Council Of Architecture Training & Research Centre, Pune

In collaboration with

MBS College, Dwarka, Delhi

Organizes **05-Day Online Faculty Development Program** on

Urban Systems and Design Research Methodologies :

Towards a Sustainable Environment.

Date : 29th December 2025 – 2nd January 2026 | **Time: 10:30 AM – 1:45 P.M**

Preamble:

The FDP is focused on strengthening key research areas in urban planning and tackling urban issues through policy frameworks. It also seeks to educate on technical pathways applications within the domain.

Key takeaways for participants:

- Understand and apply policy frameworks relevant to **Urban Planning and sustainable Urbanism.**
- Analyse and evaluate the primary **urban planning issues in megacities** related to **density, infrastructure, mobility, and resource management.**
- Formulate strong research problems and identify potential research gaps for **focused urban issues**.
- Address issues related to **human wellness, safety, and livability** in the design of high-density urban structures and developments.
- Commitment to Justice and Equity through ethical frameworks on Urban Planning, research, and addressing informed consent & privacy.

Notes:

- Teachers/ architects who wish to register for the training program either under Collaborative Training Program (CTP 2022-23) or as independent individuals may do so by filling up the Google form available on the given link.
- To confirm registration, kindly upload proof of payment towards the registration fees /nomination form on the college letterhead before submitting the registration form.
- Link to join the program will be shared one day prior to the program.
- This program is not for students.
- E-Certificate of said training program shall be send via email on the registered email id of participants, after successful completion of training program by the participant i.e., attending all sessions and submitting all assignments, EOPT and feedback form of training program.

Registration fees:

INR 1500/- (Rupees One thousand five hundred only)

Link to register:

https://forms.gle/Ao4XS2JH9E7PZRseA

Link for payment:

https://eazypay.icicibank.com/eazypayLink?P1=KOOkQYjNFb8LZHkyuUDx6Q==

Link for Nomination form under CTP 2023-2024 & 2024-2025:

https://drive.google.com/file/d/1NUWCckxuXdABP44kxCETJmRUnWIRlHKK/view?usp=drive_link

Colleges may nominate faculty under CTP 2023-2024 & 2024-2025

EoPT : 2nd January 2026, 2:00 P.M – 3:00 P.M

Last Date for Registration: 26th December 2025 @ 5:30 P.M

EXPERT SPEAKERS

01 DAY – 29th Dec, 2025



Dr. Sanjukkta Bhaduri
Research Approach in Urban Planning



Ar. Lovlesh Sharma
Blue- Green Infrastructure & Water Management Systems

02 DAY – 30th Dec, 2025



Dr. Mandeep Singh
Disaster Risk Mitigation and Resilience in Urban Fabric



Dr. Sanjay Gupta
Capacity Building and Research Methodology in Urban Planning

03 DAY – 31st Dec, 2025



Ar. Alka Arya
Environmental Design Research methodology in Vedic town & country planning



Dr. Mahfuzuar Rahman Barbhuiya
New Research Method for Quantitative Analysis in Architecture

04 DAY – 01st Jan, 2026



Dr. Tanaya Verma
Methodological Approaches to Studying Vernacular Architecture for Sustainable Urban Systems



Ar. Punit Sethi
Professional Ethics and Standards

05 DAY – 02nd Jan, 2026



Dr. Siddhartha Koduru
Beyond the Visible City: AI, AR, VR and the Transformation in Urban Design Research.



Ar. Tanushree Das
Urban Design Pedagogy in Research

Convenor	Coordinator	Online Coordinator	Online Coordinator
Prof. Jayashree Deshpande	**Prof. Alpna Rohatgi**	**Prof. HKG. Nambiar**	**Ar. Pallabi Banerjee**
Director	Professor, MBS College	Professor, MBS College	Asst. Professor, MBS College
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MBS COLLEGE DWARKA NEW DELHI

Council of Architecture Training & Research Centre (COA TRC)

The Academic Wing of Council of Architecture was constituted in 2005 as National institute of Advanced Studies in Architecture (NIASA) with the purpose of creating training centers for teachers in schools of architecture and practicing architects. It also aims to become a resource center with research facilities for academicians and professionals and to provide a platform for discourse on issues related to architectural education and practice.

COA-TRC as NIASA is now called, is set to grow in function and stature as per the growing demands of studies in architecture. At present, it functions in areas of:

- Teacher's Training & Continuing Education
- Awards & Competitions
- Architecture Publications
- Research and development

Activities of the Training Wing:
The Training wing of COA-TRC concerns itself with the training of teachers in the field of architecture and practicing architects. COA-TRC aspires to conduct training programs with a focus on education technology covering all aspects of teaching for teachers to enhance the quality of teaching inputs and upgrade their knowledge base.

The teacher training programs can be categorised as:

- **Subject specific programs** to evolve strategies for better delivery of contents and updating the traditional knowledge base for subjects.
- **Strategy related programs** to evolve teaching strategies and policies covering more than one subjects.
- **Process related programs** to enhance the understanding and skills of teachers in the subject of Education technology understand the Teaching-Learning process and evolve more effective methods of delivering the content.
- **Leadership development programs** for heads of institutions and senior faculty to enhance skills of administration and management of physical and human resources.

COA-TRC has been conducting faculty induction programs and training programs for teachers in architecture on a variety of subjects since 2005. The programs have been highly appreciated by the participants for their content and scope. The increasing participation and positive feedback received has been very encouraging.

The continuing education programs for professionals focus mainly on national and international trends in practice, improving the service standards, new technology and techniques, environment related subjects etc.

Council of Architecture under a MOU with Bureau of Energy Efficiency is conducting training programs for introduction to the provisions of Energy Conservation Building Code.

Under a MOU with GRIHA Council, Council of Architecture is also conducting training programs for practicing architects and teachers in schools of architecture. These programs are conceptualized out of a common vision of promoting sustainability in the built environment through efficient building design and optimum use of resources with special emphasis on architectural design and the built environment. This program is expected to help in the advancement of green buildings in India as the mainstream choice for the construction sector.

Activities of the Awards Wing:

COA, with a view to encourage and motivate the students of Graduate Courses, Post Graduate Courses in Architecture has instituted a

- National Awards for Excellence in Architectural Thesis
- National Awards for Excellence in Post Graduate Thesis

Submitted in compliance to the requirements of the Bachelor's degree program, Master's degree programs in Architecture and invites students to participate in this prestigious awards program by submitting their thesis projects in accordance with the conditions and instructions set out.

COA, has also instituted a National level Students' Award for Excellence in Documentation of Architectural Heritage in India. The COA Heritage Award has been instituted with an objective to encourage interest and talent of students for understanding, documentation of heritage buildings and to develop and promote sensitivity and awareness towards India's architectural heritage amongst students of architecture across the country.

The Annual International Essay Writing Competitions instituted by the Council of Architecture, are meant for:

1. Students in schools of architecture and young architects
2. Teachers in schools of architecture

These annual essay competitions organized through the Training and Research Centre of Council of Architecture (COA-TRC) are an effort to engage the energy, creativity and vision of the students, young architects, and educators in architecture in promoting a culture of nation building. It also aims to inspire the architecture fraternity to appreciate and learn from each other, ways to harness the benefits of the available facilities and initiate a discourse on the role of architects in making society a better place to live in.

Activities of the Publication Wing:

COA-TRC, has been publishing each year, the book titled 'Archiving Architectural Thesis', a compilation of the 50 best thesis entries from all the zones of the National Awards for Excellence in Architectural Thesis since 2006.

The publication wing has also published and distributed several books authored by Indian architects, useful for both students and practicing architects.

