KEY NOTE SPEAKERS



Dr. Kahar Osman Professor of Mechanical Engineering University Teknologi Malaysia.



Dr. Kuaanan Techato Dean of Faculty of Environmental Management, Prince of Songkla University, Hatyai, Thailand.

PUBLICATION

All the accepted and presented papers will be published in scopus indexed journals / proceedings as per the theme of the paper after the peer-review comments, consent from the authors and payment of publication fees. The authors are responsible for preparing the manuscript according to the journal guidelines for possible publication.

Dr. Krishna R. Reddy,

Environmental Engineering,

Department of Civil Engg.,

Dr. A.G. Apparao

IIT Madras, Chennai

Professor,

Prof. & Director, Sustainable Engg.

University of Illinois, Chicago, USA.

Research Laboratory, Civil, Materials &

- 1. Materials Science Forum (ISSN : 1662-9752)
- 2. Key Engineering Materials (ISSN : 1662-9795)
- 3. Defect and Diffusion Forum (ISSN : 1662-9507)
- 4. Solid State Phenomena (ISSN : 1662-9779)

IMPORTANT DATES

Last date for submission of Abstract	: 5 th February 2023
Abstract Acceptance Notice	: 7 th February 2023
Last date for Submission of full Manuscript	
Manuscript acceptance notification	: 20 th March 2023
Early bid Registration ends	: 27 th March 2023
Conference Dates	: 5 th & 6 th April 2023

REGISTRATION FEES

Category	Conference Registration Fee
Early Bird Before 27th March 2023 (Indian Participants)	1500 INR +Publication Charge*
Regular (Indian Participants)	2000 INR +Publication Charge*
Early Bird Before 27th March 2023 (Foreign Participant)	50 USD +Publication Charge*
Regular (Foreign Participant)	70 USD +Publication Charge*

^{*}Publication charge tends to change the preference for the publication *500 INR deduction in registration fee will be given for members of ISTE ACCOMMODATION

Accommodation can be arranged in the nearby hotels for the interested delegates, on advance payment to the conference secretariat. A list of quality hotels with tariff, within 5 KM radius from NGP iTECH is provided in the conference website.

MODE OF PAYMENT

NET Banking with the relevant information furnished is provided in the conference website.

CONFERENCE SECTETARIAT

CHIEF PATRONS

Dr. Nalla G. Palaniswami Chairman, KMCH

Dr. Thavamani D. Palaniswami Secretary, NGP iTECH

PATRONS

Dr. O. T. Buvaneswaran CEO, KMCRET

Dr. S.U. Prabha Principal, NGP iTECH

CONVENOR(S) & ORGANISING SECRETARY

Dr. S. Nandhakumar Professor & Head, Mechanical Engineering

NGP iTECH

Dr. P. Muthupriya Professor & Head, Civil Engineering NGP iTECH

CO-ORDINATOR(S)

Dr.M. Nallusamy, ASP / Mechanical Engg. Dr. E. Prabakaran, AP (Sr.G) / Civil Engg.

STEERING COMMITTEE

Dr. M. Veerapathran, AP (SI.G) / Civil Dr. P. Gopikrishnan, AP (SI.G) / Mechanical Dr. M. Senthil Rajan, AP / Civil Dr. D. Vasanthkumar, AP / Mechanical Mr. R. Vijayakumar, AP / Mechanical Mr. P. Ashokkumar, AP (Sr.G) / Mechanical Mr. S. Rajkumar, AP (Sr.G) / Mechanical Mr. M. Suriyaprakash, AP (Sr.G) / Mechanical Mr. C. Selvakumar, AP / Mechanical Mr. V. P. Pradeep, AP (Sr.G) / Mechanical Mr. K. Kiran, AP / Mechanical Mr. R. Karthikeyan, AP (Sr.G) / Mechanical Mr. P. Janarthanan, AP (Sr.G) / Mechanical Mr. S. DharagaVineeth, AP / Mechanical Mr. K. V. Boobala Krishnan, AP (Sr.G) / Civil Mr. G. Ramesh Kumar, AP (Sr.G) / Civil Mr. K.M. Manoj, AP (Sr.G) / Civil Mr. B. Vigneshkumar, AP / Civil Mr. V. K. Shankar, AP / Civil





