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*Organized by*  
**Department of Mechanical Engineering**  
**National Institute of Technology Manipur**  
**Langol, Imphal West, Manipur**  
**India - 795 004**  
[www.nitmanipur.ac.in](http://www.nitmanipur.ac.in)

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### Important Dates

Submission of Camera Ready Paper: 25<sup>th</sup> Nov., 2016

Intimation about acceptance : 30<sup>th</sup> Nov., 2016

Early Bird Registration : 03<sup>rd</sup> Dec., 2016

Late Registration : 06<sup>th</sup> Dec., 2016

## REGISTRATION FEE\*:

Delegates	India Registration (in Rs.)			International Registration (in U.S. Dollars)		
	Early Bird	Late	Partici-pants without paper	Early Bird	Late	Partici-pants without paper
Student Authors	500/-	700/-	200/-	100	125	50
Research Scholars	1000/-	1500	300/-	125	150	70
Faculty/Scientists	2000/-	2500/-	500/-	150	200	85
Industries	5000/-	7000/-	2500/-	180	300	100

\*The Registration fees include Proceedings, Journal publication charges, Conference Kit, Refreshments, Lunch and Dinner on conference days. Tours are not included. Scanned copy of payment receipt should be sent to the conference convener via email for confirmation of payment.

## MODE OF PAYMENT

Name	Director NIT Manipur
SBI,A/c Number	31098026413
Branch	Imphal Secretariat
Bank Address	Imphal –West, Manipur -795001
IFS Code	SBIN0004562
MICR Code	795002003
Payment process	Online Transfer via: NEFT/RTGS

## SPONSORSHIP OPPORTUNITIES

The conference provides a unique opportunity for sponsoring Organizations to promote their products/services to the Focused International and National audience besides having an excellent opportunity to interact with Engineers/Scientists academicians during conference. Organizations are requested to sponsor this conference by contributing rupees 20,000 and above. The contributions will be acknowledged at suitable places during conference.

## THE PROCEEDING AND SOUVENIR



The proceeding of the conference will be published in Bonfring Publishers which is made available in CD forms. The conference souvenir, with abstracts of papers, will include advertisement also. The tariff for advertisement in the souvenir.

Outside back cover : Rs. 40,000/- (Indian) USD \$ 1000 Overseas)

Inside cover page : Rs. 30,000/- (Indian) USD \$ 700 (Overseas)

Full Page : Rs. 20,000/- (Indian) USD \$ 500 (Overseas)

Half Page : Rs. 20,000/- (Indian) USD \$ 250 (Overseas)

Please note that organizing commitment may refuse to publish an advertisement, if it is felt that it is not in the public interest.

*For more information, please contact*

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Email: [ncarimmiem@gmail.com](mailto:ncarimmiem@gmail.com)

Note :- Convener, NCARIMMIEM - 2016 applied for partial funding in SERB, Govt. of India, New Delhi.



In Association with



**National Conference on Advances in  
Research and Innovations in  
Mechanical Engineering,  
Material Science, Industrial  
Engineering and Management  
(NCARIMMIEM-2016)**

**12<sup>th</sup> & 13<sup>th</sup> December 2016**



**NATIONAL INSTITUTE OF TECHNOLOGY MANIPUR**  
An Institute of National Importance under the  
Ministry of HRD, Govt. of India



*Organised by*

**Department of Mechanical Engineering**  
**National Institute of Technology Manipur**  
**Imphal, Manipur, India - 795004**

## ABOUT THE INSTITUTE

National Institute of Technology Manipur, an Autonomous Institution under MHRD, Govt. of India, is set up to impart quality technical education at various levels of higher learning. It is one of the ten new NITs established and developed as Institute of National Importance. The functioning of the institute was started at its temporary Campus at Takyelpat, Imphal in the year 2010. The Institute has started functioning from its permanent campus of 138.2 hectares in the lush green areas of Langol, Imphal. The Institute now has nine departments viz Computer Science and Engineering, Electronics and Communications Engineering, Electrical Engineering, Civil Engineering, Mechanical Engineering, Chemistry, Physics, Mathematics and Humanities & Social Sciences offering courses leading to B.Tech., M. Tech., M.Sc., and Ph.D. amongst the Departments.

## ABOUT THE DEPARTMENT

The Mechanical Engineering Department, NIT Manipur was established in the year 2013 and it is presently offering B.Tech., M.Tech. and Ph.D. programmes. The department boasts of well experienced faculty and advanced laboratory facilities in various microspecialization. At present, a centre named "Collaborative Learning & Innovation Centre" have been setup in collaboration with Tata Technologies, imparting design software skills to the students. Many R&D projects are also ongoing and the department is on the verge of starting partnership with various Industries, Research oriented Organizations and other Academic Institutions.

