

2nd International Conference on
**Recent Advances in Mechanical
Engineering Research and Development**
ICRAMERD-21

24th-25th September 2021

In Virtual Mode



Department of Mechanical Engineering

Institute of Technical Education and Research

Siksha 'O' Anusandhan

(Deemed to be University)

Bhubaneswar, Odisha, India

OUR KEYNOTE SPEAKER



Prof. A. Rolstadas
Norwegian University of Science
& Technology,
Norway

Topic: New challenges in manufacturing engineering education



Professor Jim Browne
President at Irish
Academy of Engineering
Chairman at Children's Health Ireland (CHI)



Professor (Dr.) Md. Mamun Habib
School of Business & Entrepreneurship,
Independent University, Bangladesh
Visiting Scientist, University of Texas
Arlington (UTA), USA

Supply Chain Disruption and COVID 19



Prof. David Scott Sink,
Senior Advisor, The Poirier Group
Adjunct Professor Virginia Tech,
Director, Op Analytics and
Performance Excellence, IISE
**Title: Large Scale Enterprise
Transformation**



Prof. Bopaya Bidanda,
Professor,
University of Pittsburgh, USA
**Title: Thriving Under Uncertain
and Disruptive Conditions**



Prof. Pinakeswar Mahanta
Professor and Director
Department of Mechanical Engineering
NIT Arunachal Pradesh
(on deputation from IIT Guwahati)
**Topic: Recent Development in
CO- Gasification of Biomass with Coal**

OUR INVITED SPEAKERS



Professor Suman Chakraborty
Dept. Mechanical Engineering,
IIT, Kharagpur



Prof. Jayadev Bala
Professor, Siksha O Anusandhan
Deemed to be University, Bhubaneswar
**Topic: Government, Industry and Academia
Collaboration: benefits, process and challenges**



Dr. Amiya Kumar Behera
Chairman, OPSSL,
Chairman IIE Odisha chapter
**Title: Prospects of 2G Bioethanol
production from Lignocellulosic Biomass**



Mr. Jagadish Patra, AVP,
Aditya Aluminium



Mr. Sushanta Kumar Das
AVP (SCM)
TRL Krosaki Refractories LTD



Dr. Debanik Roy, Scientist,
Scientist, Division of Remote
Handling & Robotics, Bhabha
Atomic Research Centre & Professor,
Homi Bhabha National
Institute, DAE, Govt. of India



Dr. Pradeep K. Sahoo,
Principal Scientist,
CSIR National
Aerospace Laboratories,
Bangalore, India.