Activities of the Research Wing

The Rural Studio Research Project, conducted under the aegis of National Institute of Advanced Studies in Architecture, was primarily of inclusive and participatory nature. The challenge of this project was to bring together young researchers and students from various architectural institutions in India, identify interdisciplinary experts with research background, identify and engage different rural communities to interact and work together at different geographical locations and at one training base camp, i.e., NIASA, at multiple times spanning over two years (2010 to 2012). As this project had to sustain in the long run, it had to be conducted in collaboration with educational institutions, government agencies at the local level and with local communities.

Rural Studio Project tried to achieve five clear goals:

1. to develop a meaningful dialogue on emerging issues of rural settlements in India,
2. to develop a methodology for their documentation,
3. experiment with participatory approaches by engaging local communities,
4. train young researchers and/or faculty to involve educational institutions and sensitize the next generation of architects towards these issues, and

5. publish a comprehensive document to record this process and outcomes.

The success of the Rural Studio motivated the initiation of the Urban Studio Research Project, in 2021. The aim of the project is to develop and nurture a research culture within the schools of architecture and strengthen the research activity amongst faculty members and students of architecture. The emphasis would be to promote and support an organized study and research into related disciplines and emerging areas in architecture.

I would like to thank all the schools/departments of architecture for their unstinting encouragement by extending support in hosting training programs all over India. My sincere thanks to the faculty in schools of architecture who have shared their knowledge as resource persons of various training programs. I also thank the several leading architects who have whole heartedly contributed to the various activities of the academic wing of COA.

Together, we hope to take a step forward towards improving architecture education.

Prof. Jayashree Deshpande
Director, COA-TRC, Pune

About the Host College and Coordinators.

MBS College, nestled in Dwarka, our vibrant 2-acre campus college in Delhi, is a transformative learning ecosystem with state-of-the-art laboratories, versatile workshops, and cutting-edge facilities. From specialized design studios to advanced technology spaces, we create an immersive environment that bridges academic theory with real-world professional excellence. MBS College transcends traditional education, cultivating a dynamic and inclusive community where students discover their potential beyond classroom walls. We provide a vibrant ecosystem that encourages personal expression, meaningful connections, and transformative learning experiences. Our campus empowers students to build academic excellence while developing leadership skills, preparing them for future professional challenges. MBS college Dwarka resonates with creativity, innovation, and an unrelenting spirit of growth. Throughout the academic year, our meticulously curated event calendar offers students extraordinary opportunities to expand knowledge, enhance professional skills, and engage in transformative experiences. We create an environment where ideas flourish, boundaries dissolve, and learning knows no limits.

About the Co-Ordinator's

Alpna Rohatgi. Professor

Professor Alpna Rohatgi is a distinguished academician, architect, and product designer with an impressive career spanning over 25 years. With 18 years dedicated to teaching, she currently serves as a Professor of Architecture at the MBS School of Planning and Architecture, Dwarka. Her academic foundation is rooted in excellence, holding a B.Arch and an M.Des from IIT Delhi, where she achieved an outstanding All India Rank of 14 in the CEED examination. She is currently advancing her scholarly contributions as a PhD candidate at IIT Delhi, focusing on the intricate intersections of Design and Culture Studies.

As a researcher, Professor Rohatgi's expertise lies in vernacular design, the urban built environment, and design pedagogy. Her work is widely recognized in the academic community, featuring in Scopus-indexed proceedings and international conferences such as ICORD'23 and ICSBE'23. Beyond her research, she has demonstrated exceptional leadership in academic administration, previously serving as the IQAC Head and leading NAAC accreditation processes at Amity University. Her multifaceted background also includes significant industry experience as a Senior Architect at Ansal Properties and Infrastructure Ltd, where she managed large-scale urban projects, including a 10-acre IT complex in Noida.

Driven by a passion for design methodology and architectural innovation, Professor Rohatgi brings a unique blend of practical industry insight and rigorous academic research to this Faculty Development Program. Her extensive experience in mentorship and curriculum coordination makes her a pivotal voice in shaping the future of architectural education and design thinking.

Hari K. G. Nambiar, Professor

Professor Harikrishna Gopal Nambiar is a distinguished architect, town planner, and academician with over thirty-eight years of experience in the field of architecture. He currently serves as a

Professor of Architecture at the MBS School of Planning and Architecture, Dwarka, a position he has held during multiple tenures. His diverse academic background includes a B.Arch from the School of Planning and Architecture (SPA), New Delhi, an Associate Membership of the Institute of Town Planners India (equivalent to a Master's in Town & Country Planning), and an MA in Sociology.
Throughout his career, Professor Nambiar has successfully bridged the gap between professional practice and academia. His extensive portfolio features large-scale campus planning for Manipur University, industrial townships, and significant landscaping projects for the Agra Cantonment Board. In the industrial sector, he has managed complex projects for the Indian Oil Corporation, specializing in project management and structural design. As an educator, he has served as a Head of Department and Visiting Faculty at prestigious institutions like SPA New Delhi, specializing in Building Construction, Research Methodology, and Transport Planning. His multi-disciplinary expertise makes him a valuable contributor to the discourse on urban transformation and design pedagogy.

Pallabi Banerjee, Assistant Professor

Ar. Pallabi Banerjee is a distinguished Architect, Urban Planner, and Gold Medallist from SPA New Delhi, currently serving as an Assistant Professor at the MBS School of Planning and Architecture. With over seven years of professional and academic experience, she specializes in disaster-resilient planning, universal design, and sustainable housing.
Her scholarly impact is underscored by her extensive participation in international conferences. Notably, she served as a Session Chair at the 7th International Conference of Contemporary Affairs in Architecture and Urbanism (ICCAUA2024) in Türkiye, where she presented research on the architectural transformation of Kolkata. Her diverse research portfolio also includes presentations at Jamia Millia Islamia on climate change and disaster management, and at SPA New Delhi on crime prevention through environmental design. Furthermore, she presented a strategic housing framework for the Sundarbans Delta at the International Conference on Sustainable and Inclusive Urban Development.
Ar. Banerjee's practical expertise includes leading major group housing projects and contributing to the AMRUT 2.0 GIS-based Master Plan. An active member of ITPI, COA, and the Geomatics Society, she brings a robust blend of research excellence and industry leadership to this Faculty Development Program.

Overview/Preamble of Program

Preamble: The FDP is focused on strengthening key research areas in urban planning and tackling urban issues through policy frameworks. It also seeks to educate on technical pathways applications within the domain.

Objective: The program is consciously planned in the context of global rapid urbanization, climate change, and resource depletion, addressing key urban infrastructure issues, planning research areas, and addressing potential gaps.

Key takeaways for participants:

- Understand and apply policy frameworks relevant to **Urban Planning and sustainable Urbanism.**
- Analyse and evaluate the primary **urban planning issues in megacities** related to **density, infrastructure, mobility, and resource management.**
- Apply complex urban challenges and suggest feasible, research-backed solutions by applying the knowledge to real-world problems.
- Formulate strong research problems and identify potential research gaps for **focused urban issues**.
- Address issues related to **human wellness, safety, and liveability** in the design of high-density urban structures and developments.
- Commitment to Justice and Equity through ethical frameworks on Urban Planning, research, and Addressal of informed consent and privacy.

