

## IMPORTANT DATES

Abstract Submission Link Opens on : **2<sup>nd</sup> May 2022**  
Manuscript Submission Link Opens on : **1<sup>st</sup> July 2022**  
Conference Registration Begins : **1<sup>st</sup> January 2023**  
Registration Closes on : **31<sup>st</sup> January 2023**  
Conference Date : **24<sup>th</sup> – 26<sup>th</sup> March 2023**

## REGISTRATION

It is mandatory that at least one author of all accepted papers have to register for the conference to ensure that the paper is included in the proceeding. Only registered authors are allowed to present their papers. Registration fee covers conference kit, access to all sessions, journal processing fee, coffee/tea, working lunch and welcome dinner. Accommodation on payment basis will be arranged on request in VIT Hostel or Hotels in Vellore. Please refer to ICMMM-VIT Website for tariff.

## INTERNATIONAL

Delegates from Academia / Industry / R&D Institutions **US \$350**  
Full time Research Scholars / Students **US \$250**  
Accompanying Person / Co-author **US \$110**

## NATIONAL

Delegates from Industry : INR ₹9000  
Delegates from Academia / Institutions : INR ₹8500  
Research Scholars / Student : INR ₹4500  
Accompanying Person / Co-Author : INR ₹4500  
(Inclusive of all the taxes.)

The registration fee is to be paid by demand draft drawn in favour, **"VIT University" payable at Vellore or through the VIT Portal**. Spot registration is not permitted.

## JOURNAL PUBLICATION

All accepted, registered and presented papers will be published in **Materials Today: Proceedings** by **ELSEVIER LIMITED** which is indexed in **Scopus** and **Conference Proceedings Citation Index – Science (CPCI-S)**

## SPONSORSHIP ADVERTISEMENT AND EXHIBITION COST

An exhibition would be organised to display industrial products in the area of interest and a souvenir will be released.

**Exhibition Booth Rs. 40,000/- each.**

Advertisement in Conference Souvenir:

Outside Back Cover (Colour) : INR ₹75,000/-  
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The host sponsors will be represented on the dais during the inaugural session of the conference. Other Sponsors will be appropriately acknowledged at all platforms.

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# VIT<sup>®</sup>

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

# 4<sup>th</sup> INTERNATIONAL CONFERENCE ON MATERIALS, MANUFACTURING AND MODELLING

## ICMMM-2023

24<sup>th</sup> - 26<sup>th</sup> March, 2023



Jointly Organised by

Vellore Institute of Technology, Vellore, India  
Queensland University of Technology, Australia  
Cranfield University, United Kingdom  
Liverpool John Moores University, United Kingdom  
University West, Sweden  
Universidad Tecnológica de Panamá (UTP), Panama  
University of Tours, France  
Universidade do Oeste de Santa Catarina (UNOESC), Brazil

In Association With



American Society of Mechanical Engineers,  
Vellore Institute of Technology, Vellore, India





## Vellore Institute of Technology (VIT)

Vellore Institute of Technology was founded in 1984 as Vellore Engineering College by the Founder and Chancellor Dr.G.Viswanathan. University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research and extracurricular initiatives.

### Ranking & Accreditation

Vellore Institute of Technology (VIT) has emerged as one of the best institutes of India and is aspiring to become a global leader. Quality in teaching-learning, research and innovation makes VIT unique.

- Recognized as Institution of Eminence (IoE) by Government of India.
- Engineering and Technology subject areas of VIT are the 346th best in the World and the 9th best in India as per QS World University Rankings by Subject 2022.
- NAAC Accreditation with A++ grade in the 4th cycle.
- Ranked among the top 900 Universities of the world, one among the Top 10 and the only private institution of India (Shanghai ARWU Ranking 2021).
- The 12th best institution of India in Research and Engineering categories (NIRF Ranking, Govt. of India 2021).
- Ranked within the top 200 in Asia (QS - Asia University Rankings 2022).

### School of Mechanical Engineering (SMEC)

The School of Mechanical Engineering is amongst the premier schools of VIT functioning right from 1984. The school has five departments with a team of highly qualified faculty members, many holding Ph.D. from the elite institutes across the globe, to teach and train the best minds of this country.

