VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Mechanical Engineering

organises

A 3 Day Workshop On

Additive Manufacturing Modelling and Simulation Techniques

November 23rd - 25th , 2022

TOPICS COVERED

- Additive Manufacturing
- Design For Additive Manufacturing
- Slicing
- Tool Path Generation
- Slm Simulation
- Opportunities In Additive Manufacturing

About Event

Additive manufacturing (AM) emerges as an important technology and has been used widely across the thermal, manufacturing and design departments. This workshop aims at simulation aspects of AM with real-time scenarios by the relevant speakers from academia and industry. The focus is on the following aspects: (i) usage of proper technology both experimental and simulation CURA (FDM), NETFABB, ALTAIR INSPIRE (SLM) (ii) economic aspects with respect to opportunities in indian market. This programme is beneficial to research scholars and master students who are working in the area of AM. The experts provide the platform to interact and share the knowledge and solve the difficulties faced.

RESOURCE PERSONS

Dr. Chandrasekhar U
NAFEMS

Dr. Vishwas R Puttige
AMACE Solutions Pvt Ltd

Dr. Sanjay Saurabh Nene
IIT Jodhpur

Dr. Sajan Kapil
IIT Guwahati

Dr. Pandithevan P
IITDM Kanchipuram

Mr. Amit Saxena
AMACE Solutions Pvt Ltd

Dr. Srinivasan Narayanan
VIT Vellore

Dr. Ranjeet Kumar
VIT Vellore

Dr. Renold Elsen S
VIT Vellore

Program Objectives

- Upon completion of this workshop, students will be able to:
- To understand the emerging additive manufacturing technologies and applications in a variety of industries.
- Describe the advantages and limitations of each additive manufacturing technology.
- Discuss the economic implications of additive manufacturing in businesses.
- Apply additive manufacturing simulation for time and cost savings.
- Evaluate real-life scenarios and recommend the appropriate use of additive manufacturing.

Hands on Training in:

- RHINO - RHINOCEROS 3D
- CURA
- ALTAIR INSPIRE

WHO CAN ATTEND

Academicians, researchers, graduate students and industry persons who are willing to work in the interdisciplinary areas of Product Development.

REGISTRATION LINK

Registration
1000 /- INR
Excluding GST

https://events.vit.ac.in/

CERTIFICATE

Participants who successfully complete the program will receive a Certificate .

CONTACT DETAILS

Email: vitvelloresmec@gmail.com
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ABOUT VIT

Vellore Institute Of Technology (VIT) was established with the aim of providing quality higher education on par with international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. The campus has a cosmopolitan atmosphere with students from all corners of the globe. Experienced and learned teachers are strongly encouraged to nurture the students. The global standards set at VIT in the field of teaching and research spur us on in our relentless pursuit of excellence. In fact, it has become a way of life for us. The highly motivated youngsters on the campus are a constant source of pride. Our Memoranda of Understanding with various international universities are one of our major strengths. They provide for an exchange of students and faculty and encourage joint research projects for the mutual benefit of these universities. Many of our students, who pursue their research projects in foreign universities, bring high quality to their work and esteem to India and have done us proud. With steady steps, we continue our march forward.

HIGHLIGHTS

- One among the Top 10 and the only private institution of India (Shanghai ARWU Ranking 2021)
- Ranked within top 200 in Asia (QS - Asia University Rankings 2022)
- Seven Subjects of VIT are ranked by QS World University Ranking by Subject 2021
- 12th best research institution of India (NIRF Ranking, Govt. of India 2021)
- 12th best engineering institution of India (NIRF Ranking, Govt. of India 2021)
- NAAC Accreditation with highest grade A++ in the fourth

ABOUT SMEC

The school of Mechanical Engineering is one of the oldest and the most prestigious schools of VIT. This school started functioning right from 1984, the year in which our institution began. The school of Mechanical Engineering offers 3 undergraduate and 6 post-graduate programs. The school has got a team of highly qualified faculty members, many holding PhDs from elite institutes across the globe, to teach and train the best minds of this country.

