्यापर्यंत घेऊन येईल.

पशू, पुष्प, अर्घ्य, धूप, दीप, गंध अशा उत्तम साहित्याने माझे पूजा; तसेच ब्राह्मण भोजन, होम, अभिषेक इत्यादी उपचार कोणी वर्षभर अर्पण करून मला प्रसन्न करील, तेवढीच प्रसन्न मी हे माहात्म्य केवळ एक वेळ श्रवण केल्याने होईन. याचे श्रवण केल्याने श्रवणकर्ता भयमुक्त होतो.

'ब्रह्मदेवाने केलेली स्तुती कल्याणमयी आहे, बुद्धी प्रदान करणारी आहे. एखाद्या वनात, सुनसान रस्त्यावर, निर्जन स्थळी, चोरांकडून पकडले गेल्यावर अथवा हिंस्र पशूने पाठलाग केल्यावर या चरित्राचे स्मरण करील, त्याला मी संकटमुक्त करीन,' असे बोलून भगवती अंतर्धान पावली.

सर्व कष्ट, अरिष्टे टळली होती. देवदेवतांना आपले अधिकार पुन्हा मिळाले होते. ते यज्ञभाग ग्रहण करू लागले. उरलेले दैत्य पाताळात

पळून गेले.

अशा प्रकारे अंबिका परत परत प्रकट होऊन विश्वाचे रक्षण करीत राहिली. ही देवी सृष्टी निर्माण करते, तिचे पालन-पोषण करते; तसेच संहारही करते. पुष्प, धूप आणि गंध आदि साहित्याने जो कोणी तिची पूजा करील, त्याला धन, पुत्र, धार्मिक बुद्धी; तसेच उत्तम गती सदैव प्राप्त होईल.

मेधा ऋषींकडून माहात्म्य ऐकून राजा सुरथ आणि वैश्य समाधी तत्काल तपःश्रचाय करण्यासाठी नदी किनारी गेले. तिथे देवीची मृगमूर्ती तयार केली आणि ते पुष्प, धूप आदी उपचारांनी जगदंबेची आराधना करू लागले. सतत तीन वर्षे ते तिची आराधना करीत होते. शेवटी भगवती प्रसन्न झाली आणि संतुष्ट झालेली चंडिका देवी दोघांसमोर प्रकट झाली. तिने राजा आणि वैश्याला वर मागण्यास सांगितले.

पुढील जन्मात अविनाशी राज्य आणि या जन्मात गमावलेले सर्व काही परत मिळावे, हे वरदान राजाने मागितले, तर समाधीने ममता आणि आसक्तीचा नाश करणारे ज्ञान मागितले.

त्यावर देवी म्हणाली, 'हे राजा, काही दिवसांतच तू गमावलेले राज्य परत मिळवशील. तुझे राज्य स्थिर होईल. तत्पश्चात मृत्यूनंतर भगवान वैवस्वत (सूर्याचा) अंशाने तुझा जन्म होऊन, तू सावर्णिक म्हणून प्रसिद्ध होशील. वैश्याला हवे असलेले ज्ञान प्राप्त होईल, मोक्ष प्राप्ती होईल.' मनोवाञ्छित फळ दोघांना मिळाले आणि देवी अंतर्धान पावली.

आजपर्यंत आपण दुर्गा सप्तशतीचे १३ अध्याय पहिले. इथे सप्तशती पाठ संपतो.

शेवटी आपण उत्तरांग बघू. (क्रमशः)

## उत्तरांग

गेले नऊ दिवस आपण देवीचे चरित्र पहिले. देवीने महाकाली, महालक्ष्मी आणि महासरस्वती अवतार घेऊन दुष्ट असुरांचा नाश केला. जेव्हा जेव्हा संकटे आली, तेव्हा तेव्हा देवी प्रकट झाली. पुढे राजाने ऋषींना देवीची आराधना कशी करावी, हे यथार्थस्वरूप सांगण्याची विनंती केली. त्यावर ऋषी म्हणाले, 'देवीचे रहस्य अत्यंत गोपनीय आहे. हे रहस्यमयी ज्ञान मी तुम्हाला सांगतो.'



देवी

माहात्म्य

सौरभ मराठे

दे

वी आपल्या चार हातामध्ये मातुलंग, गदा, खेट आणि पानपत्र धरण करते. मस्तकावर नाग, लिंग धरण करते. तप्त सुवर्णसमन जिची कांती आहे; ती देवी म्हणजे महालक्ष्मी. या महालक्ष्मीने तमोगुणी रूप प्रकट केले. ते रूप एका स्त्रीसमान होते. तिची कांती काजळाप्रमाणे काळी होती. मुखी दाढा होत्या, मोठे डोळे, हाती ढाल, तलवार, पेला आणि कापलेले मुंडके धारण केले होते. त्या देवीला महाकाली, महामारी, क्षुधा, तृष्णा, निद्रा, एकवीरा, कालरात्री हे नाव दिले. महालक्ष्मीने सत्वगुणी रूप धारण केले. चंद्रासमान प्रभा असलेल्या देवीने हाती अक्षमाला, अंकुश, वीणा आणि पुस्तक धारण केले. तिला देवीने महाविद्या, महावाणी, भारती, वाक्, सरस्वती, बुद्धी हे नाव दिले. पुढे या तिन्ही देवींनी संतती निर्माण केली. प्रथम महालक्ष्मीने ब्रह्मदेव आणि लक्ष्मीला निर्माण केले. महाकालीने शंकर आणि भाषा/स्वरा उत्पन्न केले, तर महासरस्वतीने विष्णू आणि उमा/चंडीला निर्माण केले. ब्रह्मदेवाला सरस्वती, शंकराला उमा आणि विष्णूला लक्ष्मी दिली. ही तीन प्रधान दाम्पत्ये सृष्टीची उत्पत्ती, स्थिती आणि लय सांभाळू लागली. हे होते देवीचे प्राधानिक रहस्य.

