

One Day Pre-Conference Tutorial  
on  
**WIND ENERGY SYSTEMS – MODELING AND DESIGN**  
**11 February 2011**

as a part of the  
**INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY UTILIZATION (ICREU) – 2012**

Organized by

Department of Electrical and Electronics Engineering,  
**COIMBATORE INSTITUTE OF TECHNOLOGY: COIMBATORE – 14**

Jointly Organized with

**Oklahoma State University, Stillwater, USA**



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**Report**

Global warming is no longer a fantasy theory but it is a practical reality. Every citizen in the world has a great responsibility to understand the implications and initiate actions to reduce the adverse impact of it. Electricity generation from the fossil fuels is a major key contributor in global warming. One of the best ways to reduce the global warming is to use the renewable sources of energy for the production of electricity. Of the various renewable energy sources, wind energy is a promising, matured source of energy. With the increasing emphasis on sustainability, the providers of electrical energy have been recognized the need to tap the wind energy for power generation. Technical and managerial barriers prevent the wind energy as a major contributor in power sector. Breaking these barriers and accelerated exploitation of wind energy in the near future will be the key success to energy security and to mitigate the global warming. **To address these issues, this one day pre-conference tutorial aims to offer a unique opportunity to learn from the fundamentals of wind energy technology to the advanced techniques adopted in this field. Further it plays an ample opportunity for all the major players working in wind energy systems to share their knowledge, the current challenges, opportunities and solutions for a cleaner and greener future generation.**

The one day pre-conference tutorial has been inaugurated by Dr.V. Selladurai, Principal, Coimbatore Institute of Technology with his presidential address. Prior to this, Dr.V. Jagannathan, Professor and Head, Department of EEE, gave a welcome address. Dr.S.Shanmugam, Administrative Officer, Coimbatore Institute of Technology offered his felicitation. In the overview Dr.E.Chandra Sekaran, Organizing Secretary of this one day pre-conference tutorial, explained the need of renewable energy systems and narrative structure of this programme.

The first technical session was handled by Er. G. Arivukkodi, Engineer, Wind Resource Assessment Unit, C-WET, Chennai on the topic of “Wind Resource Assessment and Analysis”.

**Er.S.Arulselvan, Certification Engineer, Department of Certification, C-WET, Chennai, delivered an expert lecture on “Overview of Wind Turbine Technology”**

**Er. S.R.Sivarasu, Assistant Professor, Department of EEE, CIT, Coimbatore delivered an expert lecture on “Research Challenges in Re-Powering of Wind Energy Systems”**

An another technical session was handled by **Dr.K.K.Sasi, Professor and Chairperson, Department of Electrical and Electronics Engineering, Amrita School of Engineering, Coimbatore.** on the topic of **“Modeling and Performance Evaluation of Wind Energy Systems”**.

The final session was handled by **Er.A.D. Thirumoorthy, Superintending Engineer, CEDC-Metro, TANGEDCO, TNEB Limited, Coimbatore, on “Power Quality Problems in Wind Energy Systems – Case Studies”**.

**Finally Er.S.Elango, Joint Secretary of this program proposed the vote of thanks.**

#### **Benefits of the Short-Term Course:**

- **All the participants are instructed to download the technical session materials from our official conference website <http://www.icreu2012.com/preconferencetutorial>**
- **All the Invited talks were well attended by participants and there was a very good interaction by the participants with the invited speakers.**
- **The topics were very useful to the participants. This information is based on the feedback received from the participants.**
- **Young research scholars had a very good opportunity to interact with experts in their field of interest.**

We express our sincere thanks to all the experts of various sessions and participants in making this one day pre-conference tutorial on Wind Energy Systems-Modeling and Design a rich technical forum beyond the planned expectations. We do certainly hope that this program will provide a unique opportunity for useful exchange of technical ideas among professionals that would result in forging fruitful global collaborations.