The pride of the school lies in the significant research funding received from several National and International agencies such as DST, DRDO, MNRE, CSIT, CVRDE, CPDO, IE, AR&DB, BRNS, ISRO, UGC, NRB, Royal Academy of Engineering, etc. The Department of Science and Technology, Govt of India has recognized the school for its research activities and supported it in 2003 and 2010 under the FIST scheme. The school has modern facilities, enabling cutting-edge research in a wide spectrum of niche technological areas. The school is ranked between 501-600 in the World as per THE World University Subject Ranking in 2021. Mechanical and Manufacturing Engineering is ranked within the top 9 in India and top 301-350 in the world as per QS World University Rankings by Subject 2022.

ORGANIZING COMMITTEE

CHIEF PATRON

Dr. G. Viswanathan
Chancellor

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Vice President

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Asso. Professor & HOD, DDA,SMEC

Dr. C. Pandivelan
Asso. Professor & HOD, MME, SMEC

CONVENORS

Dr. S. Renold Elsen

Dr. Srinivasan Narayanan

Dr. Ranjeet Kumar

A 3 DAYS WORKSHOP

ON

ADDITIVE MANUFACTURING MODELLING AND SIMULATION TECHNIQUES

Schedule

Day 1 - 23/11/2022 - Wednesday					
10:00 AM to 10:45 AM Inaugural					
Session 1	**11:00 AM to 01:00 PM**	**OPPORTUNITIES FOR ADDITIVE MANUFACTURING IN INDIAN MARKET***	**Dr Chandrasekhar U**	**Vice Charman**	**NAFEMS UK India Centre**
Session 2	**02:00 PM to 03:00 PM**	**DEMO - RHINO - RHINOCEROS 3D**	**Dr Ranjeet Kumar**	**Asst Professor**	**VIT - Vellore**
Session 3	**03:00 PM to 05:00 PM**	**TUTORIAL - RHINO - RHINOCEROS 3D**	**Dr Ranjeet Kumar**	**Asst Professor**	**VIT - Vellore**
Session 4	**05:00 AM to 06:00 PM**	**CHALLENGES IN AND ADVANTAGES OF METAL 3D PRINTING***	**Dr Saurabh Sanjay Nene**	**Asst Professor**	**IIT Jodpur**
Day 2 - 24/11/2022 - Thursday					
Session 5	**10:00 AM to 11:00 AM**	**DEMO - SLICING OF 3D PROFILES USING CURA**	**Dr Srinivasan Narayanan**	**Asst Professor**	**VIT - Vellore**
Session 6	**11:00 AM to 12:00 PM**	**HANDs ON - SLICING OF 3D PROFILES USING CURA**	**Dr Srinivasan Narayanan**	**Asst Professor**	**VIT - Vellore**
Session 7	**12:00 PM to 01:00 PM**	**DESIGN FOR ADDITIVE MANUFACTURING***	**Mr Amit Saxena**	**Application Engineer**	**AMACE - Bengaluru**
Session 8	**02:00 PM to 03:00 PM**	**TOOL PATH PLANNING FOR ADDITIVE MANUFACTURING AND ASTM CLASSIFICATION ON ADDITIVE MANUFACTURING TECHNOLOGIES***	**Dr Sajan Kapil**	**Asst Professor**	**IIT Guwahati**
Session 9	**03:00 AM to 05:00 PM**	**Demo - TOOL PATH PLANNING**	**Dr Sajan Kapil**	**Asst Professor**	**IIT Guwahati**
Day 3 - 25/11/2022 - Friday					
Session 10	**10:00 AM to 11:00 AM**	**PRODUCT DEVELOPMENT AND ADDITIVE MANUFACTURING***	**Dr Pandithevan P**	**Asst Professor**	**IITDM Kancheepuram**
Session 11	**11:00 AM to 12:00 PM**	**DEMO - SLM-SIMULATION USING ALTAIR INSPIRE**	**Dr Renold Elsen S**	**Assoc Professor**	**VIT - Vellore**
Session 12	**12:00 AM to 01:00 PM**	**HANDs ON - SLM-SIMULATION USING ALTAIR INSPIRE**	**Dr Renold Elsen S**	**Assoc Professor**	**VIT - Vellore**
Session 13	**02:00 PM to 04:00 PM**	**ADDITIVE MANUFACTURING LAB VISIT**	**Dr Ranjeet Kumar**	**Asst Professor**	**VIT - Vellore**
Session 14	**03:00 AM to 05:00 PM**	**PROSPECTS, CHALLENGES AND SCOPE FOR AM IN INDIAN MARKET***	**Dr. Vishwas R Puttige**	**Business Head**	**AMACE - Bengaluru**