Dr. N.G.P. Institute of Technology (An Autonomous Institution)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai Recognized by UGC & Accredited by NAAC with A+ Grade & NBA (BME, CSE, EEE, ECE & Mechanical)

SECOND INTERNATIONAL CONFERENCE

on

SUSTAINABLE DESIGN, MATERIALS & MANUFACTURING IN ENGINEERING

ISDMME 2023

5th & 6th April, 2023



Organized by Department of Civil & Mechanical Engineering Dr. N.G.P. Institute of Technology, Coimbatore - 641048

Sponsored by



Indian Society for Technical Education (ISTE) New Delhi

CONFERENCE TEHME

In the present scenario, the people, industries and society are moving towards sustainability in all aspects to retain the resources for future generation. Businesses are initiating and viewing sustainability as the new frontier of innovation, with technological advances leading to the reshaping of industries. Through these innovative technologies and solutions, the industries are gear up their sustainable transition to achieve their requirements. In order to support the global requirements, the Second International Conference on Sustainable Design, Materials and Manufacturing in Engineering (ISDMME-2023) is being organized to realize the technological developments in the areas of Design, Materials and Manufacturing Engineering for a sustainable future. The objective of this conference is to bring together experts from academic institutions, industries and research organizations and professional engineers for sharing of knowledge, expertise and experience in the emerging trends related to sustainability.

The conference is structured with plenary lectures followed by parallel sessions. The plenary lectures introduces the theme of the conference delivered by eminent personalities of international repute Each parallel session starts with an invited talk on specific topic followed by contributed papers. Papers are invited from the prospective authors from industries, Academic Institutions, R&D organizations and from Professional Engineers. This conference brings Academicians, Industrial Experts, Researchers and Scholars together from areas of Civil and Mechanical Engineering. The topic of interest includes sustainable Design, Materials and Manufacturing engineering in the areas of both Civil and Mechanical Engineering. This conference will provide a platform for learning, exchange of ideas and networking with fellow colleagues and participants across the globe in the field of both Civil and Mechanical Engineering.

Conference Objectives

This conference ISDMME-2023 will pave a way to understand the latest technological and innovative advancements especially in the fields of manufacturing, design and materials engineering. The conference will develop solutions to physical problems, questions how things work, make things work better, and create ideas for doing things in new and different ways in the manufacturing, design and materials engineering. The conference focuses on the frontier themes of recent advances in manufacturing, design and materials engineering, as applied to multiple disciplines of engineering. Researchers, Academicians Industrialist and Students will be benefitted with the latest trends and developments in design, materials and manufacturing engineering applied to various disciplines of engineering. The objective of the conference is to have the orientation of research and practice of professionals towards attaining global supremacy in manufacturing, design and materials in engineering. Also this conference aims in understanding the recent trends in manufacturing, design and materials engineering including optimization and innovation. This conference ISDMME- 2023 also aims in improving Research culture in the minds of faculty in exploring the knowledge base, establishing better insights and maintaining dynamism in the teaching - learning process.

ABOUT THE INSTITUTION

Dr. N.G.P. Institute of Technology (An Autonomous Institution) established in the year 2007 is located in Coimbatore, Tamil Nadu. It is run by Kovai Medical Center Research and Educational Trust, Coimbatore. The Chairman Dr. Nalla G. Palaniswami and Secretary Dr. Thavamani D.Palaniswami are basically medical practitioners by profession, started this Institution with the vision of imparting quality technical education.

The Institute is approved by All India Council for Technical Education (AICTE) and affiliated to Anna University, Chennai. It is also recognized by UGC under Section 2(f) and 12(B), accredited by NAAC with A+ (3.36 out of 4) and eligible programmes are accredited by NBA (BME, CSE, ECE, EEE and Mechanical).

The Institute offers 8 Under Graduate Programmes in BE - BME, CSE, Civil, ECE, EEE and Mechanical and B.Tech - IT and AIDS. It also offers 5 Post graduate Programmes namely ME - Engineering Design, Computer Science and Engineering, Embedded Systems Technologies, Power Electronics and Drives along with MBA. The Departments of CSE, ECE, EEE and Mechanical Engineering are Recognized Research Centres of Anna University, Chennai. The students are passionately mentored by 183 faculty members out of which 68 faculty members are holding their Ph.D Degree and 69 are pursuing their Ph.D.