पुढे वैकृतिक आणि मूर्ती रहस्य हे उत्तरांगाचे भाग आहेत.

वैकृतिक रहस्यात देवी-देवतांची स्थापना कशी करावी, याचे वर्णन येते. पूजा करताना रुद्र, विनायक यांची स्थाने कोणती, हे वर्णन केले आहे. देवी-देवतांची पूजा करताना कुठले मंत्र म्हणावेत, याचेही वर्णन त्यात येते. त्याच बरोबर देवीच्या पूजेसाठी कोणते उपचार करावेत, हेही त्यात सांगितले आहे. देवीसमान तिच्या सिंहाचे पूजन दक्षिणेत कसे केले जाते, याचेही वर्णन इथे केलेले सापडते. देवीचरित्राचा पाठ कसा करावा, त्याचे नियम काय आहेत, हेदेखील येथे विस्तृतपणे सांगितले आहे. होमहवन आणि तत्पश्चात महालक्ष्मी देवीच्या नाम मंत्राचे उच्चारण कसे असावे, तेही सांगितले आहे. या रहस्यच्या शेवटी, सुखप्राप्तीसाठी चंडीकेचे शास्त्रोक्त पूजन कसे करावे, ते थोडक्यात सांगितले आहे.

पुढील रहस्य मूर्ती रहस्य म्हणून ओळखले जाते. देवीच्या अंगभूत सहा देवी असून, त्या नंदा, रक्तदंतिका, शाकंभरी, दुर्गा, भीमा, भ्रामरी आहेत. त्यांच्या मूर्ती साक्षात असून, जगन्माता चंडिका देवीच्या मूर्तीच्या स्वरूपाचे वर्णन या प्रकरणात आले असल्याने, याला मूर्ती रहस्य म्हटले आहे. दिव्य मूर्तीचे आख्यान, मनोवांचित फळ देणारे आहे. सप्तशतीच्या पठणाने मनुष्य समस्त पातकांतून मुक्त होतो, असेही सांगितले आहे.

अशा प्रकारे अत्यंत गोपनीय माहिती ऋषींनी वर्णन केली. या सदरामध्ये आपण एकेक करीत दुर्गा सप्तशती जाणून घेण्याचा प्रयत्न केला. आज दशमी, इथे हे आख्यान पूर्ण होत आहे. श्री जगदंबार्पणमस्तु !!

(समाप्त)

## शिवशक्तीस्वरूपा

मस्तकावर अर्धचंद्र धरण केलेल्या शिवशक्तीस्वरूपा भगवतीच्या स्मरणाने नवव्या अध्यायाची सुरुवात होते. यात देवीच्या ध्यानाचे वर्णन येते. तप्त सोन्याप्रमाणे अत्यंत सुंदर, सूर्य, चंद्र आणि अग्नी जिचे नेत्र आहेत, अशी देवी हातामध्ये धनुष्य-बाण अंकुश, पाश आणि शूल धरण करते.



देवी

माहात्म्य

सौरभ मराठे

आ

पल्या प्रणापेक्षा अति प्रिय असलेल्या निशुंभाचा वध झाला, रणांगणात तो मरण पावला तेव्हा शुंभाला क्रोध आवरेनासा झाला. तो देवीला म्हणाला, 'आपल्या शक्तीचा गर्व करू नकोस. तुझ्या मदतीला अनेक शक्ती आहेत. त्यांच्या साहाय्याने तू लढत आहेस. तुझ्या एकटीच्या अंगी एवढे सामर्थ्य कोठे आहे?' त्यावर देवी बोलली झाली, 'अरे दुष्ट शंभु! या जगामध्ये मी एकटीच आहे. ही सर्व शक्तिरूपे माझीच आहेत.' त्यानंतर देवीने समस्त शक्ती आपल्यात सामावून घेतल्या. मातुका त्यांच्या आयुधांसह देवीच्या शरीरात लीन झाल्या आणि केवळ अंबिका युद्धास उभी राहिली. त्यानंतर अंबिका आणि शुंभाचे तुंबळ युद्ध झाले. दोघांनी बाणांचा, तीक्ष्ण शस्त्रास्त्रांचा प्रहार केला. अतिभयंकर युद्ध सुरू झाले होते! देवीने सोडलेली अस्त्रे शंभु मोडून टाकत होता आणि देवीवर अनेक अस्त्रे सोडत होत. बाणांचा वर्षाव केला. देवीने त्याचे धनुष्य मोडले. त्याच्या तलवारीचे तुकडे केले. शेवटी हस्तयुद्ध करू झाले. देवीची थप्पड खाऊन तो पृथ्वीवर पडला. देवीने आकाशगमन केले, तेव्हा शंभुही आकाशी जाऊन युद्ध करू लागला. अनंत काळ युद्ध झाल्यावर देवीने त्याला उचलून गारागर फिरवले आणि खाली आपटले. तो उदून देवीला मारण्यासाठी धावला; तोच देवीने त्याच्या छातीवर त्रिशूळाचा वार केला आणि त्याला मारले. त्याचे धड पृथ्वीवर पडले. त्याच्या प्रेताच्या वजनाने पर्वत हादरले, धरणीकंप झाला.

दुरात्मा मरण पावला हे समजताच संपूर्ण जग प्रसन्न झाले. उल्कापात

शांत झाले, नद्या शांतपणे वाहू लागल्या. देव खूश झाले, गंधर्व मधुर गाणी गाऊ लागले. अप्सरा नाचू लागल्या आणि पवित्र वारे वाहू लागले. शंभु-निशुंभ दैत्य मारले गेले. पवित्र अग्नी स्वयंप्रज्वलित झाला. सृष्टीतून भयंकर हा शब्द नाहीसा झाला. दैत्यांचा नाश झाल्यावर इंद्रादी देव अग्नीला पुढे करून कात्यायनी देवीची स्तुती करू लागले, 'हे विश्वेश्वरी या विश्वाचे रक्षण कर. संपूर्ण जगाची तू माता आहेस, तू प्रसन्न हो. जलरूपात स्थित होऊन संपूर्ण विश्वाची तहान भागव. तू संपूर्ण जगाला मोहित केले आहेस. प्रत्येक स्त्रीमध्ये तुझा अंश आहे. नारायणी! तू सर्वत्र मंगल करतेस, तुला आमचा नमस्कार असो. लक्ष्मी, लज्जा, महाविद्या, श्रद्धा, पुष्टी, महारात्री, मेधा, महाकाली, बाभ्रवी, सरस्वती तुला नमस्कार असो. विश्वाची चिंता दूर करणारी देवी तुला आम्ही शरण आलो आहोत... तू प्रसन्न हो, आम्हाला वरदान दे!'

देवी प्रसन्न होऊन म्हणाली, 'मी वरदान देण्यास तयार आहे.' देव म्हणाले, 'सर्वेश्वरी, तू त्रैलोक्याला शांत कर आणि आमच्या शत्रूंचा सदैव नाश कर.' देवी म्हणाली, 'मी नंदघरी जन्म घेऊन विंध्याचलावर राहीन आणि त्यांचा नाश करीन. वैप्रचित नामक असुरा रक्तदंतिका अवतारात वध करीन. पुढे शताक्षी रूप घेऊन, शत नेत्रांनी मुनींची देखरेख करीन. माझ्या शरीरपसून उत्पन्न होणाऱ्या वनस्पती जगाला पोषण देतील, सर्व जण माला शाकंभरी म्हणून ओळखतील. याच अवतारात दुर्गम नामक राक्षसाचा वध करीन आणि दुर्गा नावाने प्रसिद्ध होईन. मग यज्ञ रक्षण करण्यासोयी भीमादेवी अवतार घेऊन, हिमालयातील राक्षसांचे भक्षण करीन. पुढे भ्रमर रूप घेऊन अरुण नामक दैत्याला मारीन; भ्रमरी नावाने प्रसिद्ध होईन. अशा प्रकारे जेव्हा जेव्हा या संसारात दानवी बाधा निर्माण होईल, तेव्हा तेव्हा मी अवतार घेऊन शत्रूंचा नाश करीन.

(क्रमशः)

- Prof. Vaishali Latkar
- Participation in Heritage Documentation Workshop by NASA (National Association of Students of Architecture).
- Participation in organising AGM of CIF (International Committee of Heritage Education and Training of ICOMOS) as Vice President Asia held on 4th, 5th and 6th November 2024 in Venice, Italy).



FOR MORE INFORMATION CONTACT:  
 Nityanshu Panda  
 Programs Head  
 +91 73258 17290  
 programshead@nasaindia.co



Presenting in the symposium

With the Organising Committee

Website - <https://cif.icomos.org/bureau/>



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PRINCIPAL  
 MKSS's DR. BHANUBEN NANAVATI  
 College of Architecture For Women  
 Karvenagar, Pune-411 052.

- CIF is an international Committee on Heritage Education and Training of ICOMOS, outfit of UNESCO.
- **Dr. Vaishali Prasad Latkar** elected as Vice-president (Asia) in October 2023, will be leading the global research on Heritage Education Status and presented the same at the symposium in Venice on 4th November 2024 and was part of the organizing committee.

**Signatures**

Events Co-ordinator

Dr. .Vaishali Latkar

IQAC Co-ordinator

Dr. Chetan Sahasrabudhe

## REPORT

### SEMINAR ON MUSITECTURE: AN INTERDISCIPLINARY PERSPECTIVE IN ARCHITECTURAL DESIGN

**Date: 13.09.2022**

Presentation given to all 2<sup>nd</sup> year B Arch students on Innovative Architecture Inspired By Music.

The relationship of the two Art forms Music and Architecture was explained followed by explaining the examples and videos on Innovative Architecture Inspired By Music.

- Coca cola beat box pavillion Olympic park, London,
- Cargo Guitar – Feel What It's Like to be Inside a Guitar! Paris
- Dithyrambalina's Music Box – A Village Built for Music, New Orleans
- Court of Water Wall – Rainwater Music for the Masses, Germany.
- Underwater ORB Lights – Music Making ORBs React to the Sounds of the City.
- Students work done under the elective of Music and Architecture.

This will help students wherein they can apply this knowledge in Architectural Design.





Fig1 : Musitecture lecture.



Fig 2: Musitecture lecture



Fig 3 : Musitecture lecture

## Attendance record

13.01.2022  
MUSICOLOGY - 19 BARCH  
ATTENDANCE LIST

| SR. NO. | NAME                | MARKS |
|---------|---------------------|-------|
| 1.      | Pasanti Umankar     | B     |
| 2.      | Snehal Gandhi       | B     |
| 3.      | Nidhi Patole        | B     |
| 4.      | Rujuta Joshi        | B     |
| 5.      | Mrunal Patil        | D     |
| 6.      | Devyani Shinde      | D     |
| 7.      | Vaishnavi Kalhatkar | D     |
| 8.      | Tanishka Jagtap     | D     |
| 9.      | Aditi Thombal       | B     |
| 10.     | Renu Dhariya        | B     |
| 11.     | Vaishnavi Sordge    | B     |
| 12.     | Ganiksha Firodiya   | A     |
| 13.     | Aboli Bhalekar      | B     |
| 14.     | Dhanashri Kela      | B     |
| 15.     | Sanika Beshpande    | A     |
| 16.     | Isha Gosavi         | A     |
| 17.     | Trupti Bargale      | A     |
| 18.     | Pooja Chhapde       | C     |
| 19.     | Renuka Manalge      | A     |
| 20.     | Subhni Mantri       | C     |
| 21.     | Asmita Gawade       | C     |
| 22.     | Namita Langate      | C     |
| 23.     | Yadnya Joshi        | C     |
| 24.     | Sanika Ghavate      | C     |
| 25.     | Priza Ghosale       | C     |
| 26.     | Nehiya Shinde       | C     |
| 27.     | Apurva Gadhave      | C     |

