

Pre-Conference Seminar

BASICS OF SMALL WIND TURBINES

Palau Firal i Congressos, Tarragona, Spain – April 28th, 2010

Small wind turbines can be combined with PV and other electricity generating components to provide electrical power in hybrid systems and mini-grids. The one-day seminar will give an introduction to small wind turbines, covering the following topics:

- potentials and challenges,
- state of technology, turbine concepts, system integration and optimisation,
- performance, costs, quality, safety and certification,
- planning, installation and operation,
- example projects and field experience.

The seminar will focus on small wind turbines with nominal power ranging from a few hundred watts up to about 30 kW.

Seminar Chairman: Paul Kühn, Fraunhofer-Institute for Wind Energy and Energy System Technology IWES, Germany

Seminar language: English

Programme:

09.45 **Registration/Welcome Coffee**

10.15 **Opening Address**

Eckardt Günther, OTTI e.V., Germany

10.30 **Introduction**

Speaker: Paul Kühn, Fraunhofer-Institute for Wind Energy and Energy System Technology IWES, Germany

Description: classification, potentials, market overview, costs, yield estimation, comparison of PV and small wind turbines

11.15 **Small Wind Turbine Technology**

Speaker: Holger Peters, INENSUS GmbH, Germany

Description: physical basics, rotor types, system components, applications for small wind turbines, wind site analysis

12.00 **Lunch Break**

13.30 **Small Wind Turbine Requirements, Tests und Quality**

Speaker: Ignacio Cruz, CIEMAT, Spain

Description: standards and certification, safety, product information and labelling, test and test procedures

14.15 **System Technology for Small Wind Turbines**

Speaker: N.N., SMA Solar Technology AG, Germany

Description: inverters for small wind turbines, overvoltage protection, integration in off-grid systems

15.00 **Coffee Break**

15:30 **Example Projects**

Description: planning, distribution, transport, siting, installation, operation and maintenance, performance, costs etc.

15.30 Speaker: Juande Bornay, Bornay Wind Turbines, Spain

16.00 Speaker: Balthasar Klimbie, Fortis Wind Energy, Netherlands

16.30 Speaker: N.N.

17.00 **General Discussion**

17.30 **End**

18.00 **Get Together** (self payment)

Organisation

Organisation Committee

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Conference Venue

Palau Firal i de Congressos
de Tarragona
Tarragona Trade-Fair and
Congress Centre
Arquitecte Rovira, 2
43001 Tarragona, Spain
Phone: +34 977 245 577
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info@palaucongrestgna.com
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Accommodation

Please book your accommodation
as soon as possible by yourself.
www.booking.com/tarragona

Conference Fee

Basic Seminar Small Wind Turbines:

If registered until March 14th,
2010 | after March 14th, 2010
Per Person: € 250,- | 300,-

From third participant on, every
other participant of your company
profits from our **15% discount** on
the conference fee.

Fees cover the admission to all
sessions, invitation to all coffee
breaks, and the conference lunche.

Conditions of participation and cancellation

You will receive your registration documents with receipt of your registration. The participation fee is VAT-exempt and due net with receipt of the invoice. Please transfer the invoice amount not later than 14 days before the conference starts. Otherwise a copy of the transfer order must be presented at the conference desk. All bank charges have to be covered by the transmitter. Entrance to the conference can only be permitted if OTTI has received the payment. OTTI reserves the right to make modification and amendments of any kind for urgent reasons. In the case of a cancellation of your registration up to 30 days before the seminar takes place, we do not raise a cancellation fee. For cancellations made within a period of 30 to 15 days before the start of the seminar, we charge a service fee of € 120. In the event of cancellations made later than 15 days before the seminar, or in the case of absenteeism, the total participation fee will be charged, unless you are able to provide evidence of a deviating amount of damages or expenses. The cancellation must be in written form. The person representing the contracting party may be replaced at any time but a written notice is necessary not later than 4 days before the conference starts. Irrespective of legal basis, OTTI shall only be liable for property damage and pecuniary loss which occurred due to intent or gross negligence. The place of fulfilment and jurisdiction is Regensburg, Germany.

Seminar
BASICS OF SMALL WIND TURBINES (SWT 3592)
April 28th, 2010

OTTI e.V.

Headword: PV-Hybrid and Mini-Grid

**Wernerwerkstraße 4
93049 Regensburg
Germany**

I will participate in the basic seminar
Small Wind Turbines (SWT 3592).

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mation and the registration form.

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