#### INTRODUCTION

The applications of computational technologies are continuously contributing towards modern civilization. The exhaustive utilization of power has favoured the computational development of high-fidelity models to deal with various complex engineering problems which are difficult to execute in real-life by experiments. In conformity of the same, the prime objective of this workshop includes the nurturing for basic knowledge, recent developments, mutual sharing and scope of innovation cum model updating related to multi-dimensional practical applications. Moreover, irrespective of industries, academia and research, it aims to converge the synergy for prolific contribution towards social development.

## **OBJECTIVES**

To promote the knowledge and skills of computational technologies.

To understand in-depth fundamentals and high fidelity of Computational methods.

To provide case studies on various practical demonstrations and exercises.

## CONTENTS

Introduction to computational technologies, basic and recent advances of computational techniques, Industrial applications of computational technologies in aerospace, marine, civil-Construction, automobile industries, Various efficient computational techniques and approaches for design, manufacturing and mechanics related issues, Meta-modeling, Bond Graph modeling, Non-linear dynamics modeling, Aero-elastic modeling, Finite element modelling, Reduced order modelling, Impact Modeling, Composite / Smart structures modeling, Probabilistic modeling, Uncertainty Quantification modelling and recent trends in advanced computational areas.

## HIGHLIGHTS OF THE PROGRAMME

Technical sessions and discussions will be conducted by the expert faculties/scientists of various premier organizations like IITs, NITs and other reputed Universities.

### TENTATIVE EXPERT SPEAKERS

Prof. P. M. Pathak, IIT Roorkee
Prof. S. K. Dwivedy, IIT Guwahati
Prof. S. Chakraborty, IIEST Shibpur
Prof. A. Chakraborty, IIT Guwahati
Prof. S. Ray Chaudhuri, IIT Kanpur
Prof. C. S. Kumar, IIT Kharagpur

## **ORGANIZING COMMITTEE**

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# COORDINATORS

Dr. Sudip Dey (Mobile: +91 7086880231) Dr. Agnimitra Biswas (Mobile: +91 9435500659) Dr. Saikat R. Maity (Mobile: +91 9733544513) E-mail: nits.ct2018@gmail.com

# **One Week Workshop**

on

# **Computational Technologies**

(CT - 2018)

(Under TEQIP – III)

# August 16 - 20, 2018

Venue: Seminar Hall, ME Dept., NIT Silchar

<u>Coordinators</u> Dr. Sudip Dey Dr. Agnimitra Biswas Dr. Saikat Ranjan Maity





Organized by Mechanical Engineering Department National Institute of Technology Silchar (An Institute of National Importance) Assam – 788010, INDIA Website: www.nits.ac.in

## **ABOUT THE INSTITUTE**

National Institute of Technology, Silchar is one of the thirty National Institutes of Technology of India and was established in 1967 as a Regional Engineering College in Assam. In 2002 it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology Act, 2007. The climate of Silchar during August is rainy with normal temperature around 30°C. NIT Silchar is a fully residential institution with ten hostels for boys, three hostels for girls and one for married scholar. It has six engineering degree offering branches and five nonengineering branches. It conducts various programmes, including organizing the workshops, seminars, conferences, invited talks etc. in collaboration with different academic departments, institutes and reputed multinational and national industries.

## REGISTRATION

Internal Students: ₹. 500/-External Students: ₹. 1000/-Internal Faculty members: ₹. 1000/-External Faculty members: ₹. 3000/-Industry Persons: ₹. 5000/-

The registration fee includes registration kit and lunch. All participants have to pay the registration fees before submitting application either (i) via DD in favour of Director NIT Silchar, Payable at State Bank of India, NIT Silchar branch or (ii) online transfer to the account of the Director, NIT Silchar (A/C No.: 10521277057, IFSC Code: SBIN0007061). Brochure and registration form can also be downloaded from: <u>http://www.nits.ac.in/</u> Submission Process: Through below web link-<u>https://docs.google.com/forms/d/e/1FAIpQLSemy</u> GtBSNvYSLTqp-

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<u>form?usp=sf link</u> Or Scanned copies of both registration form along with D.D. (or online transfer proof) are to be sent to nits.ct2018@gmail.com on or before 13th August 2018. The original hard copies of registration form and D.D. has to be submitted at the registration desk, just before the commencement of the workshop.

## **ELIGIBILITY CRITERIA**

This program is open to industrial personnel, faculty members, research scholars, post graduate and under graduate students of technical institutions, engineering colleges, polytechnics, universities and other recognized institutions.

## HOW TO REACH NIT SILCHAR

There are daily flights from Kolkata, Guwahati. Taxis are available from Airport to NIT Silchar. Silchar is also well connected by road and train.

## ACCOMMODATION

Lodging and boarding for all selected external participants will be provided as per standard norms in the NIT Silchar guest house or scholars hostel on sharing basis.

# TRAVELNo TA/ DA will be provided to the participantDate:Signature of the applicantADDRESS FOR COMMUNICATIONPlace:Dr. Sudip Dey<br/>Principal Coordinator, Assistant Professor<br/>Mechanical Engineering Department<br/>National Institute of Technology Silchar<br/>Assam – 788010, India<br/>E-mail: nits.ct2018@gmail.com<br/>Mobile: +91 7086880231Recommendation of HOD:

### **REGISTRATION FORM :: CT-2018**

1. Name (block letters):

2. Designation:

3. Organization:

4. Address for communication:

Contact No. (Phone/Mobile):

E-mail:

DD No.:

Bank:

5. Highest Academic Qualification:

6. Accommodation (Tick): Yes / No

7. Registration Fee detail:

Date: