

AICTE co-sponsored  
International E-Conference  
on  
**Sustainable Development in  
Mechanical Engineering  
(SDME 2020)**  
October 30-31, 2020



**DEPARTMENT OF MECHANICAL ENGINEERING  
VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI  
INSTITUTE OF ENGINEERING & TECHNOLOGY**

Approved by AICTE, New Delhi, Affiliated to JNTU Hyderabad  
An UGC Autonomous, ISO 9001:2015 Certified & QS I-Gauge 'Diamond' Rated Institute,  
Accredited by NAAC with 'A++' Grade  
NBA Accreditation for B.Tech. - CE, EEE, ME, ECE, CSE, EIE, IT Programmes  
Recognized as "College with Potential for Excellence" by UGC  
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ज्ञान-विज्ञान विमुक्तये



## ❖ About VNRVJIET:

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology [VNRVJIET], an autonomous institute sponsored by Vignana Jyothi Society, was established in the year 1995 in the state of Telangana. Institution is affiliated to Jawaharlal Nehru Technological University Hyderabad (JNTUH) and is granted the status of Autonomous from the academic year 2012 by University Grants Commission (UGC) New Delhi. The institution is conferred with the honor of "College with Potential for Excellence" (CPE) by UGC in August 2016. Institute has received accreditation from National Assessment and Accreditation Council (NAAC) with Grade A++ with a CGPA of 3.73 on 4 point scale in 2018. National Board of Accreditation (NBA) has re-accredited B.Tech. - UG – CE program for 5 years in 2016 and UG – CSE, ECE, EEE, EIE, IT, ME programmes for 3 years in 2019. Institute has secured 127<sup>th</sup> rank in engineering category and in the rank band of 151-200 in overall category of NIRF India 2020 rankings. Institute has been recognized as 'AICTE Research Centre' by the AICTE. Institute received I-Gauge 'Diamond' rating from QS. The institute has 9 departments and offers 22 academic programs both at UG and PG level. The institution with a vision of serving the society through value-based education has been making a mark in the educational map of this region. The institute offers academic programs with innovative curriculum, advanced research in cutting-edge technologies and societal engagement through outreach activities. The Institute is celebrating its 'Silver Jubilee' in the year 2020.

## ❖ Department of Mechanical Engineering:

The Department of Mechanical Engineering was established in 1995 with an intake of 60 in B.Tech. Mechanical Engineering programme, which was increased to 120 in 2010. In addition to this programme, it offers 2 M. Tech. programmes in Advanced Manufacturing Systems and CAD/CAM with an intake of 18 each and a Diploma in Mechanical Engineering (II shift) with an intake of 120. Department is recognized as 'Research Center' by the JNTU Hyderabad. The department has a team of 46 highly experienced faculty and staff, out of them 17 are doctorates, involved in dedicated research, innovation and training. It has fully equipped workshop and up-to-date laboratories like Machine Tools, Thermal Engineering, Heat Transfer, Metallurgy and Instrumentation etc. The department also has sophisticated CNC, CAD, CAM labs with high configuration workstations and licensed softwares like AUTOCAD, ADAMS, ANSYS, CATIA, FLEXSIM, AUTOMOD, MATLAB, EDGE CAM, and MINITAB, MASTERCAM, AUTOMATION STUDIO etc. The department also has a Center of Excellence in Joining Technologies. Department has received grants from various funding agencies for carrying out research projects. As on date, 09 projects have been completed and 03 are ongoing.

## ❖ About SDME2020 Conference:

In fast paced world of emerging technologies, sustainability will be critical to the success of any process or product or in general a business. Sustainable development is very much essential in the contemporary scenario due to increasing environmental concerns, demand for energy, global warming and end of life safe disposal of products. These issues are also addressed and adopted as 17 Sustainable Development Goals (SDG) by the United Nations. Mechanical Engineering professionals possess a vital role to enable sustainable development in product or process design. Lot of research is being carried out all over the world emphasizing the importance of sustainability in the field of Mechanical Engineering. In order to have an insight into these developments, a platform through this conference is provided.

