

TARGET AUDIENCE

The workshop is open for faculty/students of engineering colleges, practicing engineers from utility, industry and other organizations.

FACULTY

The faculty for the workshop will be drawn from various schools of IIT Mandi, other institutions and organizations.

REGISTRATION FEE

The registration fee is Rs. 1000/- for academic participants and Rs. 8000/- for participants from utilities, industries and other organizations.

Registration fees will cover workshop fee, workshop material, working lunch, refreshments during workshop period only. Accommodation (sharing basis at Hostels) may be provided on request. Registration fee does not include the travel expenses of the participants.

All payments should be through DD/Cheque drawn in favor of "Registrar IIT Mandi" payable at Mandi, HP, India.

IMPORTANT DATES

Last date of receiving application	June 24 th , 2013
Notification and selection	First come first serve basis

Note: Selected candidates will be informed by fax / email, if provided.

MANDI AND ITS CLIMATE

Mandi is a small scenic beautiful town at the center of Himachal Pradesh. A few hours before the Himalayan resorts Kullu and Manali in Himachal Pradesh, once considered "the end of the habitable world".

The town has both mythological and historical significance and boasts of a unique temple architecture. It is also referred to as Chhota Kashi as there are many ancient temples in the city and on the banks of river Beas. The river Beas flows through the town and hills, which makes this town more scenic.

Weather at Mandi: The weather at Mandi in June is expected to be pleasant.

How to reach:

Road: Mandi is well connected by road to other places. From Chandigarh (200 km) one can travel by road to Mandi via Bilaspur. This would take about 5-6 hours. Shimla, Pathankot, Delhi, Dharamsala and Manali are all connected to Mandi by road. Mandi is actually the heart of Himachal since all buses passing from north to south and from east to west touch Mandi, making reaching Mandi a not so challenging option.

Train: The nearest railway stations are Joginder Nagar and Shimla by narrow gauge train, Chandigarh and Kalka by broad gauge train which are connected by regular bus services. From Pathankot the narrow gauge railway connects Joginder Nagar, which is 55-km from Mandi.

Information about the Institute as well as general information is available at institute website: <http://www.iitmandi.ac.in>

HOW TO APPLY

The duly filled registration form along with the registration fee should be sent to:

Dr. B. S. Rajpurohit & Dr. Samar Agnihotri

School of Computing & Electrical Engineering

Indian Institute of Technology Mandi

Mandi-175001, HP, INDIA

Phone: 01905-237917(O)/ 08894580096(R)

Fax: 01905-237917

Email: bsr@iitmandi.ac.in , samar@iitmandi.ac.in

A

National Workshop

On

Strategic Research Vision to Build a Smarter Grid

June 27-29, 2013



Coordinator
Dr. Bharat Singh Rajpurohit
Dr. Samar Agnihotri

Organized By:
School of Computing and Electrical Engineering
Indian Institute of Technology Mandi
Mandi- 175001, HP, India

INTRODUCTION

Looking beyond 2030, the challenges of efficient distribution and management for electricity networks are likely to get tougher. There exists a general consensus that the challenges of climate change, system security, and a need to accommodate significant volumes of decentralized and renewable generation, requires that the network infrastructure must be upgraded to enable smarter operation. The major changes to the way we supply energy and monitor its consumption by building a smarter grid lies at the heart of these changes.

Large increase in electricity contributed by intermittent/highly variable renewable resources, the increase of stressing/narrowly conditions on transmission system, a massive decoupling between generation/load caused by dc system and several other features expected into the future electricity networks will negatively affect the system stability.

The reliable and sophisticated solutions to the unforeseen issues of the future networks are creating dynamically intelligent applications/solutions to be deployed during the incremental process of building a smarter grid.

The future electricity networks and their potential issues require looking beyond the existing research frontiers, independent of disciplinary boundaries. *For this reason, a discussion of the future developments on sophisticated/intelligent applications/solutions is a key research issue, especially with the objective of integrating economic and social welfare into the design and maintenance of future smarter networks.* Some of the solutions based on advanced technologies/methodologies will be discussed. Several technical studies based on the recent research work will also be presented.

SCOPE OF THE WORKSHOP

The workshop's objective is to enhance the knowledge of the participants in the area of the "Research Vision to Build a Smarter Grid". A unique, national level opportunity which delves into the high-level, strategic issues relating to the integration of renewable energy and examines practical strategies that energy generators, project developers, and grid

operators can implement to overcome obstacles posed by local planning schemes and regulations, and, importantly, *do it in an intelligent, cost-efficient and timely way.* The workshop will provide a platform to an in-depth discussion on the various challenges and their possible remedies which will benefit participants from academic and R&D institutions, engineers of utilities and policy makers.

Successful implementation of Smart Grid calls for diversified technologies and expertise from various disciplines. A workshop with focus on researches such as the one proposed will enrich the technological repertoire of the research community in the country. As the leading researchers from the country are being invited, the workshop is expected to result in a well-defined road-map for the development and deployment of smart grids in India.

ABOUT IIT MANDI

Nestled in the Sivalik Range of the Himalayas, away from the bustle of the metropolis, a new abode of learning has germinated.

Vision: The vision of IIT Mandi is to spearhead cutting edge research and development of technologies needed by the world in the years to come. Research groups will work together in creating and harnessing the newest technologies needed to serve the people of the region and the country, and to tackle problems of global importance. In order to achieve excellence and high impact locally and globally, IIT Mandi focusses on fostering inter-disciplinary R&D. With a view to innovate sustainable technologies for widespread use, IIT Mandi encourages strong Humanities and Social Sciences participation in technology R&D.

Thrust Areas:

- Information and comm. for sustainable development
- Green energy technologies
- Integrated mountain development
- Agricultural and food processing technologies

REGISTRATION FORM

National Workshop On
Strategic Research Vision to Build a Smarter Grid
June 27-29, 2013

Name _____

Date of birth _____ Designation _____

Organization _____

Address for correspondence _____

Phone _____ Fax _____

Email _____

Accommodation Required: Yes/NO (Tick one)

Payment details:

Draft No. _____ Issuing bank _____

Amount _____ Drawn on _____

Date _____

Signature of applicant

* Make photocopies of registration form if required