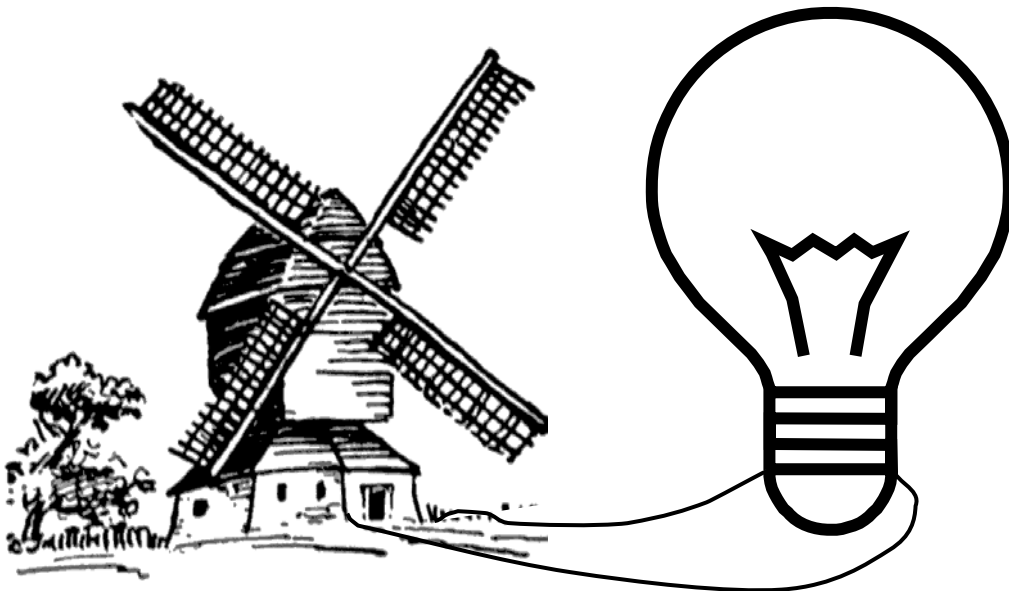


International Workshop on

# NATURAL AND LOW-COST MATERIALS IN WIND ENERGY TECHNOLOGIES

10-12 November 2008, Dhulikhel, Nepal.

Sponsored by:  
Royal Ministry of Foreign Affairs of Denmark,  
in the framework of Danida program.



## Overview and Objectives

The renewable energy technologies can provide sources of unlimited, cheap and clean energy to the people in developing countries. Especially, communities in hilly and dry regions, which do not have easy access to the hydro power, and can not afford the installation of long transmission lines or using solar photovoltaic power, could benefit from the wider use of wind energy. Small wind turbines can present a good, economically viable and environmental friendly solution to provide remote villages in hilly areas with light and electricity.

In order to reduce costs of wind turbines and to make this technology more attractive for developing countries, the natural, locally available materials, notably wood, can be used to produce parts of the wind turbines instead of or along with conventional composite materials.

The Workshop will focus on perspectives, and on scientific and technical aspects of using low cost, and natural materials, in particular, wood, in wind energy technologies. The analysis and prediction of strength and reliability of wooden parts, as well as interrelations between wood microstructures, mechanical properties and performances and computational modelling of natural materials and their properties are also important topics for the Workshop.

## Workshop Topics

The workshop will cover the following main themes:

- Low-cost wind energy technologies, their perspectives and applications in developing countries,
- Mechanical testing, strength and reliability of wood, other natural and low-cost materials, used in wind energy technologies,
- Mechanics and micromechanics of natural materials, optimal choice of materials and coatings for wind energy technologies,
- Case studies, social and economic aspects of wind energy in developing countries.

## General Information

### Contact:

Dr.-Ing. habil. Leon Mishnaevsky Jr., Senior Scientist,  
Risø National Laboratory for Sustainable Energy,  
Technical University of Denmark,  
AFM-228, P.O. Box 49, Frederiksborgvej 399,  
DK-4000 Roskilde, Denmark  
Email: [leon.mishnaevsky@risoe.dk](mailto:leon.mishnaevsky@risoe.dk)

**Webpage:** [http://www.risoe.dk/Conferences/Nepal\\_workshop2008.aspx](http://www.risoe.dk/Conferences/Nepal_workshop2008.aspx)

## Location and accomodation

Dhulikhel is a Newari town and a mountain viewpoint 30 km from Kathmandu. The symposium will take place at the Himalayan Shangri-La Hotel, in Dhulikhel (<http://www.dwarikashimalayanshangrila.com/>). You are responsible for booking your hotel accommodations. Please note that October/November is high season for tourism in Nepal. This hotel (as well as other hotels in Dhulikhel) may fill up quickly, and the prices for flight ticket increase quickly as well. **Early reservations of both the hotel and flight tickets are strongly recommended!**

## Abstract Submission

Please submit a one-page abstract (700-800 words, in MS Word format) by e-mail to [leon.mishnaevsky@risoe.dk](mailto:leon.mishnaevsky@risoe.dk) no later than May 31, 2008. Authors will be notified of the Committee's decisions shortly thereafter.

## Registration

All participants are requested to register before April 30, 2008. The registration fee is 180 EURO for participants from developed countries, and 2500 Nepalese rupees for the participants from developing countries. The local participants will have an option of on-site registration for 1500 NR per one conference day. After May 1, 2008, the registration fee increases to 300 EURO (developed countries) and 4000 NR (developing countries), respectively. The payment of the registration fee should be made either by credit card (Euro, Master or Visa), by bank transfer or (for local participants) in cash at KAPEG Office in Dhulikhel (please keep your receipt for future references). The registration includes the access to the sessions, coffee/refreshment and Nepali lunch/dinner.