



# The Institution of Engineers (India)

99 years of Relentless Journey towards  
Engineering Advancement for Nation Building



## All India Seminar

on

## Scope and Opportunity of Small Hydro & Wind Power in NER of India

Final Information Brochure

Technically Sponsored by IEEE  
DEIS Kolkata Chapter



Organized by

**The Institution of Engineers (India)**

Mizoram State Centre

Under the Aegis of

Mechanical Engineering Division Board, IEI

Venue:

Conference Hall,  
Tourist Lodge  
Aizawl, Mizoram

August 02-03, 2019  
Mizoram

In association with



NIT Mizoram



NIT Silchar



NIT Agartala



NIT Meghalaya



NIT Manipur



NIT Nagaland



Gauhati University



NIT Arunachal Pradesh



NIT Sikkim



University of Science & Technology

Meghalaya

Institute of Science & Technology

## The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform for sharing professional interest. IEI has membership strength of above 0.8 million. Established in 1920, with its headquarter at 8 Gokhale Road, Kolkata-700020, IEI has served the engineering fraternity close to a century. During this period of time, IEI has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India which has been accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating through its 124 Centres located across the country and 6 overseas chapters. Besides, IEI has bilateral agreements with about 31 international bodies and membership of another 8 international bodies of the developed nations across the globe.

Being recognized as a Scientific and Research Organization (SIRO) by the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, IEI promotes the cause of research and development by providing Grant-in-Aid support to undergraduate, post graduate students and PhD Research Scholars of Engineering Institutions and Universities.

IEI conducts Section A & B Examinations in various engineering disciplines (popularly known as AMIE examination), the successful completion of which is recognized as equivalent to Degree in appropriate field of Engineering of recognized Universities of India by the Ministry of Human Resources Development, Government of India. Every year as many as 90000 candidates appear for these exams.

IEI in collaboration with Springer regularly publishes peer-reviewed international journal in five series, namely, Series A, Series B, Series C, Series D and Series E covering fifteen engineering disciplines.

## Mizoram State Centre, IEI

The Institution of Engineers(India), Mizoram state Centre came in existence in the year 2018. It has got geographical area of operation in all Districts of Mizoram State i.e. Aizawl, Lunglei, Kolasib, Lawgttai, Mamit, Saiha, Serchhip, Champhai. At present, the State Centre is located in the campus of National Institute of Technology Mizoram, Chaltlang, Aizawl.



## About National Institute of Technology Mizoram

The Ministry of Human Resources Development, Govt. of India established NIT Mizoram in the year 2010 in the state of Mizoram with an objective to impart Education, Research & Training leading to B.Tech, M.Tech, M.Sc & Ph.D degrees. This Institute has been declared as an Institute of National Importance by an Act of Parliament. Here the students are admitted through All India Entrance Exam- Joint Entrance Exam (JEE Main). NIT Mizoram is an Institute situated in the scenic beauty of Mizoram, wrapped between clouds and mountain rocks, which add to its beauty. Being one among the most educated states of our country with a literacy rate of 91%, it beholds a very peaceful and calm environment suitable for studies. The Institute, to cope with the present competitive needs, comprises of laboratories with the latest equipment and installed with best & latest software.

## Introduction

Abundant and economical energy is the life blood of modern civilizations. Coal, nuclear and hydro are used primarily to make electricity. The bargraph shows oil, coal and natural gas together supplying 85 percent of the world's energy supply. North Eastern Region (NER) is one of the potential Hydro/Wind Power regions of the country. It is enriched with huge water resources carried by large & small river systems and average wind speed 5-8 km/hrs. Moreover, the surface water resource of the region is near 652.3 billion cubic meters which is 34% of country's total water wealth. However, due to remote location and inhospitable physical conditions the huge water and wind potential were not fully utilized. The ongoing efforts to harness the vast hydro-power potential through series of dams has posed an unprecedented threat to the water, social and ecological security of the region. These hydropower dams involve the setting up of large infrastructural which in turn leads to deforestation and disruption of forest ecosystems and reduction of biodiversity. In contradiction, small hydro/wind projects combine the advantages of sustainable hydro/wind power with decentralized power generation and also it can be integrated into existing irrigation structures flood control, etc. Therefore, it (small hydro and wind projects) is well suited to the NER India. In order to further boost the development of small hydro/wind power projects in the NER –India, there is a need to share the views in the field through organizing a national seminar covering the advances made in planning, technology selection and implementation of small hydropower projects.

## Objectives

- ❖ To provide forum for exchange of experiences on policies, regulations, technological innovations, best policies and scope of hydro power development as a clean, green and sustainable source of development.
- ❖ To identify the areas for the research and development of small hydro/wind with special reference to NER-India.
- ❖ To identify the key strength of various regions/states to develop small hydro/wind in NER.
- ❖ To bring together the national scientific experts to catalyze and advance scientific knowledge about Geriatrics and Gerontological Nursing present the most recent research findings, and promote and enhance scientific collaborations around the world.

