#### INTRODUCTION

Solar energy is a form of high grade energy, which is harnessed by devices and systems to produce both thermal and electrical energy. In modern times, solar technologies have made sufficient advancements in terms of efficiency, miniaturization of size as well as cost minimization. This workshop attempts to bring forth the modern techniques and practices in solar technologies. It is hoped that this workshop will setup a common platform for the researches, scholars, educationists, and faculty of various departments and institutes to learn directly from the experts the frontiers in solar technologies. This program aims to update the professionals working in the field of solar energy on technical, economic and social aspects also.

#### **OBJECTIVES**

To promote the knowledge and skills solar technologies. To understand in-depth fundamentals and high fidelity solutions of Computational methods. To provide case studies on various practical Demonstrations and exercises.

#### CONTENTS

The major thrust of the workshop will be on current research trends in solar energy including the following but not limited to:

- Frontiers in solar thermal technologies.
- Concentrated Solar Thermal (CST) technologies
- Concentrated solar power technologies
- Solar passive design for thermal application
- Hybrid solar energy technologies (grid and off-grid modes)
- Life cycle cost analysis of solar technologies including environmental impact.
- Modern developments in solar photovoltaic systems
- Solar cells technologies
- Solar energy sustainability, policies, and security.

#### 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 SPEAKERS**

Dr. G.N. Tiwari, IIT Delhi
Dr. S.K. Singh, NISE
Dr. T. Basak, IIT Madras
Dr. H. Tyagi, IIT Ropar
Dr. D. Rakshit, IIT Delhi
Dr. Bibek Bandyopadhyay, IIEST Shibpur
Dr. S. Suresh, NIT Tiruchirappalli
Dr. E. Saikia, GUIST

#### **ORGANIZING COMMITTEE**

PATRON-Prof. Sivaji Bandyopadhyay, Director, NIT Silchar

CHAIRMAN-Prof. P.K. Patowari, HOD, ME Deptt., NIT Silchar

#### **ADVISORY MEMBERS-**

Prof. K.M. Pandey, Prof. R.D. Misra, Prof. S. Baishya, Prof. M.A. Ahmed, Prof. P.J. Roy, Prof. D.H. Das, Prof. P. Choudhury, Dr. K. Chakraborty, Dr. K.K. Sharma

COORDINATORS-Dr. A. Biswas & Dr. Biplab Das

#### **MEMBERS-**

Dr. L. Roy, Prof. S.K. Pattanayak, Dr. S. Debbarma, Dr. S. Halder, Dr. D. Bhanja, Dr. S. Bhowmik, Dr. S. Nath, Dr. A.B. Deoghare, Dr. S. Pati, Dr. P. Debroy, Dr. S. Dey, Dr. S.R. Maity, Dr. P.R. Randive, Dr. C. Sahoo, Dr. A. Paul, Dr. Y. Singh, Dr. V. Pal, Dr. A.K. Goswami, Dr. A. Chowdhury, Dr. D. Das, Dr. P.K. Tiwari, Dr. R.G. Nair, Dr. M. Khanra.



One Week Workshop on

# Frontiers in Solar Technologies (FST-2018)

(Under TEQIP–III) September 24-28, 2018

Venue: Seminar Hall, ME Dept., NIT Silchar



Coordinators

### Dr. Agnimitra Biswas Dr. Biplab Das

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 in 2007. The climate of Silchar during September 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 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.

#### 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: http://www.nits.ac.in/.

Submission deadline: Scanned copies of both registration form along with D.D. (or online transfer proof) are to be sent to retipnits@gmail.com on or before 20<sup>th</sup> September 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. Due to limitations of seats selection of the participants will be based first cum first basis.

#### 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.

#### TRAVEL

No TA/ DA will be provided to the participants

#### ADDRESS FOR COMMUNICATION

Dr. Agnimitra Biswas Coordinator, Assistant Professor Mechanical Engineering Department National Institute of Technology Silchar Assam – 788010, India E-mail: retipnits@gmail.com Mobile: +91 9435500659

or

Dr. Biplab Das Coordinator, Assistant Professor Mechanical Engineering Department National Institute of Technology Silchar Assam – 788010, India E-mail: retipnits@gmail.com Mobile: +91 9402168938



One Week Workshop



One week workshop

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#### **REGISTRATION FORM :: FST-2018**

1. Name (block letters):

2. Designation:

3. Organization:

4. Address for communication:

Contact No. (Phone/Mobile):

E-mail:

5. Highest Academic Qualification:

6. Accommodation (Tick): Yes / No

7. Registration Fee detail:

DD No.: Bank: Date:

Date: Place: Signature of the applicant

Recommendation of Head: