



# INTERNATIONAL CONFERENCE ON SMALL WIND TURBINE

10<sup>th</sup> to 13<sup>th</sup> DECEMBER 2018

CHENNAI, TAMIL NADU



SPONSORED BY

MINISTRY OF NEW AND RENEWABLE ENERGY, NEW DELHI



नीवे NIWE

ORGANIZED BY

NATIONAL INSTITUTE OF WIND ENERGY, CHENNAI

AN AUTONOMOUS R&D INSTITUTION UNDER MNRE, GOVERNMENT OF INDIA

IN ASSOCIATION WITH



THE WINDEMPowerMENT  
ASSOCIATION

UNITED KINGDOM (U.K.)



SKILL COUNCIL FOR  
GREEN JOBS

NEW DELHI, INDIA

## Introduction

India, over the years, has been a trendsetting nation with regard to wind power utilization. Decades of concerted efforts have started to yield gratifying results and today wind power in India stands fourth in the world in terms of installed wind power capacity. The global market for small wind turbines (SWTs) has been on the rise over the last several years. This is driven by rapidly growing energy demand, varying fossil fuel prices and improved SWT technology, which can be deployed for a diverse pool of applications, both in 'grid-tied' and 'stand-alone' modes. The recorded small wind capacity installed worldwide has reached over 800 MW. Based on the world distribution of turbine manufacturers, the production of small wind turbine remains concentrated in very few countries and developing countries continue to play a minor role in SWT manufacturing.

India could benefit significantly from exploiting the potential of micro-generation technologies that can meet energy needs under the distributed generation mode, so as to provide long-term solutions. Small Wind turbine system is useful for Off-grid / Mini-grid / Micro-grid / distributed renewable energy based electricity generation in rural areas / un-electrified areas / complex terrains or areas falling under low wind regime. Ministry of New and Renewable Energy (MNRE), Government of India, has been implementing programmes to promote small wind turbines system all over India. As on March 2017, a cumulative total of 1516 nos. of water pumping windmills and an aggregate capacity of 3289 kW of aero-generators / hybrid systems are installed across India.

Though Small Wind Energy and Hybrid Systems Programme has been in place in India through MNRE, since 1994, lack of trained manpower in small wind turbine sector as compared to large wind turbine sector is seen as an impediment to sustained the growth. A need is felt for strengthening the supply chain exists in the sector to make sales & service affordable. It is, therefore, necessary for creating the skilled human resources and the know-how to produce the wind turbine systems through conducting trainings and Hands-on workshops especially on small wind turbine, is the need of the hour.

In order to support the strong development of a small wind turbine industry, NIWE with the support of MNRE has already established a Small Wind Turbine Laboratory at NIWE and has conducted special training course for National and International participants. These trainings were for mechanics, ITI and Diploma holders as well as for Engineers to train them in manufacturing the Small Wind Turbines with the local and low cost materials. The aim was to create technicians for installation, commissioning and operation and maintenance of small wind turbines. With this experience, NIWE is proposed to conduct an International Conference on Small Wind Turbine, which is unique and first of its kind in the country. This Conference is sponsored by MNRE, conducted by NIWE in association with Minvayu, Aurore Systems, Tamil Nadu and Wind Empowerment, United Kingdom. This conference would be open to Indian entrepreneurs, scientists and rural development champions along with international participants.

The conference will be discussing on the Agreeable definition of Small Wind turbine. Presently the upper limit capacity stands around 50 kW equivalent as per IEC definition and Industry practice tending towards 100 kW. In order to have a standardised definition unanimously acceptable to all stake holders internationally for an orderly and healthy small wind market development, a discussion is the need of the hour to arrive at a harmonised agreement. This is due to a global interest in having layer grid connected system and a comparatively diminishing market of standalone systems, as reported in the "Small Wind World Report" published in 2017 by WWEA.

## Aim of the Conference

The International conference will bring a wide national & international audience under one umbrella to build, learn and compare global small wind turbine know-how. The main objective of the conference is the exchange of open source technical advances, share experiences and discuss global best practices to enable the technology to expand rural wind electrification globally, with a particular emphasis on India. Creating a network of wind turbine installers, will facilitate the scaling up of the technology in remote rural India with an emphasis on productive solutions. This will also leverage the localized research solutions that continues to shape and sustain this rapidly evolving sector.

