

Spectral-domain Modelling Training School WECANet COST Action (CA17105)

WECANet is pleased to announce that a Training School on the spectral-domain modelling of wave energy converters will be held on the **10th to 11th March 2020** in **Belfast, Northern Ireland**.

Spectral-domain modelling

Spectral-domain modelling is a modelling technique that can be applied to obtain the statistical response of the system, e.g. the expected average power capture or amplitude of motion. It is based on the assumption that the waves can be represented as a random process with known spectral characteristics. This assumption, which is common to many wave model means that it is possible to produce statistical estimates of the response with significantly less computational resources compared to time-domain models, which being significantly more accurate than frequency-domain models. Consequently, spectral-domain models are particularly suitable for estimating the annual energy production or sensitivity analyses where a large number of simulations need to be performed.

Training School Content

The Training School is planned for 2 days, with six hours of training per day; the first day will be lectures and the second day will be a workshop. The Training School is specifically designed for those who would like to investigate the potential for using spectral-domain modelling for the analysis of their wave energy converters and for those interested in developing this modelling technique. The Training School content will include:

Day 1

- An introduction and fundamentals of numerical modelling of wave energy converters
- The technique of statistical linearization for spectral-domain modelling
- The development of spectral-domain models of common non-linear elements
- Further development of the spectral-domain modelling

Day 2

- Development of spectral-domain models

Training School tutors

This WECANet Training School is pleased to have the following tutors available to provide this course

- Dr Matt Folley, Queen's University, Belfast, Northern Ireland
- Dr Paul Lamont-Kane, Queen's University, Belfast, Northern Ireland

Funding Application Details

Applicants are invited to apply for a WECANet Training School Grant of 400€ towards travel and subsistence cost incurred to attend this course. Early Stage Researchers and PhD students in wave energy are eligible to apply for a grant as trainee in order to participate to the WECANet Training School.

Eligible Trainees are:

- Trainees from COST Full Members / COST Cooperating Member
- Trainees from Approved NNC Institutions
- Trainees from Approved European RTD Organisations.

The criteria for COST Action support can be found on the COST Action Vademecum (<http://www.cost.eu/Vademecum>). Any costs over 400€ must be covered by the applicant. The Grant will be award after verified attendance at the course. A total of 10 WECANet Training School Grants are available to support attendance of this Training School.

Applications for Training School Grants

Applications can be made to attend the WECANet Training School on Spectral-domain Modelling of Wave Energy Converters and for the grant on-line at the web address below

https://eSurv.org?s=MLDDHF_5bfdc687

Evaluation and granting of Training School Grants

The evaluation of WECANet Training School Grant applications and preselection of Grantees will be performed by the Action's Training School Coordinator/Committee on behalf of the Management Committee of the WECANet COST Action, who will be invited to approve a list of preselected Grantees. The selection of applicants is based on the potential value of the course to the applicant and the applicant's institution. The selection also considers the COST policies on promoting gender balance, enabling Early Career Investigators and broadening geographical inclusiveness.

EVALUATION CRITERIA FOR TRAINING SCHOOL GRANT APPLICATIONS	WEIGHT
Potential benefits to applicant	40 points
Potential benefits to applicant's institution	30 points
COST policies: promoting gender balance	10 points
COST policies: Early Career Investigators COST	10 points
COST policies: Broadening geographic inclusiveness (applicant based at ITC country)	10 points

Information on COST policies is available through <http://www.cost.eu/Vademecum> .

Key Dates

Deadline for applications to be submitted: 10th January 2020

Notification of funding application outcome: 17th January 2020

Training School: 10th – 11th March 2020

Further Information

Further information or clarifications can be obtained via the following e-mail address:

contact@wecanet.eu