|                        | DIVISION |                     |   |
|------------------------|----------|---------------------|---|
| 28. Vikhuti Deshmukh   | C        | 64. Khushi Patankar | B |
| 30. Rhea Deshmukh      | C        | 65. vanshika kabra  | B |
| 31. Mrunal Mundli      | C        | 66. Vaibhavi        | B |
| 32. Shradha Sawar      | C        | 67. Ankita Solankar | B |
| 34. Payashni Ghate     | C        |                     |   |
| 35. Samruddhi Yadav    | C        |                     |   |
| 36. Kaveri Mantri      | B        |                     |   |
| 37. Megha Mantri       | D        |                     |   |
| 38. Mithili Khat       | A        |                     |   |
| 39. Rama Malgi         | A        |                     |   |
| 40. Janhavi Kerkar     | A        |                     |   |
| 41. Priyanka Chavhan   | A        |                     |   |
| 42. Aarushi Ashkedkar  | B        |                     |   |
| 43. Ananya Joshi       | B        |                     |   |
| 44. Paragya Gadekar    | B        |                     |   |
| 45. Isha Chaudhari     | B        |                     |   |
| 46. Sneha Srivas       | A        |                     |   |
| 47. Isha Abhontkar     | B        |                     |   |
| 48. Shruti Bhise       | B        |                     |   |
| 49. Sruhti Sangtani    | B        |                     |   |
| 50. Revti Naqarkar     | B        |                     |   |
| 51. Vanshika kabra     | B        |                     |   |
| 52. Utkarsha Zagade    | D        |                     |   |
| 53. Sakshi Kulkarni    | D        |                     |   |
| 54. Maasami Tatiya     | D        |                     |   |
| 55. Tanvi Gajpute      | D        |                     |   |
| 56. Radhika Joshi      | D        |                     |   |
| 57. Janhvi Karkar      | B        |                     |   |
| 58. Ashlesha Bhosale   | B        |                     |   |
| 59. Manija Thorat      | D        |                     |   |
| 60. Ishika Mane        | D        |                     |   |
| 61. Akanksha Shirsathe | D        |                     |   |

## Signatures



IQAC Co-ordinator

Dr. Chetan Sahasrabudhe



PRINCIPAL  
MKSSS's DR. BHANUBEN NANAVATI  
College of Architecture For Women  
Karvenagar, Pune-411 052.

## REPORT ON

2 days **LOCAL LEVEL WORKSHOP** date 04.10.22 and 06.10.22 Sponsored by BNCA on the theme **AUDITORY ART** organized by BNCA ADD Department in which 40 students and 16 faculty participated.

### **Learning Objectives-**

**These are the main pointers covered :**

- 1) Mention the name of Sensory Art [Visual | Tactile | Auditory | Olfactory | Gestation]
- 2) Types of art form of that respective sense
- 3) Elements of respective sense
- 4) Principles of respective sense
- 5) Articulation of respective sense
- 6) Adjectives of respective sense
- 7) Composition of respective sense

**These are the main pointers covered in lecture Psychology of Elements –**

- 1) Meaning of Pitch
- 2) Meaning of Rhythm
- 3) Meaning of Modulation
- 4) Meaning of Articulatory phonetics
- 5) Relationship of Sound with Space
- 6) Technical Aspect of Sound instrument | Products etc.

Workshop was inaugurated at 9.0AM (start time) at the hands of **Principal**.

### **Key note address brief-**

The purpose of this workshop is to introduce to the first year students Sensory Art [Visual | Tactile | Auditory | Olfactory | Gestation] through workshop. The students will get an understanding and different viewpoints to look at these different arts.

### **Resource Faculty –**

**Dr.Sanjeevani Pendse**

**Technical Session 1-**( Give brief description on topic, contents, conduct and hands on/demo if given)

- Introduction to Music and Architecture and the concept of Artes Liberales.

- Introduction to and definitions of common parameters in Music and Architecture.
- Understanding and application of the common parameter: Proportion.

**Technical Session 2-**(Give brief description on topic, contents, conduct and hands on/demo if given)

- Examples of designs based on the relationship of Music and Architecture.
- Audio Questionnaire – Questions based on region, mood and parameters.
- Video on Coca cola beat box pavilion – Application of concepts of music and architecture.

After every technical session around 15 minutes time was given to delegates for interaction with the resource persons to clear their doubts relating to Research in Architecture.

**Feedback** (online/written/oral) –

**Vote of thanks :**

The Coordinator BNCA ADD Prof.Vandana thanked Dr.Sanjeevani Pendse for the valuable inputs on Music and Architecture.

**Participant attendance** (Manual/Online) Manual

**Geo tagged photographs with titles** –

**Workshop news published** – NA

**Schedule of workshop - 2 days presentations 9.0am to 4.0pm**

**Website link -NA**

**Signatures**



**PRINCIPAL**  
**MKSSS's DR. BHANUBEN NANAVATI**  
**College of Architecture For Women**  
**Karvenagar, Pune-411 052.**

IQAC Co-ordinator

Dr. Chetan Sahasrabudhe



**DEPARTMENT : CENTER FOR THE INTERDISCIPLINARY STUDIES IN ART AND  
ARCHITECTURE, BNCA**

**MUSITECTURE LECTURE SERIES**

**MUSITECTURE: AN INTERDISCIPLINARY PERSPECTIVE IN ARCHITECTURAL DESIGN**

**Conducted by Dr.Sanjeevani Pendse**

**AIM:** To introduce the relationship of Music and Architecture to the students.

**OBJECTIVES :**

To demonstrate the relationship of two art forms Music and Architecture

To introduce the common parameters between Music and Architecture

To give illustrative examples of the application of this relationship in Architectural design.

To motivate students to apply the concepts of relationship of Music and Architecture in their Architectural design projects.

**LECTURE 1**

**Date: 06.04.21**

**Day: Tuesday**

Participants : M Arch students

Venue: **BNCA Zoom platform**

Title : Reading landscape through Bandish in Indian Classical Music

The lecture was conducted by expert in the field Dr.Abhijit Natu.

Bandish from different ragas were explained and how to understand the landscape expressed in it was explained. The students got different insight on the relationship of the two art forms.

## **LECTURE 2**

**DATE:07/06/21**

**DAY : Tuesday**

PARTICIPANTS : B Arch Fourth year

Venue: **BNCA Zoom platform**

TITLE : Music and Architecture

B Arch and March thesis work of few students were explained done on the topic of music and architecture. Students got different insights on the application of the relationship of these two art forms music and architecture.

## **LECTURE 3**

**DATE: 24/08/21**

**DAY : Tuesday**

PARTICIPANTS : B Arch Third year

Conducted on **BNCA Zoom platform**

TITLE : Cross modal abstractions between music and architecture

Historical background of the relationship of music and architecture was explained giving references of research paper. Students design from Electives were shown wherein they have used digital tools. Also videos were shown to explain the use of Rhino to translate the content from music into graphical form.

## **LECTURE 4**

**DATE: 24/09/21**

**DAY : Friday**

PARTICIPANTS : B Arch Second year

Conducted on **BNCA Zoom platform**



TITLE : Relationship of Music and Architecture : Illustrative examples

Examples wherein the concepts of relation between the two art forms have been applied to design from historical to contemporary period were explained. Students got good insights about the relation of the two art forms music and architecture.

## **LECTURE 5**

**Date: 23.02.2022**

**Day: Tuesday**

Participants : B Arch fourth year

Venue: **BNCA Zoom platform**

Title : Relationship of music and architecture - Phenomenological approach

The opinion of experts of both the fields architecture and music were explained on the relationship of the two art forms. Students got good insights on how to decode an art form to be translated into other.

## **LECTURE 6**

**Date: 13.09.2022**

**Day: Tuesday**

Participants :Presentation given to all 2<sup>nd</sup> year B Arch students on Innovative Architecture Inspired By Music.

Venue: **II nd year Classroom**

Title: Innovative Architecture inspired by Music

The relationship of the two Art forms Music and Architecture was explained followed by explaining the examples and videos on Innovative Architecture Inspired By Music.

- Coca cola beat box pavillion Olympic park, London,
- Cargo Guitar – Feel What It’s Like to be Inside a Guitar! Paris
- Dithyrambalina’s Music Box – A Village Built for Music, New Orleans
- Court of Water Wall – Rainwater Music for the Masses, Germany.
- Underwater ORB Lights – Music Making ORBs React to the Sounds of the City.

- Students work done under the elective of Music and Architecture.

This will help students wherein they can apply this knowledge in Architectural Design.



Fig1 : Musitecture lecture.



Fig 3 : Musitecture lecture

**Attendance record**

13.01.2022  
MURTIKAR - 14.03.2021  
ATTENDANCE LIST

| SR. NO. | NAME                | DIV. |
|---------|---------------------|------|
| 1       | Poojita Umankar     | B    |
| 2       | Snehal Gandhi       | B    |
| 3       | Nidhi Patne         | B    |
| 4       | Rujuta Joshi        | B    |
| 5       | Mrunal Patil        | D    |
| 6       | Devyani Shinde      | D    |
| 7       | Vaishnavi Kalhatkar | D    |
| 8       | Tanishka Jagtap     | D    |
| 9       | Aditi Thombal       | B    |
| 10      | Renu Dhariya        | B    |
| 11      | Vaishnavi Sonde     | B    |
| 12      | Sankha Firodiya     | B    |
| 13      | Abali Bhalekar      | A    |
| 14      | Dhanshri Kale       | B    |
| 15      | Sanika Peshpande    | A    |
| 16      | Isha Gavai          | A    |
| 17      | Trupti Bargale      | A    |
| 18      | Priya Chopade       | C    |
| 19      | Renuka Manalge      | A    |
| 20      | Suhani Mantri       | C    |
| 21      | Asmita Gawade       | C    |
| 22      | Namita Langote      | C    |
| 23      | Yadnya Joshi        | C    |
| 24      | Sansya Ghavate      | C    |
| 25      | Priya Ghargave      | C    |
| 26      | Shreyas Shinde      | C    |
| 27      | Apurva Gadhave      | A    |

| DIVISION |                     | Page No. | Date |
|----------|---------------------|----------|------|
| 28       | Vikhtuli Deshmukh   | C        |      |
| 30       | Rhea Deshmukh       | C        |      |
| 31       | Mrunal Mundli       | C        |      |
| 32       | Shraddha Lawar      | C        |      |
| 34       | Payoshni Ghate      | C        |      |
| 35       | Sansiddhi Yadav     | C        |      |
| 36       | Kaushi Mantri       | B        |      |
| 37       | Megha Mantri        | D        |      |
| 38       | Maitili Khat        | A        |      |
| 39       | Rama Manalgi        | A        |      |
| 40       | Janhavi Khatkar     | A        |      |
| 41       | Priyanka Chavhan    | A        |      |
| 42       | Aarushi Ashkedkar   | B        |      |
| 43       | Ananya Joshi        | B        |      |
| 44       | Ananya Gadekar      | B        |      |
| 45       | Ishu Chaudhari      | B        |      |
| 46       | Sneha Seivas        | A        |      |
| 47       | Isha Abhontkar      | B        |      |
| 48       | Shruti Bhise        | B        |      |
| 49       | Sruhti Sangtani     | B        |      |
| 50       | Revti Nagarkar      | B        |      |
| 51       | Vanshika Kabra      | B        |      |
| 52       | Utkarsha Zagade     | D        |      |
| 53       | Sakshi Kulkarni     | D        |      |
| 54       | Maasami Tatiya      | D        |      |
| 55       | Tarini Gaspote      | D        |      |
| 56       | Pankita Joshi       | D        |      |
| 57       | Janhavi Karkar      | B        |      |
| 58       | Ashlesha Bhosale    | B        |      |
| 59       | Manjira Thorat      | D        |      |
| 60       | Ishika Mane         | D        |      |
| 61       | Abhanksha Shirsalhe | D        |      |
| 64       | Khushi Parakh       | B        |      |
| 65       | Vanshika Kabra      | B        |      |
| 66       | Vaibhavi            | B        |      |
| 67       | Ankita Solankar     | B        |      |

