

# An International Conference on Civil, Materials and Environment for Sustainability (ICCMES 2024)

Conference Date 4<sup>th</sup> & 5<sup>th</sup> October 2024

## Call for papers

Prepare to immerse yourself in a pivotal event dedicated to sustainability. We proudly announce the forthcoming International Conference on Civil, Materials, and Environment for Sustainability (ICCMES 2024). This esteemed gathering aims to furnish a distinctive international platform and forum for esteemed academicians, diligent researchers, seasoned professionals, and ambitious students. The primary objective of ICCMES 2024 is to facilitate the exchange of experiences and ideas pertaining to groundbreaking innovations in design and construction practices, particularly emphasizing the utilization of avant-garde materials. This conference endeavors to play a pivotal role in bridging the prevailing gap between practitioners and academicians, fostering mutual awareness of the latest developments in civil engineering, and disseminating invaluable insights into innovations in structural design, novel construction materials, cutting-edge construction techniques and Environmental sustainability initiatives.

At ICCMES 2024, we're set to feature keynote lectures and plenary speeches by world-renowned speakers, alongside oral presentations from delegates. In order to maximize participation, the conference will be held in a hybrid mode, offering both online and offline attendance options. Additionally, all papers will undergo rigorous peer review, with accepted papers compiled into an extended abstract volume for publication. Two Best Paper Awards will be administered for oral presentations.

## Abstract Submission:

<https://forms.gle/8GrjC11xFJ3tES9L6>

**Selected papers will be published after double-blind peer review in e3s web of conferences Open Access Scopus Indexed proceedings.**



## Organized by:

Department of Civil Engineering, Jaypee University of Information Technology, Wanknaghat, Solan, 173234, Himachal Pradesh, India.

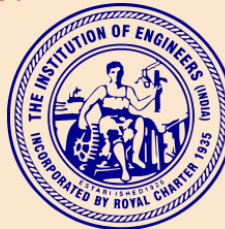
## Partner Institutions:



Indian Geotechnical Society, Shimla Chapter



National Skill Development Forum



Institution of Engineers (India), Shimla Chapter

## Full Length Manuscript Submission:

<https://cmt3.research.microsoft.com/ICCMES2024>

## Important Dates

Last date for Abstract Submission:	<b>30/6/2024-15/7/2024</b>
Intimation of Acceptance of Abstract:	<b>15/7/2024-01/8/2024</b>
The last date of Full Paper Submission:	<b>15/9/2024</b>
Notification of Paper acceptance/Revision Notification:	<b>22/9/2024</b>
Registration Ends on:	<b>3/10/2024</b>

Conference dates: **4<sup>th</sup> -5<sup>th</sup> October, 2024**

<p><b>Dr. Rohit Tiwari</b> School of Civil &amp; Environmental Engineering at UNSW, Sydney, Australia</p> 	<p><b>Dr. Sushil Kumar Himanshu</b> School of Environment, Resources and Development, AIT Thailand</p> 	<p><b>Dr. Hari Narayan Tiwari</b>, Floodkon India LLP Industry Expert on WRE and Flood mitigation</p> 	<p><b>Dr. Anjan Ray</b> Ex-Director CSIR-IIP Industry expert on Sustainable Technology</p> 	<p><b>Dr. Anjani Kumar Shukla</b>, ASCOM Buildcon Pvt Ltd Industry Expert on Structural Health Monitoring</p> 	<p><b>Dr. Kishant Kumar</b>, IIT Ropar Academic and Resource person</p> 	<p><b>Dr. Pankaj Kumar</b>, NIT Nagaland Academic and Resource person</p> 	<p><b>Dr. S. Rao Chitikela</b>, RWCEE solutions Executive — Water, Energy, &amp; EHSS, USA</p> 	<p><b>Dr. Akash Gupta</b>, Scientist CRRI New Delhi Industry expert on Transportation Engineering</p> 	<p><b>Dr. Sanju Purohit</b> Department of Civil Environmental, Akamai University USA</p> 	<p><b>Dr. Anshu Kumar</b>, IIT Palakkad Academic and Resource person</p> 
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# Conference Themes

## **Track 1: Advanced Structural Engineering and Sustainability**

Innovative Design and Analysis Techniques, Advanced Materials in Structural Engineering, Sustainable Construction Practices, Seismic Resilience and Retrofitting, Environmental Impact Assessment in Structural Projects, Advanced Steel Structures, Composite Material Applications, Structural Health Monitoring of Steel Bridges, Seismic Design of Steel Structures, Sustainability in Steel Construction

## **Track 2: Geotechnical and Environmental Innovations**

Soil Mechanics and Foundation Engineering, Environmental Geotechnics, Ground Improvement Technologies, Sustainable Soil and Water Management, Geotechnical Risk Assessment and Mitigation, Soil Dynamics and Earthquake Engineering, Geosynthetics in Geotechnical Engineering, Improvement Techniques, Geotechnical Investigation Methods, Slope Stability Analysis, Geology and its application.

**Track 3: Integrated Construction Management and Technologies:** Project Planning, Control, and Optimization, Digital Construction Technologies, Lean and Agile Construction Practices, Sustainable Project Management, Building Information Modeling (BIM) and Collaboration

## **Track 4: Innovative Materials for Sustainable Infrastructure**

Sustainable Construction Materials, Advanced Composite Materials for Infrastructure, Nanotechnology Applications in Civil Engineering, Bioinspired and Smart Materials, Circular Economy Approaches in Material Selection and Recycling, Nano Materials, rheological investigation of construction materials, Material Testing, Materials Characterization, Next Generation Material, Metamaterials, Metallic Structures, Natural and Green Materials.

## **Track 5: Geospatial Technologies and Applications**

Geographic Information Systems (GIS) and Remote Sensing, Digital Mapping and Spatial Analysis, Geospatial Data Integration for Infrastructure Planning, Monitoring and Management of Natural Resources, Disaster Risk Mapping and Assessment.

## **Track 6: Transportation Infrastructure Planning and Management**

Sustainable Transportation Planning, Intelligent Transport Systems (ITS) and Traffic Management, Urban Mobility Solutions and Transit-Oriented Development, Road Safety Engineering and Accident Analysis, Infrastructure Resilience to Climate Change and Disasters, Pavement Design and Maintenance

## **Track 7: Innovations in Sustainable Infrastructure Design**

Green Building Design and Certification Systems, Climate-Adaptive Infrastructure Solutions, Energy-Efficient and Net-Zero Building Designs, Resilient Urban Infrastructure Planning, Innovative Approaches to Sustainable Urban Development

## **Track 8: Water Resource Management and Hydraulic Engineering**

Water Quality Assessment and Management, Hydrological Modeling and Forecasting, Sustainable Urban Water Management, Hydraulic Structures Design and Optimization, Climate-Resilient Water Infrastructure, Water Quality Management, Solid Waste Management, EIA and Renewable Energy Sources.

## **Track 9: Coastal and Marine Infrastructure Development**

Coastal Zone Management and Conservation, Port and Harbor Engineering, Coastal Erosion Control and Shoreline Protection, Offshore Renewable Energy Technologies, Marine Pollution Monitoring and Management

## **Track 10: Disaster Resilience and Infrastructure Recovery**

Risk Assessment and Mitigation Strategies, Emergency Response Planning and Management, Resilient Infrastructure Design and Retrofitting, Post-Disaster Reconstruction and Recovery, Community Engagement and Capacity Building.

## **Track 11: Advanced Technologies for Civil Engineering**

Building Information Modeling (BIM) and Digital Twins, Artificial Intelligence and Machine Learning in Civil Engineering, Big Data Analytics for Infrastructure Management, Cybersecurity in Critical Infrastructure, Augmented Reality and Virtual Reality Applications, Digital Twin Applications in Structural Health Monitoring, Predictive Maintenance Using Digital Twins, Real-Time Monitoring of Infrastructure Performance

## **Track 12: Energy-Efficient Infrastructure Solutions**

Renewable Energy Integration in Infrastructure, Energy-Efficient Building Design and Technologies, Sustainable Transportation and Mobility Solutions, Smart Grids and Energy Storage Systems, Climate-Responsive Urban Energy Planning

## **Track 13: Nature-Based Solutions for Sustainable Development**

Green Infrastructure, Biomimicry in Structural Design and Urban Ecology, Bio-inspired Materials for Construction, Natural Resource Conservation and Management, Ecosystem-Based Adaptation and Resilience, Indigenous Knowledge Integration in Engineering Practices, Sustainable Land Use Planning and Management, Nature-Inspired Innovations in Urban Planning, Biofabrication Techniques for Sustainable Infrastructure

## **Track 14: Social, Economic, and Policy Aspects of Infrastructure**

Economic Analysis of Infrastructure Investments, Social Equity and Inclusion in Infrastructure Development, Policy Frameworks for Sustainable Infrastructure, Public-Private Partnerships (PPP) and Financing Models, Governance and Regulatory Challenges in Infrastructure Projects

## **Track 15: Ethics, Governance, and Stakeholder Engagement**

Ethical Considerations in Engineering Practices, Stakeholder Engagement and Community Consultation, Corporate Social Responsibility in Infrastructure Projects, Transparency, Accountability, and Anti-Corruption Measures, Legal and Regulatory Compliance in Civil Engineering Projects, Integration of Engineering with Social Sciences and Humanities, Interdisciplinary Approaches to Sustainable Development Goals (SDGs), Collaborative Innovation in Infrastructure Projects, Multi-Stakeholder Engagement for Sustainable Infrastructure



### Keynote Speakers

- **Dr. Rohit Tiwari**, School of Civil & Environmental Engineering, UNSW Sydney
- **Dr. S. Rao Chitikela**, RWCEE Solutions, USA
- **Dr. Sushil Kumar Himanshu**, School of Environment, Resources and Development, Asian Institute of Technology Thailand
- **Dr. Sanju Purohit**, Department of Civil Environmental/ Ecological Studies and Sustainability, Akamai University-USA
- **Dr. Ankesh Kumar**, Department of Civil Engineering, IIT Palakkad
- **Dr. Krishnat Kumar**, Department of Chemical Engineering IIT Ropar

### Plenary Speakers

- **Dr. Hari Narayan Tiwari, PhD - IITR**  
Managing Director Floodkon
- **Dr. Anjani Kumar Shukla, PhD - IITBHU**  
Managing Director ASCOM Buildcon Pvt. Ltd.
- **Dr. Aakash Gupta, Scientist**  
Central Road Research Institute, New Delhi
- **Dr. Pankaj Kumar**  
NIT Nagaland
- **Dr. Anjan Ray**,  
Ex-Director CSIR-IIP

### Dates and Venue

The Conference will be held, from 4th -5th October 2024, at Jaypee University of Information Technology, Wagnaghat, Solan, Himachal Pradesh, India in hybrid mode.

Google map link: <https://goo.gl/maps/Z1fzCWRPfhA2Azjt9>

GPS Coordinates: 31.0166° N, 77.0702° E.

### Registration Fees

Category	Early Bird Registration (On or before 22/09/2024)	Late Registration (On or before 03/10/2024)
	Indian Author	Indian Author
UG/P.G/PhD Students/JUIT Faculty	INR 4000/-	INR 5000/-
Faculty/ Researchers/ Industry persons/ Delegates/ Academicians	INR 5000/-	INR 6000/-
	Outside India	Outside India
UG/ P.G/ PhD Students	USD 100/-	USD 120/-
Faculty/ Researchers/ Industry persons/ Delegates/ Academicians	USD 150/-	USD 200/-
Listener (Without Paper Submission)	INR 2000/-	INR 2500/-

Additional APC Charges Rs 4000/- or 50/- USD per Selected Article for e3s web of conferences Open Access Scopus Indexed proceedings.



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- Logo in social media publication for the event
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- Logo in main e-poster for the conference

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### About the University

Jaypee University of Information Technology, Wagnaghat is Set up by Act No. 14 of 2002 vide Extraordinary Gazette notification of Government of Himachal Pradesh dated May 23, 2002. Approved by the University Grants Commission under section 2(f) of the UGC Act, vide letter no. F.9-10/2002(CPP-I) dated 09 Dec. 2002. At present, 06 UG and 08 PG courses are being offered in engineering. The University is offering Ph.D. in Bioinformatics, Biotechnology, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Humanities & Social Sciences, Mathematics and Physics & Materials Science.

### About the Department

Civil Engineering Department has been accredited by National Board of Accreditation (NBA) since 2008. It is running three full-time PG programmes (Structural Engg; Construction Management; Environmental Science & Engineering) along with UG programme in Civil Engineering and Civil Engineering with Computer Application. In addition, a Ph.D. degree is offered in the areas of Geotechnical Engineering, Structural Engineering, Construction Management, Hydropower Engineering, Environmental Engineering and Water Resources. The department has the state of art facilities for pursuing various R & D activities. The Department is actively engaged in providing consultancy services and training programs to different government and private sectors in and around Himachal Pradesh and Haryana.

### International Advisory Committee

- **Dr. Rohit Tiwari**, School of Civil & Environmental Engineering, UNSW Sydney
- **Dr. S. Rao Chitikela**, RWCEE Solutions, USA
- **Dr. Sushil Kumar Himanshu**, School of Environment, Resources and Development, Asian Institute of Technology, Thailand
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- **Prof. Nagarajan Ramasamy**, Director | Curtin Malaysia Research Institute
- **Dr. Sanju Purohit**, Department of Civil Environmental/ Ecological Studies and Sustainability, Akamai University-USA
- **Dr. A.T.M. Shakhawat Hossain**, Jahangirnagar University, Bangladesh.

### Address for correspondence

For sending a copy of the registration form, and Full-length paper:

**Dr. Saurav, Ph.D.**

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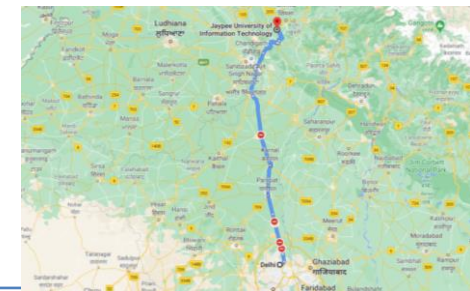
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Dean Academics & Research, Department of Civil Engineering, Jaypee University of Information Technology, HP, India

- **Prof. Dr. Ashish Kumar**  
Head, Department of Civil Engineering, Jaypee University of Information Technology, HP, India

#### Conference Chair

- **Dr. Saurav**  
Department of Civil Engineering,  
Jaypee University of Information Technology
- **Dr. Tanmay Gupta**  
Department of Civil Engineering,  
Jaypee University of Information Technology

### Location Map of University



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