Schedule of Program

Day & Date	**Monday** 29th December 2025	**Day & Date**	**Tuesday** 30th December 2025	**Wednesday** 31st December 2025	**Thursday** 1st January 2026	**Friday** 2nd January 2026
Session I 10:45 a.m. - 12:15 p.m.	**Dr. Sanjukkta Bhaduri-** Research Approach in Urban Planning	**Session I 10:30 a.m. - 12:00 p.m.**	**Dr. Mandeep Singh -** Disaster Risk Mitigation and Resilience in Urban Fabric	**Ar. Alka Arya** Environmental Design Research methodology in the Vedic town & country planning	**Dr. Tanaya Verma** Methodological Approaches to Studying Vernacular Architecture for Sustainable Urban Systems	**Ar. Punit Sethi** Professional Ethics and Standards
	Break 15 minutes					
Session II 12:30 p.m. – 2:00 p.m.	**Ar. Lovlesh Sharma** Blue- Green Infrastructure & Water Management Systems	**Session II 12:15 p.m. – 1:45 p.m.**	**Dr. Sanjay Gupta -** Capacity Building and Research Methodology in Urban Planning	**Dr. Mahfuzuar Rahman Barbhuiya** New Research Method for Quantitative Analysis in Architecture	**Dr. Siddhartha Koduru** Beyond the Visible City: AI, AR, VR and Transformation in Urban Design Research.	**Ar. Tanushree Das** Urban Design Pedagogy in Research
	Break 30 minutes					
EoPT 2:30 p.m. – 3:30 p.m	**NA**		**NA**	**NA**	**NA**	**EoPT**





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Disclaimer:

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Abstract of Each Session

Session I: Prof. Dr. Sanjukkta Bhaduri delivered the inaugural technical session on **Research Approaches in Urban Planning**, focusing on the identification of research areas, formulation of research questions, methodology selection, data sources, and application of research outcomes to real urban challenges.

This presentation by Prof. Dr. Sanjukkta Bhaduri outlines a systematic research approach for urban planning, emphasizing the transition from theoretical inquiry to actionable urban interventions. The scope of research is remarkably broad, covering contemporary themes such as environmental sustainability (sponge cities and blue-green infrastructure), disaster resilience (heat islands and climate adaptation), social inclusivity (gender and child-friendly design), and urban informality. These research areas are applied across various scales, ranging from macro-level city policies and governing principles to micro-level design interventions at the ward or neighbourhood scale.

The methodology is defined as a holistic process that ensures the credibility and validity of findings through a structured framework. It adopts a mixed-methods approach, also known as methodological triangulation, which integrates qualitative data on human experiences and beliefs with quantitative measurements and numbers. The research process begins with a problem statement and the identification of research gaps, followed by a literature synthesis to establish theoretical underpinnings and variables. Researchers distinguish between independent and dependent variables to investigate cause-and-effect relationships and utilize indicators to assess current conditions or forecast trends.

Data collection leverages both traditional and modern sources, including physical surveys, census data, and real-time feeds from Integrated Command and Control Centres (ICCC). For spatial analysis, the document highlights the use of open-source GIS software like QGIS and GRASS GIS for 3D visualization and thematic mapping. This spatial data is sourced from platforms like Bhuvan/ISRO, with mapping scales ranging from macro-regional perspectives (1:50,000) to micro-project levels (1:1,000). Analytical rigor is maintained through statistical techniques such as Correlation, Regression, and the Analytical Hierarchical Process (AHP), which facilitates decision-making by ranking alternatives. Ultimately, this research approach aims to provide a "Way Forward" through evidence-based recommendations and policy guidelines.

Course Material of each session:

- Relevant links
- Articles
- Reading Material etc

Session II: Ar. Lovlesh Sharma presented a session on **Blue-Green Infrastructure and Water-Sensitive Urban Planning**, highlighting river cities, urban water systems, flood management, wastewater reuse, and policy-driven implementation frameworks through national-level initiatives.

This abstract summarizes the presentation by Ar. Lovlesh Sharma on the integration of **Blue-Green Infrastructure (BGI)** within urban planning to enhance city resilience and sustainability. The document advocates for a shift from traditional "Grey Infrastructure" to a hybrid approach that leverages natural ecosystems to manage water, temperature, and biodiversity.

The presentation explores several critical themes of BGI, including its role in mitigating **Urban Heat Islands (UHI)**, managing urban floods through **Sponge City** concepts, and promoting biodiversity. Key components discussed include bioswales, rain gardens, permeable pavements, and urban forests, which serve as multifunctional spaces for both environmental regulation and community recreation. Ar. Sharma emphasizes that BGI is not merely an aesthetic choice but a necessary response to climate change, providing essential ecosystem services such as carbon sequestration and improved air quality.

The methodology for implementing BGI involves a multi-scalar approach, ranging from **Macro-level** regional planning (watershed management) to **Micro-level** site interventions (green roofs and local parks). The presentation details technical strategies like site suitability analysis, hydrological modeling, and the use of geospatial tools to identify optimal locations for green interventions. Furthermore, it highlights the importance of policy integration, suggesting that BGI should be embedded into city master plans and building bylaws to ensure long-term viability.

Ultimately, the document concludes that a well-integrated Blue-Green network creates "Future Ready Cities" that are more livable, economically vibrant, and resilient to environmental shocks. By prioritizing nature-based solutions, urban planners can move toward a sustainable "Way Forward" that balances development with ecological health.

Course Material of each session:

- Relevant links
- Articles
- Reading Material etc

Session III: Prof. Dr. Mandeep Singh conducted a session on **Seismic Risk Mitigation and the Role of Architects**, emphasizing earthquake-resistant design principles, building configuration, structural systems, detailing, and architects' responsibility in disaster-prone regions.

This abstract summarizes the presentation by **Dr. Mandeep Singh** regarding the critical role of architects in **Seismic Risk Mitigation**. The document emphasizes that while engineers focus on structural strength, architects are responsible for the primary configuration, which significantly dictates a building's performance during an earthquake.

The presentation highlights that seismic safety is not merely an "add-on" but must be integrated into the initial design phase. Dr. Singh outlines several architectural principles that influence seismic vulnerability, such as building mass, height, and "Regularity" in both plan and elevation. A major focus is placed on avoiding "Irregularities" like **Soft Storeys**, **Re-entrant Corners**, and **Torsional Couplings**, which often lead to structural failure.

The methodology for risk mitigation involves understanding the seismic hazard of a region—such as India's division into four seismic zones—and applying appropriate design strategies. Architects must balance functional requirements with seismic logic, ensuring that the building's shape and load paths are continuous and symmetrical. The document also discusses the importance of non-structural elements, noting that the failure of partitions, ceilings, and glass can cause significant injuries and economic loss even if the main structure remains intact.

Ultimately, the presentation calls for a proactive approach where architects serve as the first line of defense in disaster mitigation. By adhering to seismic codes and collaborating closely with structural engineers from the conceptual stage, architects can significantly reduce the "Seismic Footprint" of the built environment.

Course Material of each session:

- Relevant links
- Articles
- Reading Material etc

Session IV: Prof. Dr. Sanjay Gupta discussed **Research Methodology in Urban Transport and Planning**, covering research design, data analysis, problem formulation, and policy-oriented transport research with examples from national and international projects.

This abstract summarizes the session by **Prof. Dr. Sanjay Gupta** on **"Capacity Building and Research Methodology in Urban Planning."** The presentation addresses the critical need to strengthen research capabilities among faculty and practitioners to navigate the complex, multi-dimensional challenges of contemporary urban systems.

Dr. Gupta emphasizes that robust research methodology serves as the backbone of effective planning, moving beyond simple data collection to a deeper understanding of **Research Paradigms**, such as Positivism and Interpretivism. The discourse outlines a systematic journey from identifying a **Research Problem** to formulating a clear **Conceptual Framework**. A key highlight is the focus on **Capacity Building**, which involves upskilling researchers to apply evidence-based planning to issues like high density, infrastructure deficits, and resource management.