### Strengths of Mechanical Engineering at VIT

- Three of the Bachelor's Degree Programme offered by the School, B.Tech. Mechanical Engineering, B.Tech. Mechanical with Specialization in Automotive Engineering, B.Tech. Production Engineering and B.Tech. Mechanical with Specialization in Energy Engineering are accredited by ABET.
- Sophisticated Laboratories - 30+ Labs and 4 Research Centres DST-FIST sponsored Labs.
- MoUs with Universities abroad & Approval of International PG program through Erasmus+ scheme.
- Significant research funding from International funding agencies such as Erasmus+, DST-UKIERI, Royal Academy of Engineering, Indo-German, Indo-Egypt, BRICS, USIEF.
- Significant research funding from several government agencies such as DST, DRDO, MNRE, CSIR, CVRDE, CPDO, IE, AR&DB, CVRDE, BRNS, ISRO, UGC, NRB, AICTE.

## ABOUT ASME-VIT

ASME-VIT is a Mechanical Engineering student chapter in VIT, India. It was established in 2010 with the help of officials from ASME-INDIA. Our vision is to preach knowledge about the practical applications of Mechanical Engineering concepts, provide a platform for students to develop and showcase their technical skills and most importantly; develop a network of professionals working in the industry. In order to accomplish our vision, **ASME-VIT** has successfully organized symposiums like **INERTIA-2013, MECHNOVATE-2015, ASME GT INDIA Conference-2015, HPVC-2016, SPDC-2016**. **ASME-VIT** has also won the Outstanding Student Section Award granted by **ASME-INNTERNATIONAL** at Asia-Pacific level in August 2016 for its perseverance and overwhelming outreach. **ASME-VIT** will continue its legacy of success and scale new heights in the years to come.

## ABOUT ICMMM

International Conference on Materials, Manufacturing and Modelling (**ICMMM**) is a three day technical event that provides a platform for leading researchers, academicians and industry experts to come together and exchange knowledge and views on global changes in materials, manufacturing and modelling. This event is being jointly organized by the School of Mechanical Engineering (SMEC), VIT in association with American Society of Mechanical Engineers (ASME) Chapter, VIT. It is being planned to organize this event once in every two years and **ICMMM-2023** will be 4<sup>th</sup> in the series which is being scheduled for **24<sup>th</sup> to 26<sup>th</sup> March 2023**. The authors of all accepted papers will be invited to present their work during the conference and subsequently the papers will be published in a Scopus index journal.

## CONFERENCE THEME

Parallel technical sessions will be conducted on different themes on materials, manufacturing and modelling. While the following list is a general guideline for authors, there is flexibility and prospective authors may suggest and include contribution on alternative topics in related fields. All submitted manuscripts will undergo a peer review process to ensure high quality of international standard.

- |   |                                    |
|---|------------------------------------|
| ■ Advances in Materials                 | ■ Metal Alloy Materials            |
| ■ Bio-Materials                         | ■ Metal Alloy Materials            |
| ■ Composite Materials                   | ■ Nano Materials and Technology    |
| ■ Metal – Alloy Matrix Composite        | ■ Polymer Materials                |
| ■ Ceramic Matrix Composites             | ■ Materials Flow Modelling         |
| ■ Polymer Matrix Composites             | ■ Smart and Intelligent Materials  |
| ■ Energy Storage Materials              | ■ Surface Engineering              |
| ■ Environment Friendly Materials        | ■ Metal Additive Manufacturing     |
| ■ Laser Processing of Materials         | ■ Advances in Casting of Materials |
| ■ Super alloys – Processing             | ■ Advances in Metal Forming        |
| ■ Materials and Manufacturing           | ■ Advances in Metal Cutting        |
| ■ Materials Testing and Evaluation      | ■ Materials Modelling              |
| ■ Materials Transport phenomenon        |                                    |
| ■ Microwave Processing of Materials     |                                    |
| ■ Materials Engineering & Manufacturing |                                    |

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**24<sup>th</sup> - 26<sup>th</sup> March, 2023**

### REGISTRATION FORM

Name : \_\_\_\_\_

Title : \_\_\_\_\_

Affiliation : \_\_\_\_\_

Mailing Address : \_\_\_\_\_

Pin : \_\_\_\_\_

Mobile No: \_\_\_\_\_

Email ID : \_\_\_\_\_

a) I would like to participate in the conference

- ☐ with a paper
- ☐ without a paper
- ☐ with accompanying person

b) I would like to take accommodation in

- ☐ Hotels in vellore
- ☐ VIT Hostels

All correspondence should be addressed to

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