## LECTURE 7

**Date: 17.01.23**

**Day: Tuesday**

Participants : B Arch first year

Venue: BNCA Courtyard

Title: Relationship of Music and architecture

Examples wherein the concepts of relation between the two art forms have been applied to design from historical to contemporary period were explained. Students got good insights about the relation of the two art forms music and architecture. Also how different emotions are created in music and what are the different emotions stated in the treatise of Bharata Natyashastra were explained.

An exercise on Musical instruments and the emotions generated and transforming into 2d form was given.

### Signatures



IQAC Co-ordinator

Dr. Chetan Sahasrabudhe



PRINCIPAL  
MKSS's DR. BHANUBEN NANAVATI  
College of Architecture For Women  
Karvenagar, Pune-411 052.

## **Event Activity Report 2020-2021**

Maharashri Karve Stree Shikshan Samstha, Karve Nagar, Pune

Name of College: **Dr.BhanubenNanavati College of Architecture**

Activity title: **75<sup>th</sup> year of Independence installation**

Date & Time: **28th October 2021**

Venue: **Pune Airport**

Was it in collaboration or jointly organised

if the answer is Yes- then kindly provide

details of Organisation/s or Institution/s :- - -

The club is made and run by the students of BNCA

It is maintained by a committee of students

Event Supported, sponsored by: **BNCA Art Club**

Do you wish to highlight any purpose or Cause forconducting this event:

Installations on the theme of "75 Aazadi ka Amrit Mahotsav"

Under which category ofBNCA does the activity fit :

Social awareness, student participation and activities

Name/Names of the Guest speaker:

----

Chief Guest if any:

----

Names of special attendees or Invitee if any : ----

**Brief Write up of the about the program content (in appx. 150 words minimum):**

The students of BNCA, participated in an Installation Project proposed by the Airports Authority of India at Pune International Airport. On the theme of "75 Aazadi ka Amrit Mahotsav", the installation salutes freedom fighters, changemakers and brings to life the personalities who made our nation proud. There was an effort depicting the tri-coloured weave and showcasing peace and unity using various elements and colours, giving us hope of a brighter and vibrant tomorrow. The installation used latest CNC cutting technology in combination with art & craft of India to convey the idea.

The installation was appreciated by several people and will be put up in the departure lounge for viewing. Our Principal Dr.Anurag Kashyap was falicitated by the Pune Airport authority at the hands of Shri Shri Ravishankarji.

Kindly refer to Photo images in attachments along with the copy of the Poster

**Signatures**



Co-ordinator



IQAC

Dr. Chetan Sahasrabudhe



Principal

PRINCIPAL  
MKSSS's DR. BHANUBEN NANAVATI  
College of Architecture For Women  
Karvenagar, Pune-411 052.

## The team at Airport



Date of installation: 28th October, 2021



**Supporting faculty:** Asst. Prof. Amruta Barve, Asst. Prof. Deva Prasad, Anjani Kumari, Lab Tech.Yogesh Kulkarni, Asst. Prof. Aftab Lokhandwala, Asst. Prof.Kiran Nichale, Ahmad Shaikh, Manoj Gaund

**Student Volunteers:** Ruchika Jadhav, Manasvi Dharmik, Sakshi S Ghodke, Apurva Kate, Pallak Singh, Anushka Thorat, Meghna Pasumarti , Samruddhi Purohit, Cheluvi Dumbre, Akshata Madrewar, Rutika Patil, Mudita Mahalle, Riya Mane, Swarali Manjarekar, Shruti Patil, Diya Jain, Anagha More, Vaishnavi Jadhav, Apurva Bandhishti, Geetika Pradhan, Anvesha Mahalle, Apurva Jadhav, Sakshi Bajaj, Nishka Gada, Isha Rayarikar, Akanksha Dhumal ,Isha Gore, Prajakta Sambhu, Annette Reuben, Muskaan Joshi, Revati Sangam, Srushti Shetty



## The Final installation





## बीएनसीएच्या प्राचार्य, प्राध्यापक व विद्यार्थिनींचा विमानपतन निर्देशकांहस्ते सन्मान



पुणे : महषी कर्वे स्त्रीशिक्षण संस्थेच्या डॉ.भानुबेन नानावटी कॉलेज ऑफ आर्किटेक्चर फॉर वूमेन तर्फे (बीएनसीए) लोहगाव विमानतळावर एक भव्य कलात्मक त्रिमिती आकृतीबंधाच्या निर्मितीबद्दल बीएन-सीएचे प्राचार्य डॉ.अनुराग कश्यप, त्यांचे सहकारी प्राध्यापक, तंत्रज्ञ आणि ३० विद्यार्थिनींना स्मृतीचिन्ह आणि प्रमाणपत्र देऊन लोहगाव विमानतळाचे विमानपतन निर्देशक संतोष ढोके यांच्या हस्ते नुकताच गौरव करण्यात आला. सत्काराच्या वेळी

तिथे उपस्थित असणारे ज्येष्ठ आध्यात्मिक गुरू श्री.श्री.रवीशंकर यांनीही प्रशंसा केली. स्वातंत्र्याच्या ७५ व्या वर्षाची आठवण करून देणारा हा आकृतीबंध लोहगाव विमानतळावर लोकप्रिय सेल्फी पॉइंट बनला आहे, असे ढोके यांनी सांगितले. बीएनसीएतील प्राध्यापक, तंत्रज्ञ आणि विद्यार्थिनींच्या सर्जनशील योगदानातून उभारलेल्या या आकृतीबंधाचा विषय आहे, देशाला मिळालेल्या स्वातंत्र्याच्या अमृतमहोत्सवी वर्षानिमित्त