The methodology advocates for the use of diverse analytical tools to translate raw data into "Actionable Knowledge." By prioritizing ethical frameworks, validity, and reliability, the session provides a comprehensive roadmap for generating research that directly informs policy and enhances the sustainability and livability of future cities.

Course Material of each session:

- Relevant links
- Articles
- Reading Material etc

Session V: Ar. Alka Arya presented insights into **Urban Planning Practice and Policy Frameworks**, drawing from her experience with the Delhi Development Authority. The session focused on master planning, land pooling, TOD, MPD-2041, and institutional mechanisms shaping large-scale urban development.

This abstract summarizes the presentation by Ar. Alka Arya titled "Environmental Design Research methodology in Vedic town and country planning," which explores the application of ancient Indian wisdom to contemporary urban development. The session advocates for a return to Vedic principles to achieve "Viksit Bharat 2047," focusing on creating self-sufficient, well-coordinated clusters of settlements that prioritize health, security, and prosperity.

The core of the presentation details the meticulous sizing and hierarchy of settlements based on the *Samrangana Sutradhara*. Ar. Arya outlines a structured growth model where a village (the smallest independent unit) spans approximately 1 sq. km and caters to 20,000 people. This hierarchy scales upward, with towns being four times the size of a village, and cities being sixteen times larger, ensuring a balanced distribution of resources and population. The methodology emphasizes rectangular planning and precise dimensions to optimize the living environment.

A significant portion of the discourse is dedicated to "Agnihotra"—a Vedic process of purification through fire—as a scientific tool for environmental remediation. The presentation cites empirical evidence showing that Agnihotra and its resulting ash can significantly improve air quality by reducing microbial counts, purify water sources, and enhance soil health. Specifically, research findings indicate that Agnihotra ash can neutralize soil pH, increase nitrogen-fixing bacteria by 100 times, and boost plant growth (root and shoot length) by over 30%.

In conclusion, Ar. Arya presents a "Way Forward" that integrates these Vedic environmental design methodologies with modern needs. By combining traditional spatial planning with ancient ecological practices, the session proposes a sustainable model for future cities that ensures food security, environmental purity, and overall human well-being.

Session VI: Dr. Mahfuzuar Rahman Barbhuiya delivered a session on **Sustainability, Climate Resilience, and Data-Driven Research**, highlighting quantitative research tools, statistical modelling, GIS, and sustainability assessment frameworks in urban and infrastructure projects.

This abstract summarizes the session delivered by **Dr. Mahfuzuar Rahman Barbhuiya** (also known as Mehfuz Rahman) on the integration of **Sustainability, Climate Resilience, and Data-Driven Research** in the built environment. As an expert in climate-resilient infrastructure and an IGBC/GRIHA professional, Dr. Barbhuiya emphasizes a transition from intuitive design to evidence-based architectural and urban systems.

The discourse centers on the necessity of high-fidelity data in addressing urban vulnerabilities. Dr. Barbhuiya highlights the role of **Quantitative Research Tools** and **Statistical Modelling (SEM)** in predicting the performance of urban systems under climate stress. By leveraging **Python** for data processing and **Geographic Information Systems (GIS)** for spatial analysis, researchers can map environmental risks—such as urban water management issues and tourism-induced ecological pressure—at a granular level.

A significant portion of the session is dedicated to **Sustainability Assessment Frameworks**. Dr. Barbhuiya explains how metrics from GRIHA and IGBC, combined with advanced statistical techniques, allow for a rigorous evaluation of infrastructure projects. This quantitative approach enables the identification of specific "resilience gaps" in smart city projects, such as those in Kanpur and Jhansi. The session further explores how longitudinal data and predictive modeling can guide the development of "Future Ready" cities that are not only sustainable but also capable of adapting to extreme climate events.

In conclusion, the presentation serves as a technical roadmap for architects and planners. It advocates for a multidisciplinary methodology that combines the physical precision of architecture with the analytical power of data science, ensuring that urban development is both ecologically balanced and scientifically validated.

Session VII: Dr. Tanaya Verma conducted a session on **Vernacular Architecture and Research Methodologies**, focusing on systematic documentation, interpretation of traditional knowledge systems, passive design strategies, and integration of vernacular principles in contemporary urban contexts.

This abstract summarizes the session delivered by **Dr. Tanaya Verma** on "**Methodological Approaches to Studying Vernacular Architecture for Sustainable Urban Systems**." The presentation focuses on bridging the gap between traditional wisdom and contemporary architectural requirements through a structured, research-oriented lens.

Dr. Verma advocates for a shift in how vernacular architecture is perceived—moving from a purely "nostalgic" view to a "functional" one. The core of the session details a **Systematic Documentation Process**, which involves not just physical mapping of structures, but the deep interpretation of **Traditional Knowledge Systems (TKS)**. This includes studying the socio-cultural rituals, craftsmanship, and local materials that have historically informed the built environment. Dr. Verma emphasizes that these traditional systems offer time-tested solutions for resource management and community resilience.

A significant portion of the methodology is dedicated to the analysis of **Passive Design Strategies**. By evaluating how traditional buildings naturally regulate light, ventilation, and thermal comfort, Dr. Verma illustrates how these principles can be scientifically quantified. The session explores strategies such as thermal massing, courtyard effects, and natural orientation, which are essential for reducing the energy footprint of modern buildings.

In conclusion, the presentation provides a framework for the **Integration of Vernacular Principles** into contemporary urban contexts. Dr. Verma argues that by applying modern simulation tools to traditional techniques, architects can develop "Neo-Vernacular" solutions. This research-driven approach ensures that the sustainable wisdom of the past is effectively translated into policy-ready, energy-efficient designs for the future.

Session VIII: Prof. Dr. Siddhartha Koduru presented a forward-looking session on **Emerging Technologies in Architectural Education and Research**, focusing on AR–VR, GIS-based planning, digital fabrication, energy studies, and technology-driven pedagogy.

This abstract summarizes the presentation by **Dr. Siddhartha Koduru** titled "**Beyond the Visual City: AI, AR, VR and Transformation in Urban Research**." The session explores the disruptive potential of immersive technologies and Artificial Intelligence (AI) in bridging the gap between academic theory, industry practice, and the complex realities of modern urban environments.

Dr. Koduru begins by identifying a dual "GAP": an **Academic GAP** involving the generation, assessment, and presentation of ideas, and an **Industry GAP** centered on globalization, adaptability, and profitability. To resolve these, he proposes the integration of "Extended Reality" (XR) tools—comprising **Virtual Reality (VR)**, **Augmented Reality (AR)**, and **Mixed Reality (MR)**—alongside AI to transform how urban spaces are researched and designed.

The methodology focuses on the "Birth of the Digital City" through **Digital Twin** technology. By creating real-time virtual replicas of physical cities, planners can simulate various scenarios, from traffic flow to environmental impacts, before physical implementation. The session highlights how AI enhances this process by processing "Big Data" to identify patterns that remain "invisible" to traditional visual observation. This enables the creation of **Smart Cities** that are more responsive to the needs of their inhabitants.

Furthermore, the presentation traces the evolution of visual technology from historical stereoscopes to modern head-mounted displays, emphasizing that information only becomes knowledge through "experience." By utilizing AR/VR, stakeholders can experience a proposed urban intervention empathetically and spatially, leading to more inclusive and community-driven design outcomes.

