



COUNCIL OF ARCHITECTURE
TRAINING AND RESEARCH CENTRE
BHOPAL

in
collaboration
with

R V COLLEGE OF ARCHITECTURE
VISHVESVARAYA TECHNOLOGICAL UNIVERSITY
BENGALURU



ARCHITECTURE & CLIMATE CHANGE

Tracing Diverse Paths Towards a Common Goal

5 Day Online Faculty Development Program
6th to 10th June 2022 [2 pm to 5 pm]
Last date to register: 1st June 2022

India is witnessing unprecedented rapid urbanisation and multiple studies have projected nearly 52% of total national population will be residing in urban areas by the year 2050. This demographic transition is accompanied by the growth of cities and the built environment. However, cities, despite their capability to accommodate 50% of global population on 2% land area and generate 70% of GDP, they account for more than 60% of global energy use, 70% of greenhouse gas emissions and 70% of global waste. The global crisis of climate change, brought upon by growth and consumption, and its imminent climate impact has compelled every nation to re-look at its development model. In CoP 26 summit (2021), the Indian government has committed to Net-zero emissions target by 2070. Addressing climate change and achieving Net-zero targets, at a national level, is a multi-sectoral agenda. Recent studies have found that the building sector alone contributes to 32% of total carbon emissions in India. Globally, 11% of carbon emissions are from building material and construction and 28% from building operations (2019). Although these numbers will differ for a developing country like India, it is vital to address various means to decarbonisation in the building sector considering the projected urban growth and emission targets for the country. This FDP intends to bring forth architects' role within the big picture, inform key concepts and understand various means to mitigate carbon emissions and address climate change in professional practice.

Convened by

Dr. Navneet Munoth

Honorary Director
COA-TRC, Bhopal

Coordinator

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KEY TAKEAWAYS

- * Overview of key concepts in climate change and built environment
- * Important Theoretical frameworks of different approaches to reduce carbon emissions in Architecture
- * Varying means of application to mitigate carbon emissions in Professional Practice

REGISTRATION FEE

Academicians & Professionals: **Rs.3000/-**

PhD & Post Graduate Students[Below 40yrs of age]: **Rs. 2000/-** [Limited seats]

Registration Link:

<https://forms.gle/sYpy3gm4mkda29VN8>

Payment Link:

<https://eazypay.icicibank.com/eazypayLink?P1=sRyz9kTACSNepnR3I+VJaQ==>

Kindly mail the scanned images of proof of payment to coatrc.bhopal@gmail.com to get registration confirmation.

Virtual meeting link [Zoom Platform] will be shared after registration by email.

E-Certificate of the Faculty Development Program

shall be sent by email on registered email id of the participant upon successful completion of the program i.e., by attending all sessions and completing MCQ test[conducted on the last day]

THEMES

NET ZERO APPROACH

Ordained with an overarching goal to improve the environment, the Net Zero approach refers to consuming only as much energy as is produced, achieving a sustainable balance between water availability and water demand, and eliminating solid waste sent to landfill. Designing for Net Zero Energy building is a popular contemporary approach, one which produces, from renewable resources, as much energy on site as is used over the course of a year.

MATERIAL ECOLOGY

The ecological disturbance from resource extraction for popular building materials like cement and steel is enormous. In addition, their extraction & manufacturing process alone contributes to nearly 11% of global carbon emissions. Appropriate strategies including choice of building materials, their procurement and efficient use can significantly contribute to lower embodied carbon buildings.

RE-THINKING & INNOVATION

The Climate crisis has compelled architects to introspect conventional approaches to architecture. The crisis calls for a fresh look at various facets of the built environment that mitigate environmental impact and promote healthy ecosystems.

SPEAKERS

Ar. Sachin Mulay

Senior Associate Architect

Perkins Eastman, Mumbai

Between Scale, Comfort & Aesthetics

Kirti Makhija

Associate

cBalance Solutions, Mumbai

Climate Justice & The Built Space

Ar. Suhasini Ayer

Principal Architect

Auroville Design Consultants, Auroville

Sustainability by Design-Case Study: Humanscapes Habitat Project, Auroville

Ar. Manoj Patel

Principal Architect

Manoj Patel Design Studio, Vadodara

Clay Potentials for Urban Cooling

Er. Rohit Ranjan

Research Engineer

Himalayan Institute of Alternatives, Ladakh

Going beyond sustainability with Passive Solar Heated Straw-Clay Buildings for Mountain Deserts

Er. Rakesh Koti

Head of Sustainability

Organo Eco-Habitats, Hyderabad

Organo's Net Zero Approach to Water Balanced Eco-Communities

Ar. Minni Shastry

Sustainability Consultant

Bengaluru

Net Zero Buildings: Mitigation Solutions for Climate Change

Ar. Neelam Manjunath

Principal Architect

Manasaram Architects, Bengaluru

Bamboo in Architecture

Dr. Mahalakshmi Karnad

Associate Professor

R V College of Architecture, Bengaluru

Ecological Impact of Building Materials & their significance

Ar. Pavan Kumar

Architect

L & S Architects, Bengaluru

Contemporary Material Technology: Engineering Local Timber for Building Structures