

SUCHI PRIYADARSHANI

Ph.D. Student (PMRF May 2020, Lateral Entry) | Indian Institute of Science, Bangalore, India | suchip@iisc.ac.in

Academic Background

Ph.D., (Ongoing), Indian Institute of Science, Bangalore, 9.1/10 CGPA

B.Arch., (2019), Jadavpur University, Kolkata, 9.1/10 CGPA (86.14%)

Research Interests

Sustainable Architecture and Design, Moisture propagation in buildings, Thermal Comfort, Sustainable Building Materials, Architectural Anthropology, Wellness

Research publications

Invited Articles:

1. **Priyadarshani, S.**, Mani, M., Maskell, D., "Influence of building typology on Indoor humidity regulation", *REHVA J.*, vol. 6, no. December, pp. 48–52, 2021, Available: <https://www.rehva.eu/rehva-journal/chapter/influence-of-building-typology-on-indoor-humidity-regulation>, ISSN 1307-3729.

Journal Articles:

2. **Priyadarshani, S.**, Mani, M., "Sensory responses to manifestations of water in the living environment: A review", *Science of the Total Environment*. (Under Review, Submitted: May 2022)
3. Rao, Roshan.R., **Priyadarshani, S.**, Mani, M., "Examining the use of End-of-life (EoL) PV Panels in housing and sustainability", *Resources, Conservation & Recycling Advances* (Under Review, Submitted: Apr 2022).
4. **Priyadarshani, S.**, Mani, M., Maskell, D., "Role of moisture in the built environment: A Multi-disciplinary review", *Science of the Total Environment* (Under Review, Submitted: March 2022)
5. Mishra, S.K., **Priyadarshani, S.**, "Learning from Vernacular Architecture of Toda Community", *IJCRT*, vol. 8, no. 5, pp. 2893–2896, 2020. <http://doi.org/10.1729/Journal.23670>
6. **Priyadarshani, S.**, Ghosh, M., Dutta, S., "Appropriating architectural design methodology: Based on the context of an abandoned mine", *IJAR*, vol. 8, no. 07, pp. 1590–1595 (2020). <http://dx.doi.org/10.21474/IJAR01/11427>

Conference Articles:

7. **Priyadarshani, S.**, Rao, Roshan.R., Mani, M., Maskell, D., "Investigating the role of humidity on indoor wellness in vernacular and conventional building typologies", *Building Simulation Applications 2022: 5th IBPSA Italy Conference – Bolzano (Italy)*, 29.06.22 – 01.07.22 (Accepted/In press).
8. Rao, Roshan.R., **Priyadarshani, S.**, Mani, M., "An Investigation into thermal performance of buildings built using upcycled End-of-life Photovoltaic Panels", *Building Simulation Applications 2022: 5th IBPSA Italy Conference – Bolzano (Italy)*, 29.06.22 – 01.07.22 (Accepted/In press).
9. **Priyadarshani, S.**, Mani, M., Maskell, D., "Discerning relative humidity trends in vernacular and conventional building typologies for occupant health," in *Proceedings of the 17th International Healthy Buildings Conference, 21-23 June, 2021*, 2021, pp. 587–598, [Online]. Available: https://www.sintefbok.no/papers/index/38/sintef_proceedings. ISSN: 2387-4295

10. **Priyadarshani, S.,** Ghosh, M. (2019): Appropriateness of Plurality of Urban Public Open Space in context to human needs and activities: Study of Bus terminus in Kolkata, *Proceedings of Vistara: Int. Conference on Architectural Anthropology*, pp. 209-218, ISBN 9789388568104.
11. **Priyadarshani, S.** (2019): Model Reclamation Framework of abandoned mines to solve socio-economic issues: Proposal for Sustainable Development of abandoned coal mines and prosperity of Tribal Community in Jharkhand, *8th Anveshan Souvenir*, E-04, pp. 31.

Poster Presentation:

12. **Priyadarshani, S.**(2019): Model Reclamation Framework of abandoned mines to solve socio-economic issues: Proposal for Sustainable Development of abandoned coal mines and prosperity of Tribal Community in Jharkhand, *8th Zonal Anveshan (East Zone) 18-19 February'18 CUJ, Ranchi (Jharkhand)*.

Projects

Academic Projects:

- **Urban Sprawl along highways between 1990 – 2020** (Oct 2020- Jan 2021), A case study of Mangalore-Bangalore, and Mysore-Bangalore highway using QGIS and GRASS.
- **Retrofitting urban public open spaces for sustainable communities** (Feb 2020- Apr 2020), A Discussion on design strategies and impacts of four case studies.
- **B.Arch. Thesis** (December 2018-June 2019), M.I.T.T.I: Mines integrated with Tribal and Tourist Interaction, A proposal for sustainable development and use of Abandoned Open Cast Coal Mine in Dhanbad, Jharkhand. (Based on a proposed project by Ministry of Tourism, Government of Jharkhand).
- **Green Building Rating Systems** (Aug 2015 -Oct 2015), Comparison of BREEAM, GRIHA and ECBC Ratings for Bamboo House (Jadavpur University, Kolkata)

Other Project Involvements:

- **Wellbeing Achieved from Earthen Residence (WAFER) Project (UWB190086)**, (Jan 2021-Present), supported by British Academy.
- **Biodiversity survey and preliminary baseline data for select forest ranges at Kodagu**, (Jul 2020-Sept 2021), Part of Analysis and documentation team in study carried out by the Indian Institute of Science in collaboration with the Karnataka Forest Department.
- **Landscape Mapping of Hooghly Riverfront** (July 2015-November 2015), Documentation of cultural fabric of Hooghly riverfront ("The Little Europe", a Bengal Tourism initiative) presented to the Dutch Cultural Agency in 2015.

Experience

Research Assistant (September 2018-November 2018), for the project "Mapping Ephemerality", Dept. of Art and Architecture, University of California, Santa Barbara.

- Documentation of Durga Puja Pandals, and Dynamic Urban fabric of Streets of Kolkata.
<https://www.platformspace.net/home/mapping-ephemerality>

Intern (June 2018- July 2018), Urban Development and Housing Department, Government of Jharkhand.

- Building Plan Approval and Management System, GIS-Based Master Planning, and Execution of ongoing schemes like PMAY, and AMRUT.

Architectural Trainee (June 2017- November 2017), Arya Architects, Ahmedabad, Gujarat.

- Architectural Design and Drawings, Preparation of DPR for various projects

Achievements

- Recipient of University Medal, Department of Architecture and Nabendu Sarkar Memorial Gold Medal, Jadavpur University for standing 1st in B.Arch(2019 batch) and best thesis paper respectively.
- Recipient of the Best Paper Award at Vistara: Int. Conference on Architectural Anthropology 2019.
- Secured 1st position in Anveshan: Student Research Convention 2019 in East Zone.
- Secured 1st Position in Design Hackathon 2018 organized by Technopreneurs' Surrogate ventures.
- Recipient of Meera Rani Mitra Memorial Award 2017 and 2018, Prof. Amiya Bannerjee Memorial Award 2018, at Jadavpur University for standing 1st in B.Arch., university examinations.
- Secured 1st position in Design Competition for "Design of French Pavillion", Design Yatra 2016.
- Secured 1st position in National Children's Science Congress 2008 and 2010 at District Level (Bokaro) and Presented at State Level Congress.

Key Positions of Responsibility

- Member of Mess Committee, Indian Institute of Science, Bangalore.
- Member of organizing committee, Open day 2020 for CST, IISc Bangalore.
- Team Leader in Design Hackathon 2018 organized by Technopreneurs' Surrogate ventures.
- Co-ordinator for Ruebens in Eastern Zonasa 2016 held at NIT Rourkela.
- Member of Organising Committee, Golden Jubilee Celebration for Department of Architecture, Jadavpur University,2016.
- Team Leader for cultural mapping of Serampore Area, for documentation of cultural fabric of Hooghly riverfront, called "The Little Europe", a Bengal Tourism initiative, to be presented to the Dutch Cultural Agency,2015.
- Cultural Secretary, 2012-2014, Chinmaya Vidyalaya, Bokaro Steel City, Jharkhand.
- Member Students' Council from 2010-2014, Chinmaya Vidyalaya, Bokaro Steel City, Jharkhand.
- Event Co-ordinator and anchor during Hon'ble President Dr. APJ Abdul Kalam's Visit at Bokaro Steel City, Jharkhand.
- Member of the Organising Committee, National Inter-Chinmaya Sports Meet 2010, Chinmaya Vidyalaya, Bokaro Steel City, Jharkhand.

Workshops and Training

- Completed Indo-Swiss BEEP Camp 2020, December 2020
- Completed Revit Training Conducted by Caltrans, Kolkata in 2017.
- Completed ECBC Workshop conducted by Engineers' and Architects' Guild, Kolkata Chapter 2016.
- Certification courses on Epidemiology, Global Health, Matlab programming, Data Science.

Software Skills

BIM (Revit), Building Energy Simulations (DesignBuilder, EnergyPlus, Ecotect), Illustration & Graphic Design (Adobe Photoshop, Illustrator, Indesign), 2D&3D Modelling (AutoCad, Sketchup, 3DS Max), Rendering (Vray, Lumion), Programming (C, Matlab).