In conclusion, Dr. Koduru envisions a future where urban research moves beyond static 2D representations. By embracing AI and immersive technologies, the field can achieve a "Future Ready" status, characterized by predictive modeling, high-fidelity visualization, and a curriculum co-designed with industry to ensure students and faculty are equipped for the digital transformation of the built environment.

Session IX: Ar. Punit Sethi addressed **Ethics, Statutory Frameworks, and Professional Conduct**, reinforcing the importance of integrity, accountability, and sustainability in architectural and planning practice.

In this session, **Ar. Punit Sethi** discusses the critical intersection of professional practice, academic research, and technological innovation within the architectural and urban planning domains. The presentation emphasizes that the complexity of contemporary urban challenges requires architects to transition from traditional design roles to becoming research-driven practitioners capable of navigating various policy and technical frameworks.

The core of the discourse focuses on the **formulation of research problems** and the identification of gaps within the current urban fabric. Ar. Sethi highlights that effective research must address the primary stressors of megacities, including high density, infrastructure deficits, and resource management. By integrating ethical frameworks—specifically those concerning justice, equity, and informed consent—researchers can ensure that urban interventions contribute to human wellness and livability rather than just physical expansion.

A significant portion of the presentation is dedicated to **technical pathways and applications**. Ar. Sethi explores how modern tools and methodologies can be used to evaluate the performance of high-density developments. This includes a commitment to "Future Ready" strategies where design is informed by data-driven insights and policy-relevant outcomes. The session advocates for a multidisciplinary approach where architectural research is not conducted in isolation but is part of a larger ecosystem involving environmental sustainability and socio-economic equity.

Ultimately, Ar. Sethi concludes that the goal of architectural research is to produce "Actionable Knowledge." By bridging the gap between theoretical exploration and field-based application, architects can lead the way toward a sustainable environment and more resilient urban systems.

Session X: Ar. Tanushree Das delivered the concluding technical session on **Design Quality, Architectural Pedagogy, and Research Integration**, discussing design evaluation, academic research, post-pandemic resilience, sustainability, and the role of educators in shaping future professionals.

This abstract summarizes the presentation by **Ar. Tanushree Das** titled "**Urban Design Pedagogy and Research**," which explores the evolving landscape of architectural education and the necessity of shifting toward more socially integrated and research-driven learning models. The discourse positions Urban Design as a critical bridge that combines the physical precision of architecture with the strategic, large-scale vision of urban planning.

The presentation emphasizes that Urban Design pedagogy must move beyond the "individual structure" to focus on the interaction between built forms, the surrounding environment, and the people who inhabit them. Ar. Das highlights that the field is inherently multidisciplinary, drawing from social sciences, political economy, civil engineering, and landscape architecture. A central theme is the **"Live Lab" approach**, which advocates for using the city itself as a classroom where students engage with real-world complexities rather than idealized studio projects.

A significant portion of the methodology is dedicated to **Participatory Action Research (PAR)**. This approach involves a self-reflective cycle of planning, acting, observing, and reflecting. Unlike traditional top-down design, PAR emphasizes "socially engaged research action," where community stakeholders are active participants in the design process. The presentation identifies several challenges in this pedagogical shift, including the tension between short academic cycles and long-term community engagement, power imbalances in authorship, and the difficulty of translating lived experiences into spatial forms.

In conclusion, Ar. Tanushree calls for a "Rethinking" of design education that prioritizes process over product. By integrating social research training and ethical accountability into the curriculum, the goal is to equip future architects with the skills to create sustainable, inclusive, and functional urban communities. This transition from "architecture as art" to "architecture as activism" ensures that urban design remains relevant in an increasingly complex global context.

End of Program Tutorial:

 Which building plan shape generally performs better during earthquakes?

- A. Concave and complex shapes
- B. Irregular and fragmented shapes
- C. Curved and corner-heavy shapes
- **D. Simple and symmetrical shapes**

 Which country has the highest groundwater withdrawal and consumption?

- A. China
- **B. India**
- C. USA
- D. Brazil

 In regression-based built environment research, multicollinearity primarily affects:

- A. Model explanatory power (R^2)
- **B. Statistical significance and stability of coefficient estimates**
- C. Normality of residuals
- D. Sample representativeness

 The Bhuj earthquake of 26th January 2001 resulted in approximately:

- A. 5,000 deaths and damage to 50,000 buildings
- B. 10,000 deaths and damage to 100,000 buildings
- **C. 20,000 deaths and damage to more than 170,000 buildings**
- D. 30,000 deaths and damage to 200,000 buildings

 What is the key significance and benefit of Blue-Green Infrastructure for urban development?

- **A. Water management and resilience**
- B. Recreational activities
- C. Clean air improvement
- D. Solid waste reduction

 In urban design studios, “forming attitudes” among students MOST directly relates to:

- A. Mastery of drawing and modelling software
- B. Understanding zoning laws and regulations
- **C. Developing ethical responsibility and sensitivity to social equity**
- D. Producing technically efficient design solutions

 According to the periphery layout of a self-sufficient unit, what is the specific purpose of the ‘Parikha’ (Water channel)?

- A. Irrigation only
- **B. Aesthetics, temperature regulation, and protection**
- C. Transport of goods
- D. Fishing and aquaculture

 As per the presentation, asymmetry in buildings leads to:

- A. Uniform load distribution
- B. Reduced seismic forces
- **C. Torsion and stress concentration**
- D. Improved ductility

 Research methodology refers to:

- A. Only data collection tools
- B. Statistical analysis techniques
- **C. The entire systematic research process and framework**
- D. Sampling methods alone

 What does SDG 6 stand for?

- A. Housing for All
- B. Poverty Alleviation
- C. Sustainable Transportation
- **D. Clean Water and Sanitation**

 The concept of an “intermediate scale” in Urban Design primarily refers to:

- A. The scale between interior design and architecture
- B. The scale dealing with individual buildings only
- **C. The scale focusing on groups of buildings and the spaces between them**
- D. The regional scale of cities and metropolitan areas

 Which of the following is a common reason for severe damage in RC frame buildings during earthquakes?

- A. Heavy roof loads
- **B. Open ground (soft) storey**
- C. Over-reinforced beams
- D. Excessive floor height

 What is grey water?

- A. Water from industries
- B. Water available during the rainy season
- C. Water from the sea
- **D. Water from washing and kitchen areas**

 To reduce artificial energy consumption in small towns, which alternative is promoted for activities like farming and local transport?

- A. Solar-powered tractors
- **B. Animal power (Bullocks, oxens, horses)**
- C. Manual human labor only
- D. Wind turbines

 Tactical urban design is best described as:

- A. Centralized and top-down
- B. Slow and expensive
- **C. Bottom-up and agile**
- D. Strictly policy-driven

 Which research approach focuses on identifying cause–effect relationships through hypothesis testing?

- A. Descriptive research
- B. Correlational research
- C. Diagnostic research
- **D. Experimental research**

 Which building technology is presented as an alternative for earthquake-resistant buildings?

- A. Floating foundations
- B. Pre-stressed slabs
- **C. Seismic base isolation**
- D. Composite columns

 Mass eccentricity in buildings primarily causes:

- A. Vertical cracking
- B. Foundation settlement
- **C. Twisting of floors during earthquakes**
- D. Shear wall failure

 Which situation JUSTIFIES the use of mixed-methods instead of purely quantitative approaches in architectural research?

- A. When sample size is small
- B. When numerical data is unavailable
- **C. When quantitative results need contextual interpretation of spatial or experiential phenomena**
- D. When regression assumptions are violated

 According to the Vedic settlement hierarchy, how many villages are required to form one (01) town?

