Since our last newsletter, good progress has been made in the SDWED project. Our PhD students are working hard towards their individual goals. Unfortunately, one of the PhD students, within the topic of mooring systems for WECs, has resigned. However, the SDWED project will still be able to deliver four PhDs as originally envisaged. The following persons are currently working on the SDWED project:

- Simon Ambühl (AAU) who is working on WP5 focusing on reliability of wave energy devices.
- Andrew Zurkinden (AAU) who is working on WP4 focusing on structural analysis.
- Francesco Ferri (AAU) who is also working on WP4 but the focus is more on programming and development of the wave-to-wire model.
- Torben Christiansen (DTU) who is working on modelling nonlinear wave interaction with floating ocean energy devices which is related to WP1.

The last three are all expected to finish their PhD within the next year.

Since the last newsletter, the following people have successfully defended their PhD thesis within the field of wave energy at Aalborg University:


**PhD courses**

In 2012, three PhD courses were held at Aalborg University (AAU), Department of Civil Engineering, in cooperation with the SDWED partners:

- Generation and Analysis of Waves in Physical Models (Sep 24–28)
- Advanced Control Theory for Wave Energy Utilization (Nov 26–30)
- Reliability and Risk Analysis of Wind Turbines and Wave Energy Devices (Dec 3–5)
In 2013, a two-week PhD course on ‘Modelling and Control of Wave Energy Converters’ was held at Aalborg University (AAU), Department of Civil Engineering, in cooperation with the SDWED partners and Marine Energies and Ocean Group at Ecole Centrale de Nantes (ECN), leading up to the EWTEC 2013 conference (Sep 2–5, 2013) organized by Department of Civil Engineering, Aalborg University, and held at the Aalborg Congress & Culture Centre. The course is split into 3 modules:

- General introduction, experimental modeling and testing
- Numerical modeling
- Advanced control

A total of 25 participants from many parts of the world attended the course.

Laboratory Testing

As part of the MaRINET project (http://www.fp7-marinet.eu/), two SDWED partners have been visiting the facilities at Aalborg University:

- A group from the University of Bologna led by Assistant Professor Barbara Zanuttigh visited Aalborg in November 2012. The overall goal of the project was to characterise the loading curve of moorings and their interaction with floating wave energy converters in both ordinary and extreme wave conditions.

- Peter Kracht, Boris Fischer and Sebastian Perez-Becker from Fraunhofer Institute for Wind Energy and Energy System Technology, Researcher, Control of Wind Turbines have been testing their control strategy in the 3D basin at Aalborg University in June 2013.

MaRINET, the Marine Renewable Infrastructure Network, is a network of research centres and organisations that are working together to accelerate the development of marine renewable energy technologies – wave, tidal & offshore-wind. Co-financed by the European Commission, MaRINET offers periods of free-of-charge access to world-class R&D...
facilities and conducts joint activities in parallel to standardise testing, improve testing capabilities and enhance training and networking. A targeted 5th and final call for free-of-charge access is now open. For more information or to apply: http://www.fp7-marinet.eu/access_to-apply.html

Conferences

Results from the SDWED project have recently been presented at numerous conferences. Among these are:

**ICOE 2012**: International Conference on Ocean Energy which was held in Dublin, Ireland, October 2012.


**OMAE 2013**: International Conference on Ocean, Offshore and Arctic Engineering held in Nantes, France, June 2013.

**EWTEC 2013**: the Tenth European Wave and Tidal Energy conference, held in Aalborg from September 2-5, 2013. This was a major event for dissemination of SDWED research – a total of 16 papers from the SDWED research alliance were presented at the conference.

Publications which have been produced as part of the SDWED project are being made available on the SDWED website:

http://www.sdwed.civil.aau.dk/Publications/

and whenever possible, the papers are provided in full text with open access.

3rd Symposium

The 2nd Symposium – Advances in Modeling of Wave Energy Devices – was held on April 26, 2012 at DTU, Copenhagen, and it proved to be a great success and counted 70 registered participants from 17 different countries. Therefore, please note the following date when the 3rd Symposium will take place:

**June 3, 2014 at Aalborg University**

We hope to see many of you there – stay tuned😊