

**Third International Conference**  
on  
**Emerging Research in**  
**Civil, Aeronautical and Mechanical Engineering**  
  
**Blended Mode (Online / Offline)**



**ERCAM-2021**  
**December 16 & 17, 2021**

**Theme:**  
**Environment & Manufacturing**

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## Call for Papers

Manuscripts are invited for the Third International Conference on Emerging Research in Civil, Aeronautical and Mechanical Engineering (ERCAM'21). Prospective authors are invited to submit full length original research papers, which have not been submitted/ published/ under consideration where any in other conferences/ journals. Papers should be in English, which is the official language of the conference. All the submitted manuscripts will be sent for double-blinded peer review and the corresponding authors will be notified about the outcome of the review process. Full papers are limited to 6 pages. All submitted papers have to comply with the template available in [www.nmit.ac.in-/ercam2021](http://www.nmit.ac.in-/ercam2021)

**Publishers : All accepted manuscripts will be published in Springer Lecture Notes or AIP Conference Proceedings**

## Important Dates

Conference Dates	: December 16 & 17, 2021
Full length Paper Submission Deadline	: September 30, 2021
Notification to Authors	: October 15, 2021
Registration Deadline	: October 30, 2021

## Registration Fees

Category	Registration Fees	Publication Charges
R & D Organization / Industry	Rs. 1,500/- or USD 20	Rs. 5,000/- or USD 70
Faculty members from academic institutions		
Research scholars / Students		
Non-Authors/Accompanying person		

### Notes:

- Registration of one of the authors for the conference is mandatory.
- Registration fee includes the publishing charges of the accepted paper in the lecture notes or conference proceedings, registration kit, lunch on both the days & conference banquet.
- Institutions with more than five papers accepted for publication will be given a special discount in registration of **Rs. 1,000/-** per paper.

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About NMIT

**Nitte Meenakshi Institute of Technology (NMIT)**, Bengaluru, established in the year 2001 is a private, self-financing and autonomous Institution (Approved by the UGC). NMIT is ranked among the top 128 institutes of NIRF ranking in 2020. The institute is permanently affiliated to the Visves-varaya Technological University (VTU) Belagavi and is approved by the AICTE, New Delhi. “NMIT” is an unit of Nitte Education Trust (NET), Man-galore which is a pioneer in the field of education since 38 years and brings with it the expertise of 36 Institutions which include Nitte Universi-ty and institutions of higher education like Engineering, Management, Medicine, Dental, Pharmacy, etc.

NMIT has been accredited by the National Assessment and Accreditation Council (NAAC-UGC) with ‘A+’ Grade since May 2020 for a period of five years and also has different UG programs accredited by the National Board of Ac-creditation (NBA) under Tier-I scheme. It is the only unaided private engi-neering college in Karnataka State selected by the Govt. of India for World Bank Funding under TEQIP Phase II- Subcomponent 1.1 in the year 2011. NMIT offers wide range of academic programs comprising of seven UG and eight PG programs in Engineering besides MBA and MCA. Ten De-partments of NMIT offers doctoral programs of VTU and University of Mysore. Highly qualified and experienced faculty members comprising 106 PhD holders primarily from the IISc, IITs and NITs are on the rolls of NMIT. An additional 90 plus faculty members are pursuing PhD in different Research Centres of NMIT as well as in other Universities of Eminence.

Having a strong focus towards achieving excellence in education, research and promotion of innovation and entrepreneurship, NMIT has several spon-sored research projects amounting to Rs. 10 Crores sanctioned by differ-ent reputed national funding agencies such as the DST, DIT, AICTE, DRDO Labs. To promote multidisciplinary research, NMIT has established seven State-of- the-art Centres of Excellence on Small Satellites, Robotics, Nanomaterials & MEMS, Design Engineering and Process Simulation, Cyber security Computational Fluid Dynamics, Aerospace and IoT. Sim-ilarly, Innovation and Entrepreneurship Development Centre was estab-lished in the year 2010 and was funded with Rs. 45 lakhs by the Depart-ment of Science and Technology (NSTEDB), New Delhi and a Business In-cubator was supported by the MSME (Micro, Small and Medium Enterpris-es), Govt. of India. NMIT is recognised by ISRO for undertaking collaborative re-search on Space Technology and Satellite Development. NMIT has led a consortium that designed and built STUDSAT-1, a satellite of PICO categ-ory launched by ISRO’s PSLV-C15 on 12 July 2010. This success is listed in the Limca Book of World Records. Moreover, the development of a work-ing model of Pick & Place Robot has been kept as a permanent exhibit in Birla Science Center, Hyderabad. The institute has collaborations with North Dakota State University, USA, Indo- Korean Institute of Science & Technology, ISRO, Indian Institute of Science, NITK, Fluidyne and so on.