महाराष्ट्रातील कला व सांस्कृतिक विविधता आणि एकात्मता. लोहगाव विमानपतन निर्देशक ढोके यांनी प्राचार्य डॉ.कश्यप यांच्यासह बीएनसीएतील अकादमिक प्रमुख डॉ.शुभदा कमला-पूरकर, आकृतीबंधाच्या संकल्पनाकार प्रा.अमृता बर्वे, तसेच प्रा.देवा प्रसाद, प्रा.अफताब लोखंडवाला, तसेच आकांक्षा धुमाळ, ईशा गोरे, प्राजक्ता संभू आणि मेघना शास्त्री या विद्यार्थिनींना सन्मानित केले. ढोके पुढे म्हणाले की, विमानतळावरील या आकृतीबंधाचे छायाचित्र

आम्हीही विमानपतन प्राधिकरण तसेच देशातील अनेक विमानतळ प्रशासनाकडे पाठवले असून त्यांच्याकडूनही मोठ्या प्रमाणावर त्याची प्रशंसा केली जात आहे. स्वातंत्र्याच्या अमृतमहोत्सवानिमित्त हा आकृतीबंध लोहगाव विमानतळावर १५ ऑगस्ट २०२३ पर्यंत ठेवण्यात येईल. ज्यातून प्रत्येक भारतीयाला देशाच्या गेल्या ७५ वर्षांच्या अभिमानास्पद वाटचालीची कायम आठवण राहिल. तर या उपक्रमामुळे आम्हाला विमानतळ परिसरातील प्रवाशांना स्वातंत्र्याच्या अमृतमहोत्सवी वर्षाच्या या प्रतिक्रियात्मक आकृतीबंधाशी थेट जोडून घेता आले, याचा आनंद वाटतो, असे डॉ.कश्यप यांनी सन्मानाला उत्तर देताना सांगितले.

फोटो ओळ : लोहगाव विमानतळावर विमानपतन निर्देशक (एअरपोर्ट डायरेक्टर) संतोष ढोके यांच्या हस्ते बीएनसीएचे प्राचार्य आणि विद्यार्थिनींना स्मृतीचिन्ह आणि प्रमाणपत्र देण्यात आले. डावीकडून प्राजक्ता संभू, मेघना शास्त्री, प्रा.अमृता बर्वे, संतोष ढोके, डॉ.अनुराग कश्यप, आकांक्षा धुमाळ, ईशा गोरे, प्रा.देवा प्रसाद आणि प्रा.अफताब लोखंडवाला.

Dainik Dayitwa, Pg. no.04, 30.11.2021

# MKSSS's Dr. Bhanuben Nanavati College of Architecture for Women, Pune

## BNCA | Events and Activity Reports

Event / Activity title: Purushottam Karandak participation

Date & Time: Morning 10:00 – 23rd July 2024

Venue: Circular Courtyard, BNCA College Building.

Faculty In-charge: Prof. Amruta Barve

Faculty Co-ordinator:

Students' In-charge: Khushi Mantri, Renuka Mangalge, Kaladhaar Committee

NAAC Criteria (if any):

Guest Speakers:

Chief Guest (if any): NA

Objective of this Event: Drama competition participation enhances teamwork, assimilation and motivates student skills and talents

### Summary of the event (150-200 words):

The Purushottam Karandak 2024 Competition is a highly esteemed event conducted annually where students from across Maharashtra participate showcasing their talent, attracting talented individuals and institutions from across the state. BNCA actively participated in this competition, showcasing their acting talent and innovative set designs. The students and faculty dedicated substantial effort and time to prepare for the drama based on historic events.

**The Peshwa women of the Maratha Empire, often overlooked in historical narratives, were embodiments of resilience, leadership, and silent strength. Despite living in a patriarchal society, they played critical roles in preserving cultural heritage, managing households, and contributing to the administration during crises. The play portrays a life of Women like Aanandibai, Parvatibai and Gopikabai who demonstrated grace under pressure, showcasing their intelligence and courage.**

The play was shortlisted for final rounds among 9 from the total 51 entries. Our student Vaishnavi Bhide was awarded with certificate & trophy for her acting performance. This led to the exposure of students to handle the team and various other aspects related to it.

Event Category: Academic / Co-curricular / Extra-curricular: Extra Curricular.

### Signatures



IQAC

Principal

PRINCIPAL  
MKSS's DR. BHANUBEN NANAVATI  
College of Architecture For Women  
Karvenagar, Pune-411 052.

Co-ordinator

Dr. Chetan Sahasrabudhe

**The team**



**Poster**



महर्षी कर्वे स्त्री शिक्षण संस्थेचे  
डॉ. भानुबेन नानावटी कॉलेज ऑफ आर्किटेक्चर  
प्रस्तुत एकांकिका

# तूष्णा चक्र

विद्यार्थी लेखिका  
स्वशाली काळुसकर

विद्यार्थी दिग्दर्शिका  
जान्हवी पाटील

२८ ऑगस्ट २०२४ | भरत नाट्य मंदिर, पुणे | वेळ - सायंकाळी ५ ते ६  
तिकिटांसाठी संपर्क साधा, खुशी मंत्री - ७७९६०७७०७७

