



## Southeast Asian Collaboration for Ocean Renewable Energy: *What Do Experts Say?*



On February 25-26 2013, SEAcORE had its first workshop, *Southeast Asian Collaboration for Ocean Renewable Energy (SEAcORE): What Do Experts Say?* held in Nanyang Executive Centre (NEC), Nanyang Technological University (NTU).



This workshop was a preliminary (exploratory) meeting among the Research & Development and Technology experts on Ocean Renewable Energy (ORE) – scientists, R&D people, technology providers or engineers in Southeast Asia and UK. This workshop was co-sponsored with the British High Commission.

It was attended by around 60 participants from different Southeast Asian countries. **Four UK experts** on ocean renewable energy were invited to speak: **Professor AbuBakr Bahaj**, Head of Sustainable Energy, **Univesity of Southampton** talked about *“Global Ocean Renewable Energy Technology - Status and Prospects,”* followed by **Dr. Cameron Johnstone**, CoRMat Inventor and CEO of **Nautricity** on *“R&D Experiences for Tidal Energy and Technology: Turbines.”*

**Ms. Eileen Ann Linklater**, Client Relationship & Marketing Manager, **European Marine Energy Centre Ltd (EMEC)** shared her experiences on *“Lessons learnt from open sea test-beds.”* Finally, **Dr. Daniel Conley** of **University of Plymouth** talked about the *“Environmental Impact Assessment and Marine Spatial Planning for Ocean Renewable Energy.”*

Southeast Asian representatives/experts on ocean renewable energy were also invited to attend and eight of them from different academic and research institutes discussed the current status of ocean renewable energy in their own country: **Prof. Omar Yaakob** Professor from **Universiti Teknologi Malaysia (UTM)**, **Dr. Iswandi Mukhtasor**, Board of Founders of **Indonesian Ocean Energy Association**



(INOCEAN), **Dr. Preecha Yupapin**, Professor of **King Mongkut Institute of Technology Ladrakrabang (KMITL)**, **Prof. Miguel Escoto**, Coordinator of Energy Engineering Programme, **University of the Philippines**, **Dr. Hoang- Luong Pham**, Vice-President of **Hanoi University of Science and Technology (HUST)**,

**Dr. Myat Lwin**, Rector (Acting) of **Myanmar Maritime University (MMU)**, and **Dr. Sathyajith Mathew**, Associate Professor of **Universiti Brunei Darussalam (UBD)**. **Dr. Michael Abundo**, Research Fellow of **Energy Research Institute at NTU (ERI@N)** presented for Singapore. The event was hosted by **Mr. James Michael Moses**, Research Associate, also from ERI@N.

There were also invited speakers and participants from ocean renewable energy-related industries: **Ms. LourDesiree Latimer**, CEO **Bell Pirie Power (UK-Philippines)**, **Mr. Henry L Han**, Founder and Managing Director of **Hann-Ocean Group** and Inventor of Drakoo, **Mr. Philip Archer** Principal Design Engineer, **Atlantis Resources Corporation**, and **Mr. Ian Turner** Senior Trade and Investment Manager (Environment), **British High Commission** in Singapore.

On the second day of the workshop, there was also a NTU Laboratory Tour provided by ERI@N.



One of the highlights of the workshop was the focus group discussions (FGDs) among the UK and ASEAN speakers and other SEA invited guests. The FGDs were facilitated by **Dr. Guiseppe Cavallaro**, Visiting Scientist (and previously Program Manager of ERI@N). The group after the discussions agreed to be the core founding members of SEAcORE.

The commitment to SEAcORE was also strengthened by each signing the “Southeast Asia Collaboration for Ocean Renewable Energy Initiative Agreement.”

The following points were agreed to be the next action items for the group (What's next for SEAcORE?):

- Establishment of SEAcORE Secretariat
- SEAcORE Website/ E-group
- Survey of capabilities for each country (manpower, expertise, facilities, current ocean renewable energy projects)
- Identify new projects for collaboration (through Memorandum of Understandings (MoUs), regular meetings, etc.)
- Link up with other regional and international organizations like International Network on Offshore Renewable Energy (INORE), Asian Wave and Tidal Energy Conference Series (AWTEC), ASEAN Centre for Energy
- Participate in international workshops and conferences: Offshore Renewable Energy Conference (OREC) 2013, AWTEC 2014, European Wave and Tidal Energy Conference Series (EWTEC) 2015



After the workshop, different collaborations were initiated among the institutions who participated (through MoUs):

- Institute of Energy and Science (Vietnam) and NTU
- Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi (KMUTT) and NTU
- University of the Philippines and NTU, June 2012

In summary, the SEAcORE initiative was taken positively by the invited Southeast Asian speakers and participants, as well as the UK speakers. The SEAcORE was "established" with the signing of the Agreement. The results of the workshop were the following: initiation of discussion of MoUs among Southeast Asian universities, some potential projects in Southeast Asia (e.g. Tow Tank use in exchange for High Performance Computing) and SEAcORE next steps were also defined. #