

Key note speakers:

- Prof. Martin Sebesta, Institute of Laboratory Research on Geomaterials, Comenius University in Bratislava, Slovakia.
- Dr. M. Ananda Rao, Senior Scientist, CSIR – NML Madras Complex, Chennai, India

Instructions to participants:

- Invited talks will be delivered by experts from industry and academia
- All accepted contributed papers based on their merit given an opportunity to present orally
- All the sessions are conducted through online
- All papers are subjected to peer review process and accepted papers will be published in **IOP: Materials Science and Engineering (indexed in SCOPUS and Web of Science)**.
- All the papers must be free from plagiarism. Similarity index must be less than 20%.
- All papers must be original and not been submitted to any other conferences or journals.
- Registering at least one author per paper is mandatory
- Registration fee includes access to attend all technical sessions, participation certificate and publication charges
- At least one author must present the paper in the given time slot
- **Based on the merit, 4 best paper awards will be given among the papers presented at ICMMEE2021**
- Visit www.icmmee.com for more details. Contact: team@icmmee.com, icmmee@gmail.com

Important dates:

Abstract submission closing	30-03-2021	Registration starts	20-03-2021
Acceptance of the abstracts	30-03-2021	Camera ready full paper	20-04-2021
Full paper submission ends	05-04-2021	Conference dates	07th & 08th – 05-2021

Registration fee details:

	Indian participants (Rs/-)	Foreign participants (\$)
Academia	5500	100
Industry	7000	150
Attendees	1000	50

Contact details:

Dr. B. Ratna Sunil
Convener, ICMMEE 2021
Associate Professor,
Department of Mechanical Engineering
Phone: 7799111300, 9677119819
e-mail: bratnasunil@becbapatla.ac.in
bratnasunil@gmail.com

Dr. D. Sameer Kumar
Convener, ICMMEE 2021
Associate Professor,
Department of Mechanical Engineering
Phone: 9441651072
e-mail: me2meer@gmail.com

Dr. V.V. Kondaiah
Co-Convener, ICMMEE 2021
Associate Professor,
Department of Mechanical Engineering
Phone: 8978013595
e-mail: vvkondaiah@gmail.com

Publishing partner



IOP Conference Series
Materials Science and Engineering



ICMMEE - 2021



International Conference on Materials, Mechanical and Energy Engineering

(ICMMEE2021)

7th – 8th May 2021

Organized by
Department of Mechanical Engineering,
BAPATLA ENGINEERING COLLEGE
(Autonomous)
Bapatla 522101, Andhra Pradesh, India

www.icmmee.com

Chief Patron:

Sri. B. Venkata Siva Rama Krishna
President, Bapatla Education Society
Sri. M. Nageswara Rao,
Secretary, Bapatla Education Society

Patron:

Dr. V. Damodara Naidu
Principal, Bapatla Engineering College

Head of the Department:

Dr. T. Nancharaiiah, Professor & HOD
Department of Mechanical Engineering, BEC

Conveners:

Dr. B. Ratna Sunil, Associate Professor
Department of Mechanical Engineering, BEC
Dr. D. Sameer Kumar, Associate Professor
Department of Mechanical Engineering, BEC

Co-Conveners:

Dr. V.V. Kondaiah, Associate Professor
Department of Mechanical Engineering, BEC

Organizing committee:

Dr. M. Venkateswara Rao, Prof., Dept. of ME & Dean R&D, BEC
Dr. B. Ravi Sankar, Professor, Dept. of ME, BEC
Dr. Ch. Lakshmi Srinivas, Professor, Dept. of ME, BEC
Sri. T. Siva Sankar, Asso. Prof., Dept. of ME, BEC
Sri. G. Kantha Prasad, Asso. Prof., Dept. of ME, BEC
Sri. K. Prasada Rao, Asso. Prof., Dept. of ME, BEC
Sri. D Narayana Chowdary, Asso. Prof., Dept. of ME, BEC
Dr. B. Ifthekar Hussain, Asso. Prof., Dept. of ME, BEC
Dr. J. Laxmi Lalitha, Asso. Prof., Dept. of ME, BEC
Dr. P. Ravikumar, Asso. Prof., Dept. of ME, BEC
Sri. K. Srinivasa Rao, Asst. Prof., Dept. of ME, BEC
Sri. P. Uma Maheswara Rao, Asst. Prof., Dept. of ME, BEC
Sri. S. Vijay, Asst. Prof., Dept. of ME, BEC
Sri. Y. Narendra Babu, Asst. Prof., Dept. of ME, BEC
Dr. S. Krugon, Asst. Prof., Dept. of ME, BEC
Sri. S. Ravi Kumar, Asst. Prof., Dept. of ME, BEC
Sri. D. Vijay Praveen, Asst. Prof., Dept. of ME, BEC
Sri. K. Rajasekar Babu, Asst. Prof., Dept. of ME, BEC
Sri. M. Pardha Saradhi, Asst. Prof., Dept. of ME, BEC
Dr. A. Praveen, Asst. Prof., Dept. of ME, BEC
Sri. V. Srinivasulu, Asst. Prof., Dept. of ME, BEC
Sri. M. Subramanyam, Asst. Prof., Dept. of ME, BEC
Sri. A Suresh, Asst. Prof., Dept. of ME, BEC
Sri. Ch. L. Prudhvi Raz, Asst. Prof., Dept. of ME, BEC
Sri. G. Moshe Babu, Asst. Prof., Dept. of ME, BEC
Sri. V. Krishna Koundinya, Asst. Prof., Dept. of ME, BEC