The Institute is located within a serene green campus and has well planned infrastructure. The institute also established center for e-learning, TLC and digital library to enrich teaching-learning process. Through AICTE funded IIPC, the Institute established industry powered centers like Center for Robotics e-Yantra, Texas Instruments Center, NI LabVIEW Academy, etc., to train the students on emerging technologies.

In order to bridge the gap between industry and academia MoUs have been signed with SIEMENS Ltd, Oracle Corporation, CISCO Systems Inc, Texas Instruments, IBM India Pvt. Ltd., National Instruments, CODISSIA, Siemens Healthcare Pvt. Ltd., KEF Infrastructure India Pvt. Ltd. etc.

Our Vision

To empower the students for succeeding in a changing world to become productive engineers and responsible citizens.

Our Mission

The stated vision of the institution will be achieved by: MI1: Producing graduates with sound technical knowledge and skills in diverse engineering disciplines. MI2: Adopting innovative teaching and experiential learning practices by competent faculty. MI3: Enhancing knowledge and skills in cutting edge technologies through alliances with industry and research organizations. MI4: Creating conducive learning environment with state-of-art infrastructure and laboratories. MI5: Inculcating ethical standards among students, both societal and personal through outreach programs.

Call for Papers

Authors from India and abroad are invited to submit original unpublished research articles relevant to the theme of the ISDMME -2023 conference. ISDMME -2023 endeavor to publish high quality original research papers, review papers, case studies, and technical notes. All papers in the conference will have to undergo rigorous peer review process.

Discussion Topics

Topics of interest include, but are not limited to, the following

Sustainable Materials

- ℘ Smart Materials & Applications
- © Characterization of Alloys and Composites
- Polymer Synthesis & Processing Techniques
- Application Oriented Hybrid
- Application Oriented Sandwich Composites
- ℘ Nano & Bio composites
- ℘ Amorphous Materials
- Ø Biomaterials
- ℘ Polymers/FRP
- © Superconducting Materials
- ℘ Super plastic Materials
- © Thin Film Chalcogenide Photovoltaic Materials
- Ø Tool Materials
- © Two Dimensional Materials
- Ø Hard/Soft Magnetic Materials
- © Sustainable Construction Materials
- © Concrete Repair and Structural Strengthening
- Ø Plastic Roads
- ℘ Green Building

Sustainable Design

- © Kinematics and Dynamics
- 😥 Engineering Analysis : Theoretical, Experimental & Numerical Fatigue, Fracture and Life Cycle Analysis 🖉 Optimization of Water Resource Systems
- Ø Vibration, Acoustics and Condition Monitoring
- © Thermal systems & Analysis
- Product Design & Development
- © Design and Behavior of Equipment and Tools
- Advanced Construction Techniques
 Advanced Construction
 Advanced Construction
 Advanced Construction
 Advanced Construction
 Advanced Construction
 Advanced
 Adva
- Advanced Earthquake Resistant Techniques
- ℘ High Rise Buildings

- © Stabilization of Soils

- © Surface Engineering for Manufacturing Process
- © Precision & Mechatronics Engineering
- © Rapid Manufacturing & Technology

Non-conventional Machining Processes

- Ø Machine Tools & Maintenance
- © Manufacturing Innovations

Sustainable Manufacturing

© Chemical Analysis

Ø Hybrid Machining

Ø Materials Synthesis

© Powder Metallurgy

Ø High-Speed Machining

Ø Material Characterization

© Processing and application

℘ Welding & Casting Technique

© Surface Treatment and Machining

φ Additive Processing and Joining Technologies

℘ Advanced Metal Forming & Bending

- © CAD/CAM/CAE & Robotics
- ℘ Flexible & Web Based Manufacturing
- © Fibre Reinforced Concrete
- Ø Fibre Use in Constructions
- Ø Hazardous Waste Management
- © Disaster Management
- © Low-Cost Housing
- ℘ Nanotechnology in Civil Engineering
- Geotextiles
- © Green Concrete
- Geographical Information System & Remote Sensing
- Intelligent Transport System (ITS)
- Modern Air Pollution Control Technologies
- Ø Environmental Impact Assessment
- Application of Total Station In Civil Engineering
- © Earthquake Resistant Structural Design