Mr. Sridhar Panigrahi,
Division Head,
SR-SS & CSDL/ISRO,
Valiamala

ABOUT

SIKSHA 'O' ANUSANDHAN

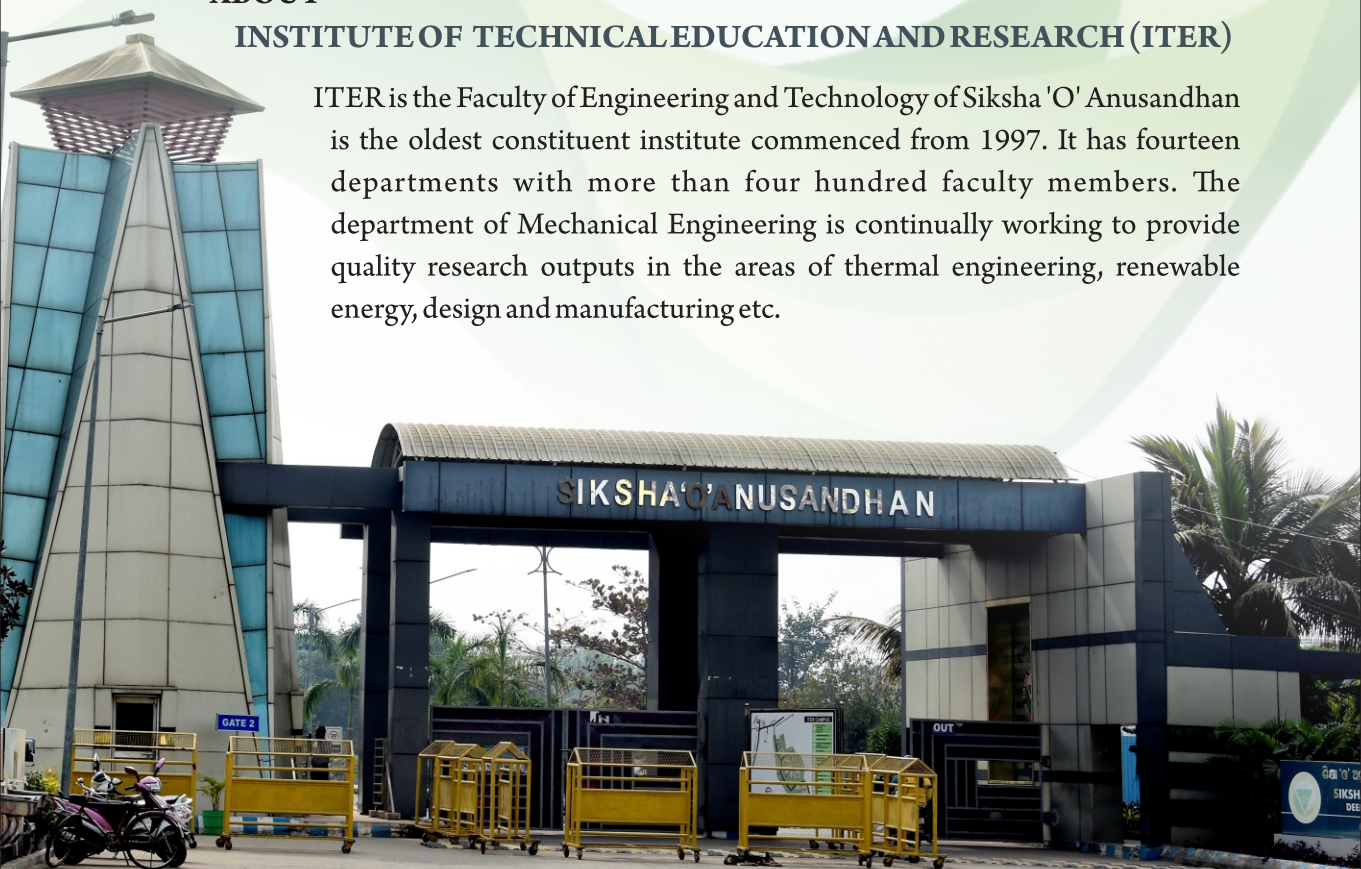
Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar declared u/s 3 of UGC Act, 1956 is a leading University in India offering professional programmes in the disciplines of Engineering, Medicine, Dental Science, Nursing, Pharmaceutical Science, Biotechnology, Management, Law, Hotel Management and Agricultural Sciences. Based on its all-round performance, this University has been awarded ranks among top 20 in the country in University category by National Institutional Ranking Framework (NIRF) of Ministry of Human Resources & development (MHRD), Govt of INDIA consistently for last three years, surpassing many State & Central University/IIT's/ Institute of high learning. It has also been ranked as the 33rd best National Institution, the 20th Best National University and the best Institution in Odisha by the MHRD through its NIRF Rankings in 2017. 19th Best Medical College in the country. Approved by UGC & AICTE, it has been re-accredited by the NAAC with A-Grade and has obtained the International Accreditation by ABET, USA and certification by IAO, URS, UK.



ABOUT

INSTITUTE OF TECHNICAL EDUCATION AND RESEARCH (ITER)

ITER is the Faculty of Engineering and Technology of Siksha 'O' Anusandhan is the oldest constituent institute commenced from 1997. It has fourteen departments with more than four hundred faculty members. The department of Mechanical Engineering is continually working to provide quality research outputs in the areas of thermal engineering, renewable energy, design and manufacturing etc.



ABOUT THE CONFERENCE

The 2nd International Conference on Recent Advances in Mechanical **Engineering Research and Development (ICRAMERD-21)** is being organized by “The Department of Mechanical Engineering”, Institute of Technical Education and Research (ITER), Siksha 'O' Anusandhan (Deemed to be University). The mission is to create a platform for exchange and dissemination of knowledge in the emerging field, different emerging research aspects in Mechanical Engineering from practicing professionals and academic researchers both at national and international levels. Large numbers of high caliber researchers across the world have consented to deliver key note addresses. Speakers from industry are invited to enlighten about the new technologies being used in different industry sectors. Top management professionals and eminent academicians have also consented to participate in panel discussions.

CONFERENCE DELIBERATIONS

The International Conference deliberations are being structured to cover the following themes (but not limited to)

