

RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Approved by AICTE, New Delhi, Affiliated to JNTUA-Ananthapuramu.
Accredited by NBA (Tier-I) & NAAC of UGC with 'A+' Grade,
Sanctioned UGC DDUKK & CPE under MHRD, APSSDC SIEMENS TSDI &
CMs Skill Excellence Center and participated in TEQIP-I

Nandyal- 518501, Kurnool (Dist), Andhra Pradesh, India

Ph: 08514 - 275203, Extn: 520; Fax: 08514-275123; Cell: 9441310586, 8074741028

Visit us : www.rgmcet.edu.in

e-mail: hme@rgmcet.edu.in



CIME 2022

22-23, April 2022

Nandyal, India



(ESTD-1995)

nirf 2021 | 201-250 Rank Band

Date: 16.01.2022

Internal Committee

Chief Patrons:

Dr. M. Santhi Ramudu, Chairman
Sri. M. Siva Ram,
Managing Director

Patron:

Dr. T. Jaya Chandra Prasad,
Principal

Technical Advisor:

Dr. D.V. Ashok Kumar,
Director- Admin

President:

Dr. K. Thirupathi Reddy,
Professor & HOD of ME

Organizing Committee:

Dr. Abhishek Dasore, Asst. Prof.
Dr. Upendra Rajak, Assoc. Prof.
Dr. B. Ramakrishna, Assoc. Prof.
Dr. Manoj Panchal, Asst. Prof.

Executive Committee:

Dr. Syed Altaf Hussain, Professor
Dr. V. Siva Reddy, Professor
Dr. V. Chandra Sekhar, Professor
Dr. B. Sidda Reddy, Professor
Dr. V. Nageswara Reddy, Professor
Dr. G. Venkatesh, Assoc. Prof.
Dr. K. Sudha Madhuri, Assoc. Prof.
Dr. Asif Perwez, Asst. Prof.
Dr. Md. Alamgir, Asst. Prof.
Mr. Y. Suresh Babu, Asst. Prof.
Mr. B. Chinna Ankanna, Asst. Prof.
Mr. N. Upendra, Asst. Prof.
Mr. B. Suresh, Asst. Prof.
Mr. B. Dinesh Babu, Asst. Prof.
Mr. T. John Babu, Asst. Prof.
Mr. G. V. Satyanarayana, Asst. Prof.
Mr. K. Aswarthanarayana, Asst. Prof.
Mr. M. G. Khaja Hussain, Asst. Prof.
Mr. Bana Veerendra, Asst. Prof.
Mr. S. M. Karishma, Asst. Prof.
Mr. Md. Anees Shaik, Asst. Prof.
Mr. G. P. Ranga Swamy, Asst. Prof.,
Mr. A. Gouse Peera, Asst. Prof.,
Mr. P. V. Jaya Sankar, Asst. Prof., ME

To

The Principal/HOD,

Dear Sir/Madam,

Sub: Invitation for two-day International Conference on Contemporary Innovations in Mechanical Engineering (CIME 2022).

We have immense pleasure in bringing to your kind notice that the Department of Mechanical Engineering, RGMCT Nandyal is organizing a two day **International Conference on "Contemporary Innovations in Mechanical Engineering (CIME-2022)"** during **22 - 23, April 2022** at Nandyal, Andhra Pradesh, India, in association with Science City of Andhra Pradesh.

The conference is going to be organized in a blended mode (both offline and online), in which a large number of academicians, researchers, industry professionals and students from various technical institutions across the globe are going to take part in this event.

In this connection, Faculty Members, Research Scholars, Professional Practitioners across the globe are requested to submit their research work. Please find the paper submission guidelines, registration process in the enclosed brochure. Alternatively, please find conference details at : www.rgmcime2022.com

All the selected papers will be published in Scopus/WOS Indexed Journal/ Proceedings based on the Author's preference. Kindly circulate this information among your fellow colleagues/Research Scholars.

