

Foreword

This book includes the scientific material of the 1st WINERCOST Training School “Advances in Wind Energy Technology” for Early Stage Investigators held in Malta between the 26th and the 31st May 2015. The aim of the Training School is to broaden the scientific background of the trainees, firstly by introducing them to the views of some leading researchers of wind engineering and then, by challenging them to understand and work together on advanced wind engineering topics, independently and as a group. Through an interactive training and networking procedure, the TU1304 WINERCOST COST Action “Wind energy technology reconsideration to enhance the concept of smart future cities” aims to play a major role to the formation of the next generation of leaders in wind energy harvesting research and practice across Europe and internationally.

Experts participating in the WINERCOST Action are active in three Working Groups. However the overall mission is in promoting integration in the key activities. The Working Groups in the first phase of the WINEROST Action are:

- WG1: Theoretical, numerical and experimental approaches of wind energy related topics as are e.g. wind simulation and characterization issues (CFD, maps) in non disturbed and disturbed environments in large and small scale.
- WG2: Wind energy onshore and offshore projects and the respective accumulated expertise.
- WG3: Societal acceptance of wind energy technology, nuisance, aesthetics, processes or communication and related issues.

The TU1304 WINERCOST Action was launched in March 2014 with the participation of leading experts in the field coming from different research groups in 26 COST countries. The first “Strategic Workshop: Trends and Challenges for Wind Energy Harvesting” was organized in Coimbra, Portugal on the 30-31 March 2015. The Workshop had the aim of putting together the current state of research, mainly in the participating countries and setting it in the context of worldwide knowledge. The present Training School, the first in the WINERCOST Action, is the second deliverable of the WINECOST Action; it intends to train early stage researchers on advanced wind energy harvesting related topics. The Training School can be considered as the first in a series that will follow during the coming years, planned for early stage investigators, on the theme of Wind Energy Technology.

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