- A. 5 villages
- B. 10 villages
- **C. 16 villages**
- D. 40 villages

 Participatory Action Research (PAR) is characterized by:

- A. Expert-led decision making
- B. Fixed master planning
- **C. Shared ownership and community action**
- D. Focus only on physical design outcomes

 Which of the following is a primary data source mentioned in the presentation?

- A. Journals only
- B. Books only
- **C. Census and government-generated data**
- D. Literature review

 The principle of “Strong Column – Weak Beam” is important because:

- A. Columns should fail before beams
- B. Beams should be avoided
- **C. Columns must remain stable while beams dissipate energy**
- D. It reduces construction cost

 What is the sequence of the outermost layers of a typical self-sufficient Vedic development unit?

- A. Ring road → Boundary wall → Water channel → Green strip → Cattle land → Dense forest
- **B. Dense forest → Cattle land → Green strip → Water channel → Boundary wall → Ring road**
- C. City center → Residential zone → Industrial zone → Forest
- D. Boundary wall → Ring road → Agriculture → Water body

 Which research design provides the STRONGEST causal inference in architectural sustainability studies?

- A. Cross-sectional survey
- **B. Longitudinal panel study with fixed effects**
- C. Single case study
- D. Descriptive statistical analysis

 As per WHO norms, what should be the minimum per capita green space for a healthy and progressive city?

- a) Minimum 20 sq m per capita
- b) Minimum 40 sq m per capita
- **c) Minimum 10 sq m per capita**
- d) Minimum 50 sq m per capita

 ICCC (Integrated Command and Control Centre) is primarily useful for:

- A. Architectural design visualization
- B. Academic grading
- **C. Real-time data integration and city management**
- D. Land ownership mapping only

 In Structural Equation Modeling (SEM) applied to architectural research, model identification requires:

- A. Each latent variable to have at least one observed indicator
- B. Sample size greater than 100
- **C. Degrees of freedom greater than zero**
- D. Cronbach's alpha above 0.80

 Which ancient document serves as the primary lead for Vedic town and country planning principles, and who is its author?

- A. Arthashastra by Chanakya
- **B. Samrangan Sutradhar Granth by Maharishi Vishwakarma**
- C. Manusmriti by Manu
- D. Mayamatam by Garga

 Which measurement scale is MOST appropriate for capturing perceived thermal comfort in post-occupancy evaluation studies?

- A. Nominal scale
- **B. Ordinal Likert scale**
- C. Ratio scale
- D. Binary scale

 The shift from strategic design to tactical design in contemporary urban design pedagogy emphasizes:

- A. Long-term centralized planning by experts
- **B. Bottom-up, decentralized, and rapid interventions**
- C. Large-scale infrastructure development
- D. Elimination of design studios from education

 According to the presentation, architects generally select building systems based on:

- A. Lateral force demands
- B. Displacement criteria
- **C. Gravity loads**
- D. Ductility requirements

 What is the optimum population size for a self-sufficient medium-sized village (900 m x 1200 m) in Vedic planning?

- A. 5,000 people
- **B. 10,000 people**
- C. 20,000 people
- D. 50,000 people

 Correlation analysis is used to:

- A. Prove cause–effect relationships
- B. Replace regression analysis
- C. **Measure the degree of relationship between variables**
- D. Group data into clusters

 Non-structural elements generally account for approximately what percentage of a building's total value?

- A. 20–30%
- B. 30–40%
- C. 40–50%
- **D. 60–70%**

Q. A Code of Conduct for Professionals would not deal with _____

- A. Remuneration & Costs
- B. Professional Competence
- **C. Retirement Benefits**
- D. Integrity and fairness

 Which of the following is an example of qualitative data?

- A. Census data
- B. Numerical measurements
- **C. Beliefs and experiences of people**
- D. Satellite imagery

 In the traditional geographical hierarchy of the Indian subcontinent, which unit sits between 'Desh/Rashtra' and 'District (Mandal/Janpad)'?

- A. Nagar (City)
- B. Dweep (Continent)
- **C. Khetra/Prant (Region)**
- D. Gram (Village)

 Research conducted at the city level mainly falls under:

- A. Local actions
- B. Design interventions
- **C. Policy guidelines**
- D. Neighbourhood planning

 According to the recommendations, an increase of approximately how much in new building cost can significantly improve seismic performance?

- A. 1–2%
- B. 2–3%
- **C. 4–6%**
- D. 10–12%

 Which of the following are traditional community-level water conservation methods mentioned?

- A. Desalination and Reverse Osmosis
- **B. Pokhar, Johad, Talab, and Bawadi**
- C. Concrete dams and reservoirs
- D. Atmospheric water generators

Q. Meta-ethics mainly deals with _____

- A. Practical ethical problems
- B. Professional conduct rules
- **C. Nature and meaning of moral judgments**
- D. Legal obligations of professionals

 Which method combines both qualitative and quantitative approaches?

- A. Stratified sampling
- B. Experimental method
- **C. Mixed-method research**
- D. Diagnostic research

 Which of the following is an example of including forests within urban areas, as seen in Delhi?

- A. Central Park
- **B. Bio-diversity parks of DDA**
- C. Rooftop gardens
- D. Vertical farming towers

 Variables in research are best defined as:

- A. Survey questions
- B. Statistical tools
- **C. Parameters on which a phenomenon is studied**
- D. Mapping scales

Q. Conflict of interest in professional practice refers to _____

- A. Disagreement between client and authority
- **B. Personal interest affecting professional judgment**
- C. Multiple projects at the same time
- D. Delay in project approvals

About the Speakers, and Convenor

Speaker 1: Prof. Dr. Sanjukkta Bhaduri

Prof. Dr. Sanjukkta Bhaduri is at present holding the position of CEO in the Centre of Excellence in Urban Planning and Design, SPA, New Delhi. She is a highly accomplished academician with over 37 years of experience as Faculty at the School of Planning and Architecture (SPA), New Delhi, along with 2 years of experience in the corporate sector. She has held key leadership positions, including Head of Department (Urban Planning and Regional Planning) and Dean (Research). She has extensive experience in Urban Planning, Environmental Planning, Climate Resilience, Smart Cities, Disaster Risk Reduction, Sustainable Development and Inclusive cities. She has supervised 12 doctoral theses, 4 are ongoing and more than 250 Masters level Dissertation. Her key skills and expertise include research, teaching, training & capacity building, policy formulation with the following thrust areas - Urban Planning and Regional Planning, Environmental and Climate Resilient Development, Disaster Risk Mitigation and resilient settlements , Inclusive Urban Development and Gender sensitive Planning, Urban Energy Transition and Sustainable Urban Transport. She has a patent on Systems and Methods for Local area Planning. She has 2 online courses on the SWAYAM Platform, one on City and Metropolitan Planning and One on Urban Disaster Risk mitigation and Climate resilient Development.

Speaker 2: Ar. Lovlesh Sharma

Lovlesh Sharma is a Danida Fellow, an Architect and Urban Infrastructure Planner currently working as National Program Lead of River Cities Alliance RCA and Head of Urban Youth Unit at the National Institute of Urban Affairs (NIUA), New Delhi, with over 15+ years of multidisciplinary experience in Urban Development, Infrastructure Planning, Climate Resilience, and Water-Sensitive Cities. Currently, he leads the National River Cities Alliance (RCA) Secretariat at Water and Environment Vertical at NIUA in collaboration with the National Mission for Clean Ganga (NMCG), driving transformative initiatives across more than 145+ Indian and Global cities.Specializing in policy formulation, strategic urban planning, and large-scale program implementation, Mr. Lovlesh has steered pioneering efforts in Master Planning Delhi (MPD)-2041, and Urban River Management Plans (URMPs), Integrated Water Management plans including wastewater reuse strategies, and river-sensitive master planning for RCA member cities. His work emphasizes strengthening institutional capacities and bridging research with practice through capacity building programs, faculty development, and young professional engagement initiatives.