Thanking you sir,

With Warm Regards

Dr. Abhishek Dasore

CIME-2022

Convener

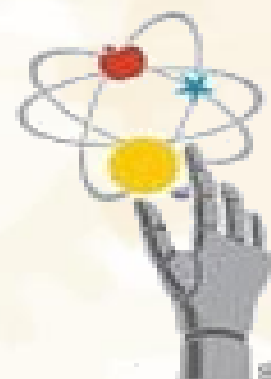
CIME 2022

International Conference on Contemporary Innovations in Mechanical Engineering

22 – 23, April 2022

Nandyal, India

www.rgmcime2022.com



Organized by:

Department of Mechanical Engineering

Rajeev Gandhi Memorial College of Engineering and Technology,
(Autonomous)

Nandyal- 518501, Kurnool (Dist), Andhra Pradesh

About the Conference

With the volatile advancement of Mechanical Engineering and its applications, the challenging problems in innovation to serve the sovereign applications are growing exponentially. Thus, the prime objective of the conference CIME-2022 is to bring various experts of research culture together and respond the noble knowledge, new evolutions and key issues in the fields related to new technology advancements and innovations in Mechanical Engineering.

About the Organizing Institute

RGMCET Nandyal was inaugurated on 09.03.1996 by Late Sri P. V. Narasimha Rao, the former Prime Minister of India and Sri N. Chandrababu Naidu, the former Chief Minister of Andhra Pradesh (A.P.). It is the dedicated commitment and effort of our Chairman, the man with vision “Vidyarthna” Dr. M. Santhi Ramudu, who started the institution with a motto “EDUCATION FOR PEACE & PROGRESS”. This institute is one of the top engineering colleges of A.P. The institute has got permanent affiliation from JNTUA Anantapuramu. It has been conferred Autonomous status by UGC in 2010 and has upgraded the curriculum and regulations as per the needs of the industry 4.0 and society from time to time. All the UG eligible Courses in the institute are accredited four times by NBA and recently in Tier-I category. The institute has also got accredited by NAAC with A⁺ grade (3.54 out of 4.0 CGPA). The institute has been accredited by TCS for placements and training. The institute has DSIR (Ministry of Science and Technology) recognition for the exemption of excise duty for the research equipment procured.

It was selected for the World Bank assisted TEQIP-1 for quality improvement. The institute is ISO 9001-2015 certified. The Jawahar Knowledge Center of the institute has been awarded as the best JKC center twice by the Government of Andhra Pradesh for highest campus placements. The Institute offers number of Skill Development Programs and has been sanctioned the Deen Dayal Upadhaya KAUSHAL Kendra under Ministry of HRD. The institute has been conferred with College with Potential for Excellence (CPE) by UGC, New Delhi in 2016. The institute has been recognized as SIEMENS INC “Technical Skill Development Institute” (TSDI) by Government of Andhra Pradesh in association with APSSDC in 2016, apart from establishing two CM's Skill Centers in 2018. On a continuous basis this institution is embarking on a journey towards excellence in quality education and research

About the Science City of A.P.

Science City of Andhra Pradesh (SCAP) is the ‘First Science City in the Nation to be co-sponsored by Ministry of Science & Technology’, Government of India and Government of Andhra Pradesh. The Government of Andhra Pradesh has appointed Dr. Jayarami Reddy Konda as Chief Executive Officer of Science City of Andhra Pradesh who works under the leadership of Hon’ble Chief Minister. Its prime objectives are to create an ecosystem, to develop science popularization program, to collaborate with top-tier global universities and companies, knowledge transfer program interact with Indian and state scientists to gain knowledge in emerging areas, to develop innovative curriculum and to train science teachers, students and general public.