About ICMMEE2021:

Recent developments in the fields of materials engineering revolutionized the engineering applications in different strategic sectors including automobile, aerospace, marine, biomedical, agriculture, energy engineering and structural and construction engineering. Developing new material systems and novel manufacturing processes enhanced the ability of engineers to address several technological challenges in various industrial applications. Understating the behavior of the materials helps to develop potential engineering applications to improve the quality of the human life. Utilizing computational tools to analyze the materials and processes brings additional advantage to understand the complex issues and accelerates the development of science and technology. Interdisciplinary research couples the expertise of several professionals belong to diversified fields and promotes rapid growth in achieve a common goal in addressing the research challenges. In this context, ICMMEE2021 becomes a viable platform for knowledge shearing among the experts from various research fields in materials and mechanical engineering. The dissemination of interdisciplinary knowledge at ICMMEE 2021 helps the young researchers and professionals to engage in R and D activities to bring promising yields for the society.

Call for Papers:

A one page abstract not more than 300 words with complete details of authors and affiliations is invited from prospecting authors to present their research work in the following areas but not limited to:

- Advanced materials
- Nanomaterials
- Biomaterials
- Energy materials
- Materials for thermal engineering applications
- Structural materials
- Materials for construction & building applications
- Composite materials
- Material testing and characterization
- Smart materials
- Computational methods in materials engineering
- Materials for food processing and storage
- Materials for agriculture
- Minerals, metals and alloys
- Mechanical behavior of materials
- Additive manufacturing
- Unconventional machining
- Advanced manufacturing processes
- Design and optimization
- Welding, machining and forming of materials
- Modeling and simulation
- Materials for thermal applications
- Materials for energy storage applications
- Solar materials
- Materials for electronics applications
- Surface engineering

Technical & Advisory Committee:

- Prof. Martin Urik, Faculty of Natural Sciences, Comenius University in Bratislava, Slovak republic.
- Prof. Marek Colencik, Slovenská poľnohospodárska univerzita v Nitre, Slovak republic.
- Dr. M. Paparao, Senior Scientist, Jawaharlal Nehru Aluminium Research Development and Design Centre, Nagpur, India
- Dr. B. Balakrishna, Professor & Principal, JNTU College of Engineering, Kakinda, A.P. India.
- Dr. M. Jagannatham, Manager, R&D, TVS Wheels India, Chennai, India
- Dr. N. Rameshbabu, Associate Prof., Dept. of MME, NIT Tiruchirappalli, India
- Dr. Ravikumar Dumpala, Asst. Prof. Department of Mechanical Engineering, VNIT Nagpur, India.
- Dr. S. Anandkumar, Asst. Prof., Department of Mechanical Engineering, IIT Jammu, India.
- Dr. T. Hanas, Asst. Prof., School of Materials Science and Engineering, NIT Calicut, India.
- Dr. K. N. S. Suman, Associate Prof., Department of Mechanical Engineering, Andhra Univeristy, India
- Dr. P. Poddar, Principal Scientist, CSIR-NML Jamshedpur, India
- Dr. T. K. Mahanta, Asst. Prof., Department of Mechanical Engineering, VIT Chennai, India
- Dr. M. Ravikumar, Asst. Prof., Department of Mechanical Engineering, MNIT Bhopal, India

About the College:

Bapatla Engineering College (Autonomous) was established in the year 1981 with a total intake of 180 students in CE, ME & E.C.E branches. The college was initially affiliated to Andhra University and later to Nagarjuna University from 1984 onwards. An additional section with an intake of 60 was sanctioned for Mechanical Engineering branch in 1987. From the year 1994, The College embarked on programs of expansion in terms of courses and intake, infrastructure and facilities. With requisite infrastructure facilities and competent human resources, the college is one of the "Largest Institutions in the State of Andhra Pradesh ". The college is widely acclaimed for its meticulous planning, resource scheduling and Institutional management. The college has solicited appropriate accreditation for Civil, Computer Science, Electronics and Communications, Electrical and Electronics, Electronics and Instrumentation and Mechanical Engineering branches twice by AICTE-NBA and for subsequently started Chemical Engineering, Information Technology and Bio-Technology once.

About the Department:

Mechanical Engineering Department was established in the year 1981. The Department has excellent lab facilities with state of the art equipment and has highly qualified, experienced and committed faculty members. The Department gives importance not only to academic education; research and development but also ethical values and personality development of students. The Department of Mechanical Engineering regularly organizes various technical & extracurricular events and brings out magazine annually under MECHANICAL ENGINEERING STUDENTS ASSOCIATION. The Department has exclusive Computer Centers equipped with high capacity servers and systems with high configuration. Number of Mechanical related software packages like ANSYS-18.0, Pro/ENGINEER 4.0, CATIA V5 R15, ADMSS, INVENTOR SERIES, AUTOMATION STUDIO, STAR-CD for CAD lab and packages like Master CAM, Emco off line simulation etc., for CAM and Automation lab are available. The department strives hard to impart quality education and to keep the students on the competitive edge of the present-day technology. The curriculum of B. Tech program is enriched with recent developments by offering number of elective courses.