An alumnus of CEPT University, Ahmedabad, with a Master's in Urban Infrastructure Planning, FROM the Government College of Architecture, Lucknow, with a Bachelor of Architecture, Lovlesh has also contributed to academia as Deputy Head of Department and Assistant Professor at Amity University (UAE & India), where he focused on curriculum innovation, faculty mentoring, and research on sustainable urbanism. He has also been awarded prestigious international fellowships and training certifications from Aarhus University (Denmark), the Asian Institute of Technology (Thailand), and IIT Roorkee (India), bringing global best practices into contextual application for Indian cities. His notable contributions include representing India and Urban development domain at premier global platforms such as the World Economic Forum (Davos, Switzerland 2025), World Urban Forum (Cairo, Egypt 2024), World Water Week (Stockholm, Sweden 2024), UN Climate Change Faculty Development Program COP28 (Dubai, UAE 2023) and World Water Congress (Daegu, South Korea 2021) etc. He continues to actively contribute to professional bodies including the Institute of Town Planners, India (ITPI), Council of Architecture (CoA), and the Indian Institute of Architects (IIA) reinforcing his commitment to advancing the discourse on sustainable urban growth, resilient infrastructure, and climate-sensitive city planning.

Speaker 3: Prof. Dr. Mandeep Singh

Prof. (Dr.) Mandeep Singh, a visionary Architect, Urban Designer, and Academician with over 40 years of multifaceted experience in the built environment. A distinguished alumnus of the School of Planning and Architecture (SPA), New Delhi, Dr. Singh earned his B.Arch, Master of Urban Design, and a Ph.D. focusing on Seismic Conscious Architecture-simply put PhD in Earthquake resistant design.from the institution. His academic leadership is unparalleled, having served as the Dean of SPA Delhi and holding the position of Head of Department for Architecture, Urban Design, and Industrial Design at various stages of his 35-year tenure there. Beyond the classroom, his influence on India's national landscape is profound; he served as a Member of the Delhi Urban Arts Commission (DUAC) from 2021 to 2024 and acted as the Professional Advisor for the National War Memorial and the National War Museum for the Ministry of Defence.

Dr. Singh's professional portfolio seamlessly bridges public infrastructure and specialized design, ranging from winning the urban design competition for the GGSIPU Dwarka Campus to managing complex pilgrimage infrastructure for the Shri Mata Vaishno Devi and Shri Amarnathji Shrine Boards. His expertise is frequently sought by global and national bodies, including the World Bank, the National Disaster Management Authority, and the Bureau of Police Research and Development. Notably, he has also played a creative role in national celebrations as a member of the expert committee for the selection of Republic Day Tableaux. Throughout his career, Dr. Singh has remained dedicated to socially conscious design, focusing his research and consultancy on Design for the Elderly, the physically challenged, and safety and security. Please join me in welcoming a true leader in the field, Prof. (Dr.) Mandeep Singh.

Speaker 4: Prof. Dr. Sanjay Gupta

Prof. Sanjay Gupta is a Professor of Transport Planning at School of Planning and Architecture New Delhi with 39 years of experience. He is also Coordinator of the Centre for Urban Freight Studies (CUFS) and Centre for Shared & Electric Mobility at SPA New Delhi. He was awarded Commonwealth Academic Fellowship in 2012 at Institute for Transport Studies, University of Leeds (U.K) where he served as a Visiting Professor for two successive terms during 2013-2019.

He has been involved as Co -Team Leader in two prestigious international research projects namely CLIMATRANS related to transport and climate change issues in Indian cities in collaboration with Institute of Transport Economics (TOI), Norway (2014-2018) and UNDERREFORM (2018-19) project related to urban governance and its impact on mobility patterns and transport policy in Smart Cities with Leeds University (U.K) and Birmingham University (U.K) respectively. He also has been involved in several prestigious institutional consultancy assignments in the field of urban transport. He has been an expert member on the Expert Appraisal Committee (EAC) (Infra –II), Ministry of Environment, Forest and Climate Change, Government of India besides member, State Expert Appraisal Committee (SEAC), Ministry of Environment, Government of Delhi in the past besides being a member of the Jury for selection of National Awards for Urban Transport, Ministry of Urban Development, GoI (2011-18). He is a member on Delhi DDA's UTTIPEC expert technical Committee as well as CUMTA Chennai respectively related to urban transport and mobility related policy matters. He has been also a former Honorary Secretary of Institute of Urban Transport, India and has been actively associated in its various capacity building initiatives in the field of Urban Transport for several years till date. He has delivered several invited capacity building lecture

talks at leading academic and policy institutes both within and outside country including in UNESCAP capacity building programmes at Colombo and Bhutan.

Speaker 5: Ar. Alka Arya

Ar. Alka Arya is a visionary leader in urban planning with over two decades of experience in shaping the structural and strategic future of India's capital and regional landscapes. A Silver Medalist in Architecture from the IPS Academy, Indore, she further refined her expertise with a Master's in Regional Planning from the prestigious School of Planning and Architecture (SPA), New Delhi. This robust academic foundation bridges the technical rigor of structural design with the strategic foresight required for large-scale regional planning.

Her professional journey began in the private sector with global leaders such as Scott Wilson India and Cushman & Wakefield. During this tenure, she was instrumental in high-impact initiatives, including the feasibility study for the Kundli-Manesar-Palwal (KMP) Expressway corridor. Her work spanned the breadth of India—from the urban extensions of Ranchi to the commercial corridors of Jaipur and Chandigarh. Notably, in 2007, she represented India's technical excellence at the India-China Technical Exchange Programme in Shanghai, gaining a deep understanding of global market dynamics and complex development norms.

In 2009, Ar. Arya transitioned into public service with the Delhi Development Authority (DDA) under the Ministry of Housing and Urban Affairs. Currently serving as Director (Planning), she has played a pivotal role in projects that define modern Delhi, including the development of Dwarka and Rohini, and the formulation of groundbreaking Land Pooling and Transit-Oriented Development (TOD) policies. Most significantly, she has been a key figure in preparing the Master Plan for Delhi-2041, a document destined to guide the city's growth for the next two decades.

Beyond policy frameworks, Ar. Arya is distinguished by her unique personal philosophy rooted in her Arya Samaji background. A staunch advocate for "Spiritualizing our Sciences," she believes in integrating Vedic science into modern urbanism to expand both materialistic and spiritual horizons. Her approach seeks not only to build resilient cities of steel and glass but to create environments where humanity can coexist harmoniously and blissfully with the universe.

Speaker 6: Dr. Mahfuzuar Rahman Barbhuiya

Dr. Mahfuzuar Rahman Barbhuiya, also known as Mehfuz Rahman, is an accomplished academic and professional specializing in architecture, urban planning, and sustainability, currently serving as an Assistant Professor at the Netaji Subhas University of Technology (NSUT), Delhi. His distinguished academic pedigree includes a PhD from IIT Kanpur, a Master's in Urban and Rural Planning from IIT Roorkee, and a Bachelor's in Architecture from NIT Bhopal. A recognized expert in climate-resilient infrastructure, Dr. Barbhuiya is both an IGBC Accredited Professional and a GRIHA Certified Professional, with research focused on resilience and sustainability in the tourism and urban water management sectors. His data-driven approach is supported by a diverse skillset in Statistical Modelling (SEM), Python, and GIS, leading to numerous publications in high-impact SCI-indexed journals.