## Programme & Venue

Program	From	To	Duration	Venue
International Wind Empowerment Conference	10.12.2018	12.12.2018	3 Days	The Gateway Hotel IT Expressway 309, Rajiv Gandhi Salai, (OMR), Elcot Sez, Sholingnagar, Chennai

on 13.12.2018, Wind Empowerment General meeting will be held at NIWE, Chennai  
(limited participation to members and special invitees)



## International Wind Empowerment Conference

The conference involves different Lectures and Poster presentations that cover the dissemination of experiences globally with small wind turbine development, especially in developing countries and how these experiences can be applied to India and other developing countries. Discussions about education, market assessment, and sustainability would be a part of it. The sessions will provide a valuable platform for the creation of collaborative projects between international and domestic member organizations taking on the electrification challenge for urban and rural habitats in complex terrains and low windy States.

### Target Participants

◆ Industry Personnel
◆ Technical Experts in SWT
◆ Innovators
◆ Entrepreneurs
◆ Faculty
◆ Research Scholars / Students working in SWT
◆ R&D Institution
◆ State Nodal Agencies
◆ Mechanics and technicians based in rural areas

### Training Language

The official language of the Conference will be in English.

### Conference Themes

Posters are invited for the conference on the following topics:

- ◆ Education & Training: Providing tools to facilitate training on small wind turbines
- ◆ Delivery Models: International Best practices in the implementation of wind rural electrification
- ◆ Technology: Developing technological innovations related to small wind systems
- ◆ Maintenance: How to keep a small wind turbine working properly
- ◆ Measurements: Development and deployment of electronic measurement equipment
- ◆ Policy: For sustainable growth of SWT sector
- ◆ Global Harmonisation of SWT Rating.

### Call for Posters

Original research articles broadly within the scope of the conference topics, written in English language, are invited as Posters. The programme of the conference will be made available in NIWE website. Authors will have to sign a declaration of originality at the time of final submission. The authors should submit abstract of the Poster before the deadline. The abstract should be concise and clearly state the results, aims, key components of the research topic with key words. The name of the author making the presentation should be underlined. At least one of the authors must register for presentation as poster.

The poster template should be forwarded in word (.doc) and PDF (\*.pdf) files by one of the authors of the Poster to the E-mail Id: [itraining.niwe@nic.in](mailto:itraining.niwe@nic.in). A specified format is made available in NIWE website.

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• Shri. Kostas Latoufis	Wind Power Empowerment

## Important Dates

### Event Date

- ◆ International Conference on Wind Empowerment : 10<sup>th</sup> to 13<sup>th</sup> December 2018

### Poster Submission Dates

- ◆ Abstract Submission : October 25, 2018
- ◆ Notifications of Abstract Acceptance : November 01, 2018
- ◆ Specified format Submission : November 05, 2018
- ◆ Last Date for Registration : November 05, 2018

## Registration Procedure

The Registration form should be submitted before the deadline. Kindly send your nomination / participant details to [itraining.niwe@nic.in](mailto:itraining.niwe@nic.in). The registration form can be downloaded from the NIWE website (<http://niwe.res.in>).

For Indian Residents: The duly filled-in registration form along with the registration fees in Demand Draft drawn from any Nationalized Bank in favour of "NATIONAL INSTITUTE OF WIND ENERGY" payable at Chennai.

For Foreign Residents: The registration fees to be remitted through 'Wire Transfer' to "NATIONAL INSTITUTE OF WIND ENERGY" (made available in NIWE website [http://niwe.res.in/assets/Docu/RTGS\\_document.pdf](http://niwe.res.in/assets/Docu/RTGS_document.pdf)). The duly filled-in registration form along with proof of money transfer to be submitted.

## Conference Sponsor Opportunities

The Conference offers sponsorship opportunity. The interested sponsor may contact the organizer.

## Exhibition of Products and Services

The Conference provides opportunity for Exhibition to display the products and services to professionals and stakeholders across the wind industry. Those who need stall may contact the organizer for booking forms and rules.

## Registration Fee

Registration fee includes conference kits, working Lunch and tea / coffee and no accommodation and local travel will be provided.

Category	Registration fee per Participant
Student / Ph.D Scholar	INR 3000 + 18% GST (Rs. 3,540/-)
Other delegates / participants	INR 6000 + 18% GST (Rs. 7,080/-)



## Co-ordinator Details

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