About the Department of Mechanical Engineering

The Department of Mechanical Engineering has been functioning since the inception of the Institute i.e., 1995 and is offering UG : B. Tech course in Mechanical Engineering with an intake of 120 & PG : M. Tech in Machine Design with an intake of 18. Department has been accredited by NBA (Tier-I). The department has been recognized as a research center by JNTUA-Anantapur to carry out Ph.D. Program on regular basis. The department of ME is completed/equipped with 2crores worth of R&D projects sponsored by AICTE, DST-SERB, DST-FIST and sponsored equipment for measurement of beam and global radiation of solar. Also, the institute is equipped with 500 kW solar PV power plant. More than 300 research articles are published in various reputed journals and 6 patents are granted & 15 patents are filed by the faculty and students of the department. The curriculum of ME is designed keeping in view of the industry 4.0 requirements in India and Overseas. The primary focus of the curriculum is imparting industrial and societal problem identification skill and promotes problem-solving skill. The students are encouraged to be a part of various clubs for overall development of personality. The department is having well qualified and dedicated teaching staff with 16 PhD's and others are pursuing. Our labs worth 2.5 crores have state of the art facilities to carry out projects for the development of technologies. All the faculty members are involved in research and development activities.

Keynote Speakers

Prof. P. Muthukumar

Professor & Associate Dean,
Industrial Interactions and
Special Initiatives
Department of Mechanical
Engineering, IIT Guwahati



Dr. M.V. Reddy

Senior Professional Researcher
Nouveau Monde Graphite:
Montreal, Quebec, Canada



Prof. Siba Sankar Mahapatra

Professor HAG,
Department of Mechanical
Engineering, NIT Rourkela



Dr. Norhashila Hashim

Assoc. Prof. & Head
Department of Biological and
Agricultural Engineering
Faculty of Engineering
Universiti Putra Malaysia



Dr. Anil Kumar

Associate Professor,
Department of Mechanical
Engineering
Additional Coordinator: Centre
for Energy and Environment
Delhi Technological University,
Delhi



Dr. Chanchal Loha

Principal Scientist,
Energy Research & Technology (ERT)
Department,
CSIR-Central Mechanical Engineering
Research Institute, Durgapur



CONFERENCE COMMITTEE

CHIEF PATRONS

- **Dr. M. Santhi Ramudu**, Chairman,
- **Sri. M. Siva Ram**, Managing Director

PATRON

- **Dr. T. Jayachandra Prasad**, Principal

TECHNICAL ADVISOR

- **Dr. D. V. Ashok Kumar**, Director-Admin

PRESIDENT

- **Dr. K. Thirupathi Reddy**, Prof., & HOD

ORGANIZING COMMITTEE

- **Dr. Upendra Rajak**, Assoc. Prof., ME
- **Dr. Abhishek Dasore**, Asst. Prof., ME
- **Dr. B. Ramakrishna**, Assoc. Prof., ME
- **Dr. Manoj Panchal**, Asst. Prof., ME

EXECUTIVE COMMITTEE

- **Dr. Syed Altaf Hussain**, Prof.,
- **Dr. V. Siva Reddy**, Prof.,
- **Dr. V. Chandra Sekhar**, Prof.,
- **Dr. B. Sidda Reddy**, Prof.,
- **Dr. V. Nageswara Reddy**, Prof.,
- **Dr. G. Venkatesh**, Assoc. Prof.,
- **Dr. K. Sudha Maduri**, Assoc. Prof.,
- **Dr. Asif Perwez**, Asst. Prof.,
- **Dr. Md Alamgir**, Asst. Prof.,
- **Mr. Y. Suresh Babu**, Asst. Prof.,
- **Mr. B. Chinna Ankanna**, Asst. Prof.,
- **Mr. T. John Babu**, Asst. Prof.,
- **Mr. M. Khaja Hussain**, Asst. Prof.,
- **Mr. G. V. Satyanarayana**, Asst. Prof.,
- **Mr. B. Dinesh Babu**, Asst. Prof.,
- **Mr. B. Suresh**, Asst. Prof.,
- **Mr. N. Upendra**, Asst. Prof.,
- **Mr. K. Aswartha Narayana**, Asst. Prof.,
- **Mr. Bana Veerendra**, Asst. Prof.,
- **Mr. Mohammed Anees**, Asst. Prof.,
- **Ms. Shaik Mullan Karishma**, Asst. Prof.,
- **Mr. G. Pandu Ranga Swamy**, Asst. Prof.,
- **Mr. A. Gouse Peera**, Asst. Prof.,
- **Mr. P. V. Jaya Sankar**, Asst. Prof.,