 BNCA  
 कर्तव्य  
Photo Credit - Srushti Patil

The recognition

**पुरुषोत्तम करंडक वर्ष** राजाभाऊ जन्मशताब्दी वर्ष 1925 - 2024 5/5

### अंतिम फेरी सविस्तर निकाल अभिनय उत्तेजनार्थ पारितोषिके (अंतिम फेरी)

| विद्यार्थी        | भूमिका        | एकांकिका     | महाविद्यालय   |
|-------------------|---------------|--------------|---|
| ओम चव्हाण         | सुदामा/ फडतरे | सखा          | आय एम सी सी   |
| अनामिका मदन       | जानेशवरी      | बिजागरी      | पी. व्ही. जी. कॉलेज ऑफ इंजिनीअरिंग अँड टेक्नोलॉजी, पर्वती |
| तन्वी खाडीलकर     | धिया          | पार्टनर      | सर परशुरामभाऊ महाविद्यालय                                 |
| शुभा जाधव         | माय           | बिजागरी      | पी. व्ही. जी. कॉलेज ऑफ इंजिनीअरिंग अँड टेक्नोलॉजी, पर्वती |
| राखी गोरखा        | आत्या         | देखावा       | न्यू आर्ट्स सायन्स & कॉमर्स कॉलेज, अहमदनगर                |
| समृद्धी कुलकर्णी  | बारकी         | बस नंबर १५३२ | गरवारे वाणिज्य महाविद्यालय                                |
| द्व्योम कुलकर्णी  | भूषण          | पार्टनर      | सर परशुरामभाऊ महाविद्यालय                                 |
| वैष्णवी शिडे      | आनंदी बाई     | तृष्णाचक्र   | भानुबेन नानावटी कॉलेज ऑफ आर्किटेक्चर                      |
| प्रद्युम्न उमरीकर | सचिन          | ११,१११       | फर्ग्युसन महाविद्यालय, पुणे                               |
| पार्थ दीक्षित     | माधव          | पार्टनर      | सर परशुरामभाऊ महाविद्यालय                                 |



**सहजं sahajachki Bharat Natya Mandir**

**पुरुषोत्तम करंडक वर्ष** राजाभाऊ जन्मशताब्दी वर्ष 1925 - 2024

### अंतिम फेरी साठी निवडलेले संघ (लॉट्स अनुक्रमे)

| एकांकिका     | महाविद्यालय   |
|--------------|---|
| बिजागरी      | पी. व्ही. जी. कॉलेज ऑफ इंजिनीअरिंग अँड टेक्नोलॉजी, पर्वती         |
| तेंडूलर्स    | एम ई एस सिनिअर कॉलेज  |
| पार्टनर      | सर परशुरामभाऊ महाविद्यालय   |
| सखा          | आय एम सी सी   |
| देखावा       | न्यू आर्ट्स सायन्स & कॉमर्स कॉलेज, अहमदनगर                        |
| पाटी         | विद्या प्रतिष्ठानचे कला, विज्ञान आणि वाणिज्य महाविद्यालय, बारामती |
| बस नंबर १५३२ | गरवारे वाणिज्य महाविद्यालय  |
| तृष्णाचक्र   | भानुबेन नानावटी कॉलेज ऑफ आर्किटेक्चर                              |
| ११,१११       | फर्ग्युसन महाविद्यालय, पुणे                                       |



# ‘पुरुषोत्तम’च्या अंतिम फेरीत नऊ संघ

म. टा. प्रतिनिधी, पुणे

पुरुषोत्तम करंडक स्पर्धेच्या प्राथमिक फेरीचा निकाल शुक्रवारी रात्री जाहीर होताच भरत नाट्य मंदिराबाहेर एकच जल्लोष झाला. एस. पी. कॉलेज, गरवारे वाणिज्य महाविद्यालय, भानुबेन नानावटी कॉलेज ऑफ आर्किटेक्चर, आयएमसीसीसह पाच महाविद्यालयांनी अंतिम फेरीच्या नऊ संघांत आपले स्थान पक्के केले. या संघांमध्ये २१ आणि २२ सप्टेंबर रोजी अंतिम फेरी रंगणार आहे.

महाराष्ट्रीय कलोपासक आयोजित पुरुषोत्तम करंडक स्पर्धेची प्राथमिक फेरी १६ ते ३० ऑगस्ट या कालावधीत भरत नाट्य मंदिर येथे झाली. या स्पर्धेचे यंदाचे ५९वे वर्ष आहे. प्राथमिक फेरीत सादर झालेल्या ५१ संघांच्या एकांकिकांतून अंतिम फेरीतील नऊ संघांवर शुक्रवारी शिक्कामोर्तब झाले. मंजूषा जोशी, गोपाळ जोशी, अभिजित मकाशिर यांनी स्पर्धेच्या प्राथमिक फेरीचे परीक्षण केले.

पीव्हीजी कॉलेज ऑफ इंजिनीअरिंग टेक्नॉलॉजी (बिजागरी), मएसोचे सीनिअर कॉलेज (तेंडुलकर्से), स. प. महाविद्यालय (पार्टनर), आयएमसीसी (सखा), न्यू आर्ट्स



पुरुषोत्तम करंडक स्पर्धेच्या प्राथमिक फेरीचा निकाल शुक्रवारी रात्री जाहीर होताच भरत नाट्य मंदिराबाहेर एकच जल्लोष झाला.

कॉमर्स अँड सायन्स महाविद्यालय (देखावा), विद्या प्रतिष्ठान कला, वाणिज्य, विज्ञान महाविद्यालय (पाटी), गरवारे वाणिज्य महाविद्यालय (बस नं. १५३२), डॉ. भानुबेन नानावटी कॉलेज ऑफ आर्किटेक्चर (तृष्णाचक्र) आणि फर्ग्युसन महाविद्यालय (११,१११) या संघांची अंतिम फेरीसाठी निवड झाली.

वैभव वासणकर, मिहिर माईणकर, शर्वायु डेमसे, वेदिका वाबळे, ऋतिक रास्ते, रूपाली सोनवले, राजसी वळामे, केदार लगस, सोहम देशपांडे, आविष्कार ठाकूर यांना अभिनयासाठी उत्तेजनार्थ आणि ऋतुराज दंडवते, वैष्णवी जमदाडे यांना दिग्दर्शनासाठी उत्तेजनार्थ पारितोषिक जाहीर झाले.