Beyond his academic roles, he contributes his expertise as an advisor and consultant for organizations such as IFACET, IIT Kanpur, and EHM Consultancy, notably working on major national initiatives like the Jhansi and Kanpur Smart City Projects. His career is marked by significant global and national accolades, including Graduate Scholar Awards from Imperial College London and UCLA, an All India Rank of 95 in GATE 2013, and a 0.01% merit certificate in Mathematics from the CBSE board. Furthermore, his influence extends to academic governance and professional review, serving as a member of the Board of Studies for Chitkara University and on review committees for the Institute of Town Planners, India (ITPI).

Speaker 7: Dr. Tanaya Verma

With an illustrious career spanning over 25 years in the field of Architecture and Design, Dr. Tanaya Verma brings with her a rich and diverse experience across the key pillars of teaching, academic administration, and accreditation. Known for her passion for creativity and excellence, she is widely respected for her strong communication skills, leadership abilities, and effective administrative acumen. Energetic, self-motivated, and dependable, she is regarded as a committed leader and a true team player. Currently, Dr. Tanaya Verma serves as the Dean of the School of Architecture and Design at K.R. Mangalam University, Gurgaon, where her focus remains on delivering quality education while fostering the academic and professional growth of both students and faculty members.

Over the years, she has played a pivotal role in conceptualizing and implementing comprehensive curricula for a wide range of programs—from Bachelor of Architecture to specialized disciplines such as Interior Design, Fine Arts, Game Design, Animation, and UX/UI Design. Her leadership roles as Dean, Director, Academic Head, and NAAC Coordinator have strengthened her expertise in institutional governance, examinations, accreditation, faculty development, outreach planning, and academic marketing. She strongly advocates the integration of contemporary, practice-oriented components into academic frameworks, ensuring alignment with NEP-2020 guidelines and the norms of the Council of Architecture.

Beyond administration, Dr. Tanaya Verma's academic passion lies in research and innovation, with focused work in Passive Design, Vernacular Architecture, and Architectural Pedagogy. At present, she is guiding six PhD scholars, with three doctoral candidates already awarded their degrees under her mentorship. Her scholarly contributions include Scopus-indexed research publications and granted patents, with several more currently in the pipeline. She has also made noteworthy contributions at the national level by representing the Council of Architecture, actively participating in the planning and conduct of NATA examinations and in the inspection of architectural institutions across the country.Her professional journey reflects a deep commitment to academic excellence, impactful research, and institutional development. Continuously seeking dynamic and intellectually stimulating environments, Dr. Tanaya Verma remains dedicated to lifelong learning and professional growth.

Speaker 8: Prof. Dr. Siddhartha Koduru

Dr. Koduru is currently serving as a Professor at the School of Architecture, Anant National University, Ahmedabad. Over the years, he has worked with several reputed institutions across India and has played an important role in strengthening architectural education by bringing together design, sustainability, and emerging technologies. Talking about his academic background, Dr. Koduru has completed his PhD from Jadavpur University, Kolkata, with a specialization in Energy Studies in the Built Environment. He holds a Master of City Planning from IIT Kharagpur and a Bachelor of Architecture from JNTU Hyderabad.

In his leadership journey, Dr. Koduru has held many key administrative positions. He served as the Director at Amity School of Architecture and Planning, Kolkata, where under his leadership the institution achieved an impressive 25th rank in NIRF 2024 in the Architecture and Planning category. He has also been the Director of the University Institute of Design at Chandigarh University, and has worked as an Associate Professor at Manipal University Jaipur and Chitkara University.

One of the most inspiring aspects of Dr. Koduru's work is his contribution to digital transformation in architecture education. He has been instrumental in setting up advanced laboratories under the Atal Incubation Center at Manipal University Jaipur, including AR and VR Labs and Design Augmentation and Fabrication Labs. His work beautifully connects traditional architectural thinking with modern tools like GIS-based planning, energy-efficient design, and 3D printing.

Dr. Koduru has also contributed at the national level as a Primary Evaluator for ToyCathon 2021, organized by the Ministry of Education, Government of India. He is a registered member of the Council of Architecture (COA) and the Institute of Town Planners, India (ITPI). He has led important consultancy projects as well, including GIS-based Master Planning for Urban Local Bodies in West Bengal.

Speaker 9: Ar. Punit Sethi

With more than 35 years of professional experience, Ar. Punit Sethi is a highly respected name in the field of architecture and planning. Over the years, he has successfully led large and multidisciplinary teams and has been involved in delivering a wide range of projects with great competence and vision. His professional work covers Master Plans and Development Plans, as well as Hospitals, Institutional Campuses, Commercial, Industrial, Residential, and Recreational projects, along with detailed interior works. This wide-ranging portfolio reflects his strong ability to work at both large planning scales and detailed design levels. The trust of his repeat clients and the respect of his peers clearly speak of his professional integrity and excellence.

Beyond professional practice, Ar. Punit Sethi has made significant contributions to the architectural profession through leadership roles in reputed organizations. He has been actively associated with the Indian Institute of Architects and the Council of Architecture, contributing to the growth and ethical standards of the profession. He is also a Registered Valuer with the Insolvency and Bankruptcy Board of India and is associated with professional valuation bodies, reflecting his strong technical expertise. His commitment to sustainable development is evident through his involvement with the ASSOCHAM GEM Green Building Council, where he actively supports environmentally responsible practices in the built environment.

Ar. Punit Sethi has also contributed meaningfully to the healthcare infrastructure sector through his association with the Indian Confederation for Healthcare Accreditation, ensuring that healthcare facilities meet high national and international standards. As a recognized Town Planner with the Institute of Town Planners, India, he brings a holistic understanding of cities, planning, and built environments. Deeply connected to academics, he remains closely associated with his alma mater, the School of Planning and Architecture (SPA), New Delhi. He has served as the Immediate Past Chairman of the SPA Alumni Association and continues to guide young minds as a Visiting Faculty at the Department of Architecture.

Ar. Punit Sethi is a Registered Architect, Registered Valuer, mentor, and thought leader, whose career reflects dedication, experience, and a strong commitment to shaping responsible and sustainable built environments.

Speaker 10: Ar. Tanushree Das

Ar. Tanushree Das, a distinguished architect and academician with over two decades of experience spanning professional practice, research, and academic leadership. She currently serves as Professor and Principal-in-Charge at the Gateway College of Architecture and Design, Sonipat. Ar. Das holds a Bachelor of Architecture from Jadavpur University and a Master's degree in Building Engineering and Management from the School of Planning and Architecture, New Delhi. She is presently pursuing her PhD at SPA, New Delhi, with her research focusing on architectural design quality.She is an architect, an IGBC Accredited Professional, a GRIHA Certified Professional, and also serves as a GRIHA Evaluator for both architectural and project management categories. With over a decade of professional practice, Ar. Das has been associated with several landmark projects, including hospitality and heritage developments such as the Ganga Kutir resort, heritage hotel restorations in Kolkata, commercial projects like the Ecospace Business Park, and residential and specialized design projects for organizations such as the Ambuja Neotia Group and Tata Metaliks.

In academics, she has held key leadership roles at KL University and Amity University. Her research work, published in international journals, explores design quality indicators in educational environments, cultural heritage management and sustainability, and post-pandemic resilience in the built environment. She was also the recipient of the Best Paper Award at the 2023 Chitkara University Doctoral Consortium. With her rare combination of industry experience, academic depth, and research insight, Ar. Tanushree Das brings a holistic and contemporary perspective to architectural education and practice.