INTERNATIONAL ADVISORY COMMITTEE

- **Dr. Norhashila Hashim**, UPM Malaysia
- **Dr. Richard Jayson Varela**, Waseda University, Japan
- **Dr. Naveen Puppala**, NMSU USA
- **Dr. Mohammad Rahimi Gorji**, UGNT Belgium
- **Dr. Melvin Samuel. S**, UWM, USA
- **Dr. Vinod Kumar Sharma**, ENEA, Italy
- **Dr. Anburajan Parthiban**, Yonsei University, South Korea
- **Dr. Navin Shrivastav**, BITS Dubai
- **Dr. Kapil Gupta**, UJ South Africa
- **Dr. K. J. Sabareesan**, UTAS-Nizwa Oman
- **Dr. Umit Agbulut**, DUZCE, Turkey
- **Dr. Puneet Verma**, Air Quality Scientist, Trinity Consultants, Australia

NATIONAL ADVISORY COMMITTEE

- **Prof. P. Muthukumar**, IIT Guwahati
- **Prof. K. Ramakrishna**, KLEF, Guntur
- **Dr. Anil Kumar**, DTU Delhi
- **Dr. Ravi K Gujjula**, CGM, APSSDC, A.P.
- **Dr. K. Jayarami Reddy**, CEO , Science City
- **Dr. G. Prasanthi**, JNTU Anantapur
- **Dr. Tikendra Nath Verma**, MANIT Bhopal
- **Dr. B. Kiran Naik**, NIT Rourkela
- **Dr. G. Raghavendra**, NIT Warangal
- **Dr. T. Sudhakar**, NIT Uttarakhand
- **Prof. B. Durga Prasad**, JNTU Anantapur
- **Prof. M Indira Rani**, JNTU Hyderabad
- **Dr. Amaranatha Reddy**, IIITDM Kurnool
- **Dr. K. Karthik Selva Kumar**, PU
- **Dr. Shruti Aggarwal**, Chandigarh University
- **Dr. V. Rajesh**, KLEF Guntur
- **Prof. G. Murali**, KLEF Guntur
- **Dr. Prem Kumar Chaurasiya**, BIST Bhopal
- **Dr. Shakuntala Ojha**, KITS Warangal
- **Dr. Hasane Ahammad Shaik**, KLEF Guntur

Call for Papers

Submissions on all emerging areas of Mechanical Engineering and inter- disciplinary are invited. The topics include (but not limited to) the following

Thermal and Fluid Sciences	Manufacturing and Material Sciences	Design Engineering	CAD/CAM/CIM
Energy and Energy Storage	Material Characterization	Sustainable product design	CAD/CAM Integration Technology
Heat and Mass Transfer	Advanced Materials for Energy Applications	Dynamics and Acoustics	CAD/CAM, Automation & Robotics
Drying Kinetics	Modeling and Simulation of Materials	Mechanics of Materials	Computer-aided Geometric Design & Simulation
Heat Recovery Systems	Non-Traditional Machining processes	Vibration, Noise Analysis and Control	Dynamic Mechanical Analysis, Optimization and Control
Renewable Energy	Bio Materials & Super Alloys	Product design and development	Logistics and Supply Chain Management
Refrigeration & Air-conditioning systems	Operation Management	Environment and sustainability	System Dynamics and Simulation
Computational Fluid Dynamics	Reliability and Maintenance Engineering	Engineering Systems Design & Development	Automation
Multi-phase Flows	Advanced Instrumentation and Measurement	Risk, reliability and failure analysis	Numerical Optimization
Alternate Fuels	Advanced machining processes	Structural Dynamics	Robotics
Fuel Cell	Composite and Polymer Manufacturing	Design of Feedback Control Systems	Stochastic Systems
Cryogenic systems	Material Testing	Innovation strategies for new product development	Modeling and Design Using Machine Learning

Paper Submission Guidelines

Authors intended to submit their research findings, shall follow the guidelines :

1. Manuscripts must be submitted online at easychair.org/conferences/?conf=cime2022 For manuscripts related query, please drop a mail in rgmcime2022@gmail.com
2. Manuscript should be written in MS word, Times New Roman font. All articles must be accompanied by an abstract of 150-200 words and 4-6 keywords.
3. Your manuscript text file should start with a title page that shows author affiliations and contact information, identifying the corresponding author with an asterisk.
4. Number the pages using an Arabic numeral in the footer of each page. Maximum number of pages is 8 in 8.5 × 11 inch paper single column template.
5. The final paper format after acceptance will be based on the publication series :
www.rgmcime2022.com
6. Language: English is the official language of the conference. The paper should be written and presented only in English.
7. Plagiarism must not be above 12 %.

Important Dates

Submission deadline for full-text paper	30 th March 2022
Paper acceptance notification	2 nd April 2022
Last date for camera ready full paper submission	5 th April 2022
conference registration (without late fee)	10 th April 2022
Conference registration (with late fee)	15 th April 2022
Conference dates	22 nd – 23 rd April 2022

Registration Fee

Participation Type	Registration fee in INR	Late Registration fee in INR
Virtual mode participation	1000	1500
Offline mode participation	1500	2000
For publication in proceedings with ISBN	3000	3500
For publication in IOP: MSME	7000	7500
AIP Conference Proceedings (WoS & Scopus indexed)	8000	8500

CONFERENCE REGISTRATION

1. Upon acceptance of the full paper, authors are required to pay the registration fee to the account details as mentioned here only,

Beneficiary Name	HOD of Mechanical Engineering Dept. (RGM CET)
Bank Name	State Bank of India
Account number	32807551502
IFSC code	SBIN0010577
Branch location	RGM CET Nandyal

2. After registration, fill the online registration form using the link [CIME 2022](#)
3. Submit the final paper in prescribed format to rgmcime2022@gmail.com
4. All selected papers will be considered for publication based on authors preference.
5. Certificates will also be provided for the candidates.

Awards

The idea behind the Presentation of awards is to encourage one's contributions, give motivation for active involvement to conduct better research work in future. Considering the marks given by the evaluation committee and the Conference Chair, the highest scoring presentations shall be recommended for the following awards.

Best Presentation Award

Offered for outstanding presentation considering every presenter of the conference, which is the most inspiring, effective and professional and are delivered through an impressive, authoritative and engaging speaker. Based on the marks given by the evaluation committee for every presentation and Conference Chair's own reading of the papers, Conference Chair decides which presentation will receive the Best Presentation Award.

Session's Best Paper Award

Based on the marks given by the evaluation committee including session chair and two evaluation panel members for an every presentation of an each session, Session Chair decides which presentation will receive the Session's Best Presentation Award.

ORGANIZER STATEMENT

Conference is planned to held in blended mode i.e., both virtual and offline mode. The organizing institute will take all the covid protocol guidelines for the safety of participants. However, delegates who wish to participate physically at the mentioned venue are to be allowed only if they are fully vaccinated and also should bring COVID-19 RT-PCR report which should have been conducted within 72-hrs prior only.

But if the conference could not be physically held on time due to force majeure such as weather and disasters, it will be held through online mode only and the organizer will not bear any compensation and will not refund the registration fee. Participants are obligated to cooperate with the organizer's arrangements. The organizers have planned to publish the conference proceedings with reputed indexed journals.

The exact details are available at the conference website www.rgmcime2022.com

PUBLICATION DETAILS

1. All the accepted papers will be published in the proceedings indexed in leading databases – Web of Science, Scopus, Inspec and Chemical Abstracts Service (CAS), Astrophysics Data System (ADS).
2. Based on the authors preference, accepted papers will be published in AIP Conference proceedings, IOP Conference Series: Materials Science and Engineering and Conference Proceedings with ISBN.
3. Best written student papers/award winning papers will be invited for publication in the SCI indexed Journal, whose details will be updated soon in the conference website www.rgmcime2022.com

FOR FURTHER DETAILS CONTACT

Dr. Abhishek Dasore

Assistant Professor,
Department of Mechanical Engineering,
RGM College of Engineering and Technology,
Nandyal, Kurnool (Dist.), Andhra Pradesh, India
Ph: +91-8074741028
Email: dasoreabhishek@rgmcet.edu.in
Conference website: www.rgmcime2022.com