

3RD Training WINERCOST School

Advances in Wind Energy Technology III

COST Action TU1304 - WINERCOST

Wind Energy Reconsideration to Enhance the Concept of Smart Cities

WINERCOST is pleased to announce the 3RD Training School “Advances in Wind Energy Technology III” on the following topics:

- Flow simulations and measurements for wind-energy harvesting
- Pre-design of large supporting structures for wind converters.
- Small wind technology projects
- Building integration, societal acceptance and related topics

Chair

Prof Dr.-Ing. Charalampos BANIOPOULOS

University of Birmingham, Birmingham, UK

Chair of the COST Action TU1304

Local Organisers

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TU1304 WINERCOST Action

TU1304 COST Action aims to merge the efforts of the COST countries research groups working on the Wind Energy Technology and design the pathways to introduce it by means of robust applications to the urban and suburban built environment, thus enhancing the concept of Smart Future Cities. This Action revisits safe and cost-effective wind energy technology for consideration in the development of the future urban and suburban habitat and which are acceptable to society.

The principal objectives of WINERCOST is to collect the existing expertise on the Built environment Wind energy Technology (BWT) recently developed as a follow-up of the Onshore/Offshore Wind Energy Technology (ON/OFF-WET) and to investigate effective adoption methods for enabling the concept of Smart Future Cities. In addition, the utmost important issue of the social acceptance strategy will be scrutinized in close collaboration with municipality authorities, industry, manufacturers as well as the international wind energy organizations.

For further information visit: <http://winercost.com/>

Objectives of the TU1304 WINERCOST Action

There are two main objectives of the WINERCOST COST Action: to foster and accelerate long-term enhancement of Built environment Wind energy Technology (BWT) in Europe by scrutinizing the wealth of knowledge on Wind Energy Technology (WET) accumulated during the last decades, and to investigate and propose strategies of societal acceptance for the acceleration of the application of such BWT systems.

For more information about the COST action please refer to <http://winercost.com/>

The 3RD Training School “Advances in Wind Energy Technology III”

The 3RD Training School provides advanced professional training. The Training School consists of lectures, tutorials and hands-on activities. The lectures will cover the following fundamental aspects of wind energy including wind speed statistics, turbulent flow in the urban environment, CFD and wind tunnel simulation, structural analysis of bearing elements, sustainability, building integration and societal acceptance. The previous topics include:

1. Introduction to CFD and wind tunnel testing
2. Wind generation mechanisms and wind speed statistics
3. The atmospheric boundary layer and wind turbulence characteristics
4. The structural response of wind turbine towers under wind and earthquake excitation.
5. Design of the steel tubular towers against buckling.
6. Wind-Wave-Structure interaction in offshore wind turbines
7. Sustainability aspects of structures for wind towers
8. Impact on the built environment and Societal Acceptance

This workshop provides an opportunity for the trainees to participate in the assessment of indicators that support the strategic frameworks for built environment considerations and societal acceptance.

The Lecturers and Workshop coordinators

The Training School shall be led by experts in the fields of wind energy. The lecturers in alphabetical order (refer to separate document for their CV) are: A. Avossa (University of Napoli "Federico II", Italy), Prof. C. Baniotopoulos (University of Birmingham, UK), Prof. R. P. Borg (University of Malta, Malta), Prof. N. Hamza (University of Newcastle, United Kingdom), Prof. H. Hemida (University of Birmingham, UK), Prof. R. Hoeffler (Ruhr University Bochum, Germany), Prof. A. Mandara (University of Naples "Federico II", Italy), Prof. E. Marino (University of Florence, Italy), Prof. L. Pagnini (University of Genova, Italy) and Prof. F. Ricciardelli (University of Naples "Federico II", Italy)

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Upon completion of the training, the trainee will receive a lump sum as a contribution to cover the relevant expenses and costs.

Eligibility

Trainees are expected to be either students in the final year of their master degree or early stage researchers with or without a PhD degree. Lower priority will be given to those who participated to the previous 1st & 2nd Training School. In addition, a reasonable country and gender balance should be respected concerning trainees participation.

Application Procedure

The eligible participants should duly fill the APPLICATION FORM and send it together with a short CV (Not more than 2 pages) by e-mail to the Local Organiser Prof. Francesco Ricciardelli (e-mail friccia@unina2.it)

Selection Criteria

The COST-H2020 Vademecum (www.cost.eu/Vademecum) and MoU TU1304 (<http://winercost.com/>) criteria will be considered in the selection of the successful candidates.

Registration

Eligible candidates should fill in the registration form and return it to:

Submission of the Applications and Deadlines

The applications for participation to the Training School should be submitted to the Local Organiser Prof. F. Ricciardelli between 10-29.01.2017. The **deadline for the submission** of the application is **Sunday 29th January, 2017 (24:00 CET)**. Applications sent after this date will not be considered.

All submissions shall be evaluated by the COST Action Core Group. Notification of Acceptance or otherwise, shall be sent by the **12th February 2017**.

Venue and Date

The Training School will take place in Naples, Italy from the 23rd till the 28th of April 2017. The venue will be announced in due time.

REGISTRATION AND ACCOMODATION

Accomodation: Each participant should arrange his/her accomodation. However, the Local Organiser will provide appropriate information about hotels close to the venue with good price and other practical information. A local travel agency can provide additional assistance, if requested.

Registration Deadline at the 3rd Training School Secretariat: **19th February 2017**.

Important Notice

Please note that the deadline for Registration is **the 19th February 2017**. If no registration is done by this date, the candidate will lose the grant and the place in the Training School.

For more information, contact the Local Organiser:

Prof. Francesco Ricciardelli
e-mail: friccia@unina2.it