

INTRODUCTION

Applied Mathematics involves the application of mathematics to problems which arise in various areas, e.g., science, engineering or other diverse areas, and/or the development of new or improved methods to meet the challenges of new problems. Applied mathematics is the application of mathematics to real-world problems with the dual goal of explaining observed phenomena and predicting new, as yet unobserved, phenomena. Therefore, the emphasis is on both the mathematics, e.g. the development of new methods to meet the challenges of new problems, and the real world. The problems come from various applications, such as physical and biological sciences, engineering, and social sciences. Their solutions require knowledge of various branches of mathematics, such as analysis, differential equations, and stochastics, utilizing analytical and numerical methods.

OBJECTIVES

- To provide a platform for academicians all over the India to promote, share and discuss various new issues and new developments in different areas of applied mathematics
- To provide directions for future research and development by identifying key problems and their viable solutions and opportunities.
- To interrelation between theory and practice.

CONTENTS

- Numerical Methods For Singularly Perturbed BVP
- Finite Difference Methods,
- Spline Collocation Methods,
- Parallel Algorithms For Linear Systems
- Mathematical Modelling
- Bio-Fluid mechanics Convective Transport in Porous media
- CFD; Micro- and Nano-fluidics Modelling
- FEM for Interface Problems

- Higher order Compact Scheme/Multigrid Methods for CFD

TENTATIVE SPEAKERS

Prof M K Kadalbajoo(IIT Kanpur)
Prof Peeyush Chandra(IIT Kanpur)
Prof B V Ratish Kumar(IIT Kanpur)
Prof Somnath Bhattacharyya(IIT Kharagpur)
Prof Rajen Sinha(IIT Guwahati)
Prof T V S Sekhar(IIT Bhubhaneswar)
Prof S. Chandra Sekhara Rao(IIT Delhi)
Prof. S. Dey (IIT-ISM Dhanbad)

ORGANIZING COMMITTEE

Patron: Prof. Rajat Gupta
Director(In-Charge), NIT Silchar

Chairman: Dr. Santanu Roy,
HOD, Mathematics

Advisory members: Sri. Bijan Nath
Dr Pijus Kanti De
Dr Mausumi Sen
Dr Ganti Ramesh
Dr Kedar Nath Das
Dr Md Maqbul
Dr Juthika Mahanta
Dr Subrata Bera

Coordinators: Dr. Pankaj Biswas
Assistant Professor,
Mathematics Department, NIT Silchar

Dr. Praveen Kumar Gupta
Assistant Professor,
Mathematics Department, NIT Silchar

Dr. B H S Raju
Assistant Professor,
Mathematics Department, NIT Silchar

One Week Workshop on Recent Advances in Applied Mathematics (Under TEQIP – II)

22nd February to 26th February 2017

National Institute of Technology, Silchar (Assam)

REGISTRATION FORM

1. Name:
2. Designation:
3. Institution/Organisation:
4. Address for communication:
5. E mail:
6. Phone/Mobile No:
7. Highest educational qualification:
8. Accommodation required (Tick): Yes/No
9. Any other information:
10. Details of Registration Fee:
11. Recommendation of HOD:
12. D. D. No.: _____ Date: _____
Bank: _____
Place: _____
Date: _____

Signature of the applicant

REGISTRATION DETAILS

External Student & Research Scholar Rs. 500/-
External Faculty/Scientist/ Engineers Rs. 2000/-

All participants have to make payment via DD in favour of **Director NIT Silchar**, Payable at **State Bank of India, NIT Silchar** branch.

Brochure and registration form can also be downloaded from the institute website:
<http://www.nits.ac.in/workshops/>

Submission deadline: Scanned copy of Registration Form along with D.D. required to be sent via email (nits.math@gmail.com) on or before **5th February, 2017**.

The hard copy of original registration form and D.D. has to be submitted before the commencement of workshop at the registration desk.

ABOUT THE INSTITUTE

National Institute of Technology (NIT) Silchar, an Institute of National Importance under the NIT Act was established in 1967 as Regional Engineering College (REC) Silchar in Assam. In year 2002, it was upgraded to the status of an NIT from REC. NIT Silchar is situated on the banks of river Barak and on a sprawling campus spread over 600 acres of land on the outskirts of Silchar. The landscape of NIT Silchar campus is beautiful with natural lakes and hillocks, surrounded by tea gardens. The climate of Silchar during October is very pleasant with normal temperature around 27-30°C and little cloudy. NIT Silchar is a fully residential institution with nine hostels for boys and two hostels for girls. It has six engineering degree offering branches and five non-

engineering 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.

ELIGIBILITY

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

ACCOMMODATION AND TRAVEL

All the out station participants will be provided accommodation in the Institute. No TA/DA will be paid to the participants.

HOW TO REACH NIT SILCHAR

The Silchar city is well connected by air, rail and road. Silchar is situated at a road distance of 334 km from Guwahati. NIT campus is about just 10 km away from Silchar railway station and 35 km from Silchar Airport.

(http://www.nits.ac.in/misc_docs/Reaching_NIT_Silchar.pdf)

ADDRESS FOR COMMUNICATION

Dr. Pankaj Biswas
Coordinator,
Assistant Professor
Department of Mathematics,
NIT Silchar, Assam, India
Mobile: +91 9435432427/9530226601
Email: nits.math@gmail.com

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Organized by

DEPARTMENT OF MATHEMATICS
(AN INSTITUTE OF NATIONAL IMPORTANCE)
SILCHAR-788010
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