1. MATERIALS ENGINEERING

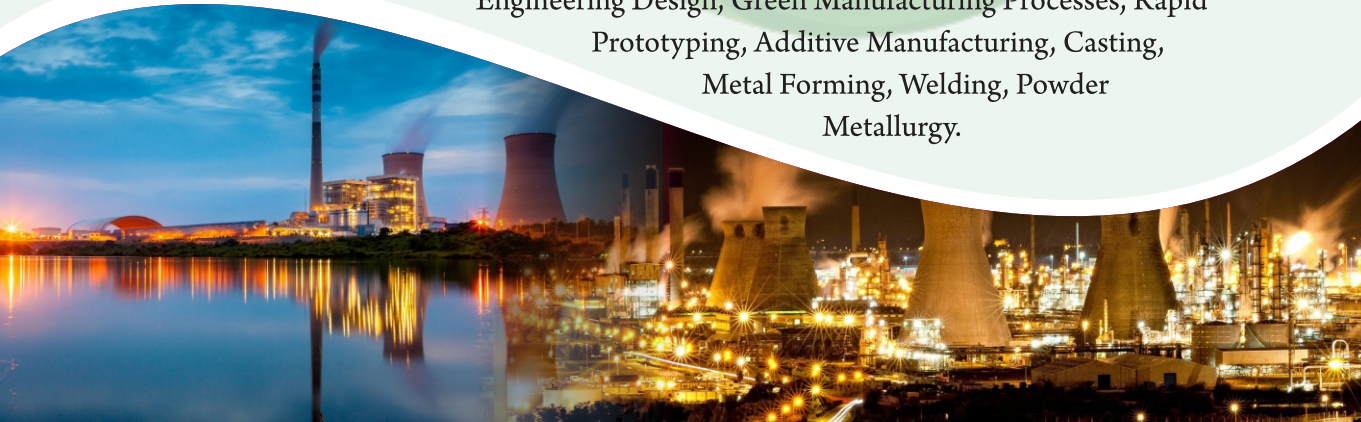
Nanomaterials and Nanocomposites, Ceramics and Glasses, Polymers, Electrical and Magnetic materials, Composite, Fibers, Bio-Materials, Nanostructure, Flexible and Hybrid Materials, Smart Materials.

2. INDUSTRIAL AND SYSTEMS ENGINEERING

Operation as a service, Production Planning & Control, Total Quality Management, Supply Chain & Logistics Management, Product Design & Development, Machine Learning, Artificial Intelligence in Industry 4.0 Applications, Robotics & Automation, Business Process Re-engineering, Operation Research, Industrial Automation, Control System.

3. MANUFACTURING SYSTEMS ENGINEERING

Advanced Manufacturing Processes, Computer Simulation, Manufacturing Facilities, Planning and Optimisation, Lean Manufacturing systems, Automation in Control System Design and Simulation, Application of optimization methods in Engineering Design, Green Manufacturing Processes, Rapid Prototyping, Additive Manufacturing, Casting, Metal Forming, Welding, Powder Metallurgy.



4. AUTOMOTIVE ENGINEERING

Design and simulation of smart Vehicles, Electric and Hybrid Vehicles, Artificial Intelligence in Automotive Engineering, Automated Guided Vehicle.

5. THERMAL SYSTEMS ENGINEERING

Fluid Flow, Heat Transfer, Application Thermodynamics in thermal system Design, Modelling and Simulation, Computational theory in Engineering, Combustion, Power Plant Engineering, Gas Dynamics and Jet Propulsion, Refrigeration, Heating Ventilation and Air conditioning (HVAC).

6. DESIGN ENGINEERING

Biomechanics, Automation, Control system design and simulation, Application of optimisation methods in Engineering Design Composite Materials, Functionally Graded Materials, Structural Analysis, Vibration, Finite Element Methods, Tribology.

7. ASSURANCE ENGINEERING

Safety System Design, Reliability Engineering & Optimization, Design for Maintainability.

8. ENERGY

Renewable Energy and Technology, Solar, Wind, Biomass, Geothermal, Hydropower energy Engineering etc., Fuel Cell, Alternative Fuel, Sustainable Energy System, Energy Saving Devices- Super Capacitors.

Publication Details :
All the selected papers will be published in
Lecture Notes in Mechanical Engineering (Springers)
Scopus Indexed Conference Proceeding.



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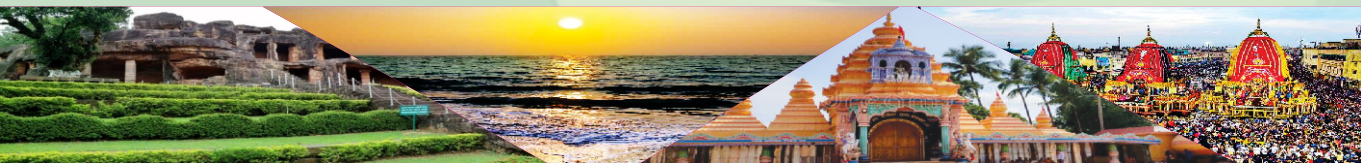
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Academician	Rs. 3000/-	USD 45
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Dr. Premananda Pradhan

Convenor

Email: premanandapradhan@soa.ac.in

Mobile: 7008726144

Dr. Shakti Prakash Jena

Co. Convenor

Email: shaktijena@soa.ac.in

Mobile: 8249476361

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Welcome 2021



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