The primary objective of International Conference on Sustainable Development in Mechanical Engineering (SDME2020) is to bring together the experts from academic institutions, industries and research organizations from various countries across the globe to facilitate close interaction. The participants of SDME2020 will get opportunity to share their views and ideas through deliberations and discussions pertaining to latest developments and trends focussing on sustainability developments in the field of Mechanical Engineering.

## ❖ Call for Papers:

Original research articles broadly within the scope of the conference topics, written in English language, are solicited. The topics/tracks of the conference are available in conference details. Authors will have to sign a declaration of originality at the time of final submission.

## ❖ Topics/Tracks:

The conference aims to be a platform for reporting both fundamental and applied issues of mechanical engineering field leading to sustainability. The overall themes of the conference are classified into the following tracks, but are not limited to:

- Fluid Mechanics
- Heat Transfer
- Thermal Engineering
- **Sustainable Design in Mechanical Engineering:**
  - ✓ Applied Mechanics
  - ✓ Acoustics & Vibration
  - ✓ Fatigue & Fracture Mechanics
  - ✓ CAD/CAM - Analysis & Optimization

- **Sustainable Materials & Technologies:**
  - ✓ Composites & Advanced Materials
  - ✓ Biomechanics & Biomaterials
- **Sustainable Energy:**
  - ✓ Renewable Energy Sources
- **Sustainable Manufacturing Systems:**
  - ✓ Advanced Manufacturing – Additive, Subtractive, Formative & Joining
  - ✓ Green Manufacturing Systems
- **Sustainability in Industrial Engineering:**
  - ✓ Supply Chain Management
  - ✓ Industrial Design & Ergonomic Design
  - ✓ Industrial and Production Engineering
- **Sustainability & Industry 4.0 - Mechanical Engineering:**
  - ✓ Artificial Intelligence
  - ✓ Internet of Things
  - ✓ Machine Vision
  - ✓ Robotics, Automation & Mechatronics
  - ✓ Data Science & Predictive Analytics
  - ✓ Autonomous Vehicles
  - ✓ Automotive Technology
  - ✓ Aerospace Applications

### ❖ **Instructions for Authors:**

- The official language of the conference is **English**. The maximum page limit for full paper is **10 pages**. Template of full paper is available in the conference website.
- The authors of the selected papers will directly present their work at the conference as per the format (*oral presentation* or *poster presentation*).
- All the submitted papers will be peer-reviewed and upon paper acceptance, payment of registration fee and presentation in the conference, will be published in **SCOPUS and Web of Science indexed** –  
[IOP Conference Series : Materials Science and Engineering](#)
- Similarity index is set at **18%**.



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## ❖ Revised Short Call for Papers:

Submission of full length paper for review	September 24 <sup>th</sup> , 2020
Author notification of full length paper acceptance	September 28 <sup>th</sup> , 2020
Submission of final camera ready papers	September 30 <sup>th</sup> , 2020
Registration	September 30 <sup>th</sup> , 2020
Dates of Conference	October 30 <sup>th</sup> – 31 <sup>st</sup> , 2020

Conference shall be conducted in **Online Mode**.

## ❖ Registration:

Conference fee includes *registration and publication* charges.

Participants	Registration Fee	
	Indian Participants * (in INR)	Foreign National Participants * (in USD)
Faculty / Research Scholars	9,500/-	\$ 500
Industry / R & D Organization	12,000/-	\$ 600
Delegates / Attendee / Accompanying Person	4,500/-	\$ 250

**NOTE: \* Bank charges / transaction fee to be paid by the participants**  
Details of payment modes are available in the conference website.

## ❖ Contact:

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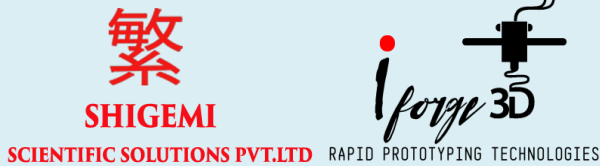
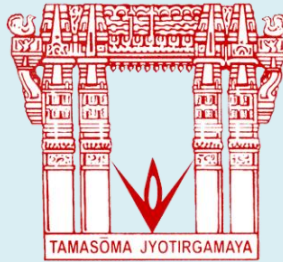
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