## Seminar topics

The seminar will promote research & developments and challenges faced in the areas of wind, hydro, solar and other renewable energy resources. The ultimate goal is to highlight the current research problems and evolve at the suitable solutions. Therefore, we welcome research articles and case studies on any one of the below mentioned tracks **but not limited to:**

- ❖ Wind Power Technology and Instrumentation
- ❖ Wind Farms Construction
- ❖ Challenges in Wind and Renewable Energy
- ❖ Next Generation Wind Power
- ❖ Hydro Power Technology
- ❖ Nano Technology for Wind Power
- ❖ Global Trends in Wind Energy Commercialization & Investment
- ❖ Wind Conditions
- ❖ Wind Turbine Technology
- ❖ Wind Energy Integration
- ❖ Offshore Deployment and Operation
- ❖ Hydrology, Flood and Sediment Management
- ❖ Recent Trends in Hydro Generating Equipment
- ❖ Micro Hydro and Ultra Low Head
- ❖ Challenges in Hydropower Development
- ❖ Environmental and Socio Issues and Relevance in Hydropower Development
- ❖ Impact of Natural Disaster on Hydropower Development

## Call for Papers

Faculty, research scholars, students and scientists from academic institutions, universities, R&D organizations and consultants and practicing engineers from industries / professional bodies are invited to participate and present technical papers with original ideas on the above mentioned topics

## Registration

### Important Dates

Full Paper Submission Opens	: May 01, 2019
Registration Opens	: June 01, 2019
Full Paper Submission Ends	: June 30, 2019
Intimation of Review Comments	: July 15, 2019
Early Bird Registration Starts	: June 30, 2019
Submission of Revised Paper	: July 20, 2019

Intimation of final Acceptance	: July 25, 2019
Early Bird Registration Ends	: July 26, 2019
Late Registration starts	: July 26, 2019
Spot Registration	: August 02-03, 2019

### **Registration Fee**

Early Bird Registration	
Participants from Abroad	: US \$100
Industry/ Research Organizations	: INR ₹ 3,000/-
Faculty Members	: INR ₹ 2,000/-
Students (Pursuing PhD / Master/ Bachelor Courses)	: INR ₹ 1,000/-

### **Late Registration Fee**

Participants from Abroad	: US \$150
Industry/ Research Organizations	: INR ₹ 5,000/-
Faculty Members	: INR ₹ 3,500/-
Students (Pursuing PhD / Master/ Bachelor Courses)	: INR ₹ 2,500/-

## **Souvenir and Advertisement Tariff**

The Seminar **Souvenir** is a valuable resource that all attendees receive and refer to again and again as they navigate the Seminar. Advertising in the Seminar **Souvenir** is a great way to market and can help you secure long-term business. The advertisement charges are as follows:

Back Cover (Colour)	: ₹ 30,000.00
Inside Front Cover (Colour)	: ₹ 25,000.00
Inside Back Cover (Colour)	: ₹ 25,000.00
Full Page (Colour)	: ₹ 20,000.00
Half Page (horizontal only) (Colour)	: ₹ 15,000.00
Full Page (Black & White)	: ₹ 10,000.00
Half Page (horizontal only) (Black & White)	: ₹ 7,000.00

## **Payment**

All payments are to be made through crossed Demand Draft / At par Cheque, drawn in favor of **“The Institution of Engineers (India), Mizoram State Centre”** payable at Aizawl. OR The registration fee can be paid through online transfer (NEFT/RTGS) to the Account Number: **38115089105**, Name of the account holder: **Institution of Engineers India Mizoram State Centre**, Bank: **SBI**, Branch: **Bawngkawn**, IFS Code: **SBIN0007059**. Candidate’s first name and words **“REG FEE”** to be mentioned in the remarks. UTR/Ref. No. should be mentioned in the application form as well as a copy to be enclosed with the application form.

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## Full Paper Submission

- The paper template for the full paper submission is available @ [www.nitmz.ac.in](http://www.nitmz.ac.in). The authors should make sure that the similarity index for the manuscripts should be less than 20%. The full paper may be sent to the following mail ID before the last date.  
Email ID : **hod\_me@nitmz.ac.in**
- The accepted and presented papers may be published in one of the Scopus indexed Proceedings [*AIP/IOP/Springer etc.*].
- Extended version of Selected papers after peer review may be published in Scopus/SCI Journals.

## Contact



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**on**  
**Scope and Opportunity of Small Hydro & Wind Power in NER of India**  
**Aug 02-03, 2019**  
**DELEGATE REGISTRATION FORM**

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Particulars)..... Cheque / Demand Draft No..... Dated ..... OR  
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Amount Transferred: .....

UTR/Ref.No.....Date: .....

.....  
Signature of the Candidate

.....  
Signature of the Head of the Dept. /Institution

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**Registration Fee:**

**Participants from Abroad:** US \$100

**Industry/ Research Organizations:** INR ₹ 3,000/-

**Faculty Members:** INR ₹ 2000/-

**Students (Pursuing PhD / Master/ Bachelor Courses):** INR ₹ 1000/-