INTERNATIONAL ADVISORY COMMITTEE

Dr. Matthew Franchetti Professor, The University of Toledo, Ohio. Dr. Sandro C. Amico Professor, Universidade Federal do Rio Grande do Sul. Brazil. Dr. Esther Titilayo Akinlabi Professor, University of Johannesburg, South Africa. Dr. Kuaanan Techato Prince of Songkla University, Hatyai, Thailand. Dr. Sunday Ayoola Oke University of Lagos, Nigeria. Dr. B.W. Ikua Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.

NATIONAL ADVISORY COMMITTEE

Dr. D. Chakradhar Indian Institute of Technology, Palakadu, Kerala. Dr. M. Chandrasekaran NERIST (DU) Nirjuli, Itanagar, Arunachal Pradesh. Dr. S. Vinodh National Institute of Technology, Trichy, Tamilnadu. Dr. P. Thanikaivelan Chief Scientist, CSIR-Central Leather, Chennai. S.R. Devadasan PSG College of Technology, Coimbatore, Tamilnadu. Dr. Y. Ravikumar National Institute of Technology, Warangal, Telengana. Dr. Rajesh Ranganathan Coimbatore Institute of Technology, Coimbatore, Tamilnadu. Dr. B. Ravisankar National Institute of Technology, Trichy, Tamilnadu. Dr. T. Ram Prabhu Deputy Director / Scientist, Defence R & D Organization. Dr. TV. Arjunan Guru GhasidasViswavidyalaya (Central University), Bilaspur (C.G). Dr. Koka Naga Sai Suman Andhra University, Andhra pradesh. Dr. S. Aravidhan Indian Institute of Technology, Delhi. Dr. G. Mohan Ganesh Vellore Institute of Technology, Vellore. Dr. A. Sudhahar, Principal Consultant, M/s.Dimensions Structural Designs, Coimbatore.

Dr. Kahar Osman Professor, Universiti Teknologi, Malaysia. Dr. Saroj Gyawali Kathmandu PSU University, Nepal. Dr. Felix T. S. Chan The Hong Kong Polytechnic University, Hongkong. Prof. Khalifa Al-Jabri Sultan Qaboos University, Oman. Dr. S. Neelamani Kuwait Institute for Scientific Research, Kuwait. Dr. Mubarak Khamis Al Alawi Sultan Qaboos University, Sultanate of Oman.

Dr. K. Soorya Prakash Anna University, Regional Campus, Coimbatore. Dr. Shalij P. R, Dean Research, APJ Abdul Kalam Technological University, Kerala. Dr. L. S. Jayagopal, Managing Directore, M/s.Mithran Strucutres (P) Ltd., Coimbatore. Prof. Neelima Satyam Indian Institute of Technology Indore, Madhya Pradesh. Dr. G. Prince Arulraj Karunya Institute of Technology and Sciences, Coimbatore. Dr. Bibhuti Bhusan Das National Institute of Technology Karnataka, Surathkal. Dr. R. Senthil Anna University, Chennai. Dr. Sreevalsa Kolathavar National Institute of Technology Karnataka, Surathkal. Dr. R. Thenmozhi Government College of Technology, Coimbatore. Dr. V.G. Srisanthi Coimbatore Institute of Technology, Coimbatore. Dr. G. S. Venkatasubramani, Managing Director, M/s. SG Structural Engineers, Coimbatore. Dr. Leon Raj, CSIR -NEIST, Jorhat, Assam. Dr. Santhosh Tamang, NERIST (DU) Niriuli, Itanagar, Arunachal Pradesh. Dr. Jessy Robby, Professor, Hindustan Institute of Technology and Science. Chennai.

FOR FURTHER INFORMATION

The Convenor **ISDMME - 2023** Department of Civil & Mechanical Engineering

Dr. N.G.P. Institute of Technology

(An Autonomous Institution)

Kalapatti Road, Coimbatore – 641048

Contact : +91 422 2369105 | + 91 96775 32565 | +91 99524 46391

E-mail : isdmme2023@drngpit.ac.in

Web : https://www.conference.drngpit.ac.in/ISDMME 2023/index.php