ERCAM - 2021

Today, multi disciplinary research has become vital in the development of a wide range of technological processes and systems. The role of Civil, Aeronautical and Mechanical Engineering in the country’s economy and societal evolution has long been demonstrated. Some of the areas that are drawing the attention of researchers, the world over, in developing a wide range of engineering technologies are Advanced Materials, Mechanics of Engineering Components, Engineering Structures and Systems etc. The International Conference, ERCAM-2021, is envisaged to bring together specialists and practitioners from various Industries, R&D institutes and Academicians across the world, thereby providing a forum for exchange of knowledge on recent trends in major sectors of materials, processes

and systems pertaining to Civil, Aeronautical and Mechanical Engineer-ing with multi-disciplinary approaches. The Third International Conference ERCAM 2021 focuses on the theme Materi-als, Mechanics, Structures, Systems and Sustainability. The conference will bring together leading academicians scientists, researchers and in-dustry experts in the domains of interest from across the world. Topics of interest for submission include, but are not limited to the following. In active participants with University Putra Malaysia, Gazi University and North Dakota State University, Fargo, USA.

Theme	Tracks		
	Mechanical Engineering	Civil Engineering	Aeronautical Engineering
Materials	<ul style="list-style-type: none"><li>• Smart and multifunctional composite materials</li><li>• Nano materials</li><li>• Metal Alloys, Ceramics, Graphene and Polymers</li><li>• Environmental and Green Materials</li><li>• Energy harvesting materials</li><li>• Bio Materials</li><li>• Thermal/Fluid systems &amp; Analysis</li><li>• CAD/CAM/CAE &amp; Robotics</li></ul>	<ul style="list-style-type: none"><li>• Advanced materials for Structural, Geotechnical, Hydraulic Structures and Transportation Applications including Micro and Nanomaterials</li></ul>	<ul style="list-style-type: none"><li>• High enthalpy materials</li><li>• High temperature materials, composites</li><li>• Conventional Aerospace materials and metals</li><li>• Advanced materials and manufacturing</li><li>• Smart and intelligent materials</li><li>• Antimatter</li><li>• Carbon Nano Tubes</li></ul>
Mechanics	<ul style="list-style-type: none"><li>• Computational Mechanics</li><li>• Solid mechanics</li><li>• Mechanics of Functionally Graded Material (FGMs), Porous and Nano-composites</li><li>• Tribology</li><li>• Biomechanics</li><li>• Non-Newtonian fluid flow</li><li>• Turbulent fluid flow</li></ul>	<ul style="list-style-type: none"><li>• Solid and Fluid Mechanics</li><li>• Computational Mechanics of Civil Engineering Structures</li></ul>	<ul style="list-style-type: none"><li>• Linear, Non-linear, FSI and Aeroelasticity</li><li>• Drones, Parachutes, Baloons and Aerostats</li><li>• Computational and Applied Mechanics in Aerospace systems</li><li>• Analytical Methods and Solution Mechanism</li><li>• Aeroacoustics</li></ul>
Structures	<ul style="list-style-type: none"><li>• Kinematics &amp; Dynamics</li><li>• Fatigue, Fracture &amp; life cycle analysis</li><li>• Smart Structures-Vibration &amp; noise control</li><li>• Bio-Inspired Structures</li><li>• Structural health monitiring</li><li>• Biomechanical designs &amp; applications</li><li>• Fluid-Structure Interactions</li></ul>	<ul style="list-style-type: none"><li>• Static and Dynamic behaviour of Civil Engineering Structures</li><li>• NDT in Civil Engineering</li><li>• Reliability Analysis and Optimisation Techniques</li><li>• Earthquake Resistant Analysis and Design of Structures</li></ul>	<ul style="list-style-type: none"><li>• Static and Dynamic behaviour of Aerospace Structures and materials</li><li>• Rocket, Helicopter, Missiles and Spacecraft Technologies</li><li>• NDT in Aerospace systems</li><li>• Conventional/Non-conventional method in structural design</li><li>• Optimization of Aerospace structures</li><li>• Stealth structures</li></ul>
Systems and Industry 4.0	<ul style="list-style-type: none"><li>• Sensors and structural identification</li><li>• MEMS/NEMS</li><li>• Vibration, Acoustics and Condition Monitoring</li><li>• Thermal/Fluid systems &amp; Analysis</li><li>• CAD/CAM/CAE &amp; Robotics</li><li>• Artificial Intelligence &amp; Machine Learning</li><li>• Data Analytics</li></ul>	<ul style="list-style-type: none"><li>• Structural Systems, Fluid Flow Systems for Civil Engineering including IoT, BigData, AI and their applications for Smart Constructions and Maintenance</li></ul>	<ul style="list-style-type: none"><li>• Virtual method in Aerospace system, Materials management</li><li>• Advances in Aerospace technologies.</li><li>• Optimization Techniques</li><li>• Reliability Analysis</li><li>• System Design</li><li>• Experimental Aerodynamics</li><li>• Transonic, Supersonic and Hypersonic Flow Analysis</li><li>• Industrial Aerodynamics</li></ul>
Topics related to Multidisciplinary Approach			

**ERCAM - 2021 is now accepting papers on the above topics through its system.**  
**If you have a paper on an additional topic, please write an email to [ercam@nmit.ac.in](mailto:ercam@nmit.ac.in)**

Registration

**After submitting the full length paper in th Easy Chair Scan the QR Code to register**



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