## ABOUT NCARIMMIEM-2016

The National Conference on Advances in Research and Innovations in Mechanical Engineering, Material Science, Industrial Engineering and Management (NCARIMMIEM - 2016) is a premier forum for communication on new advances and research results in the

fields of Mechanical Engineering, Material Science, Industrial Engineering and Management and any other closely related fields. The conference also encourages the submission of critical review articles covering advances in recent research of such fields as well as technical notes.

## CALL FOR PAPERS

The organizing committee of conference is pleased to invite prospective authors to submit their original unpublished manuscripts to NCARIMMIEM - 2016. A full paper of maximum six pages, Including figures and tables, of A4 size sheet, may be sent to [ncarimmiem@gmail.com](mailto:ncarimmiem@gmail.com). All full paper submissions will be peer reviewed and evaluated on originality, technical and/or research content/depth, correctness, relevance to conference, contributions, and readability. All the selected full papers will be published in the Online proceeding Indexing - Bonfring Explorer. The best papers will be upgraded to International Journal i.e., Bonfring International Journal of Industrial Engineering and Management Science Journal. All the original unpublished manuscripts are to be strictly prepared as per the Template available in the [www.nitmanipur.ac.in](http://www.nitmanipur.ac.in), for timely publication.

*Scope of the conference includes all the following topics but not limited to:*

## MECHANICAL

Casting, Welding, Micro-Machining, Concurrent Engineering, CAD/CAM/CAE, Green Manufacturing - Design and Manufacturing, Dynamics Manufacturing, Rapid Prototyping, Reverse Engineering, Machine Learning, Applications of AI Techniques in Design and Manufacturing, Expert systems, Fuzzy logic, Genetic Algorithm, Aerospace Systems & Technology, Product Design, Machine Design Machinery, Finite Element Analysis, Biomechanics, Solid and Fracture Mechanics, Applied Mechanics and

Design Automation, Industrial Tribology, Noise and Vibration analysis, Instrumentation and Control, Automation, Mechatronics, Robotics, Aerodynamics, Alternative Energy, Heat Exchangers, Energy Management, Fluid Dynamics, Heat and Mass Transfer, Internal Combustion Engines, Refrigeration & Air Conditioning, Renewable and Non Renewable Energy, Solar Thermal Systems, Energy and Exergy Analysis of Thermal Systems, Solar Heat Exchangers and Solar Cookers.

## MATERIAL SCIENCE

Materials Preparation and Processing, Materials Engineering, Materials Science, Micro and Nanomaterials, Composite Materials, Forming, Powder Processing, Surface Engineering, Materials Characterization, Adhesion and Interfaces, Smart Materials and Structures, Electronic and Magnetic Materials, Corrosion, Non-Destructive Inspection Techniques, Contact Surface Mechanics and Fracture, Impact Behaviour of Materials.

## INDUSTRIAL ENGINEERING AND MANAGEMENT

Advanced Operations Management, Productivity Enhancement, Decision Analysis, Eco-Friendly and Sustainable Manufacturing, Engineering Economics and Cost Analysis, Enterprise Resource Planning, Ergonomics/Human Factors Engineering, Facility Planning and Management, Industrial Marketing, Information and Communication Technology Systems, Innovations in HRD Systems, Lean, Agile and Quick Response Manufacturing, Logistics and Supply Chain Management System, Manufacturing Systems Engineering, Optimization Techniques in Industrial Engineering, Production Economics and Finance, Production Planning, Scheduling and Control, Project Management, Reliability and Maintenance Engineering, Renewable Energy and Management, Small Scale Industries and

Entrepreneurship, Technology and Knowledge Management, Total Quality Management Systems.

## ABOUT THE CITY

Imphal is the capital city of Manipur, one of the sister states of northeastern India. It is located between 24°49'N & 24°82'N latitude and 93°57'E & 93°95'E longitude. Situated at an average altitude of 786 m above the sea level, Imphal has moderate climate adorned with beautiful landscapes. It is the centre of all cultural, commercial and political activities of the state.

## WAY TO NIT MANIPUR

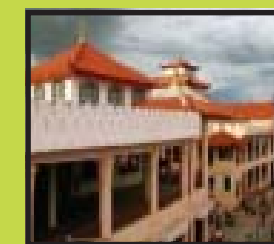
The campus is around 3.5 Km from the main market area of Imphal City. The nearest airport is located at a distance 7 km from the campus. The Institute is well connected by daily flights with Delhi, Kolkata and Guwahati. It is just 30 minutes ride from the campus. Imphal can be reached through National Highway No. 2 and No. 37. The nearest railway station is Dimapur and it takes around 8 hrs by bus from Dimapur to reach Imphal.



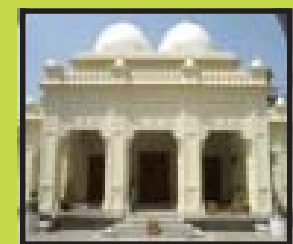
Loktak Lake



Kangla Fort



Ima Market



Govindajee Temple