

JGSEE

The Joint Graduate School of Energy and Environment



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KMUTNB



PSU



CMU



SIIT-TU

Consortium involving five leading institutions

CENTER OF EXCELLENCE ON ENERGY TECHNOLOGY AND ENVIRONMENT



JGSEE Newsletter

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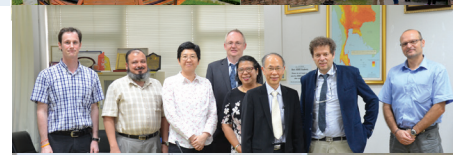
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Contribution to International Forum

Fifth International Conference on Sustainable Energy and Environment (SEE 2014)

JGSEE-CEE and Kyoto University successfully organized the 5th International Conference on Sustainable Energy and Environment (SEE 2014) on the theme of “Science, Technology and Innovation for ASEAN Green Growth” during 19-21 November 2014 at the Anantara Riverside Resort & Spa in Bangkok. The event is the 7th in a series of biennial conferences that began in 2000 and the 5th in collaboration with Kyoto University that serves as a forum for presenting and sharing knowledge on advances in science, technology and innovation (STI) that addresses energy security, environment, climate change and sustainability issues.

The conference attracted over 200 participants from academia, research organizations, government agencies and businesses to present their research work and attend technical sessions in which 130 papers from around 20 countries worldwide were presented. His Excellency Dr Pichet Durongkaveroj, Deputy Permanent Secretary, Ministry of Energy, Thailand, presided over the opening ceremony and delivered a keynote address on “Overview of Energy Situation and Policy in Thailand”.

SEE 2014 also featured 10 prominent scientists who are well recognized internationally as keynote speakers. A number of invited speakers and chairpersons also contributed to the 24 technical sessions organised during the event on topics covering renewable energy, especially bioenergy and biofuels, energy efficiency with an emphasis on the building sector, energy systems and policy, environmental and climate science, and low carbon society promotion.

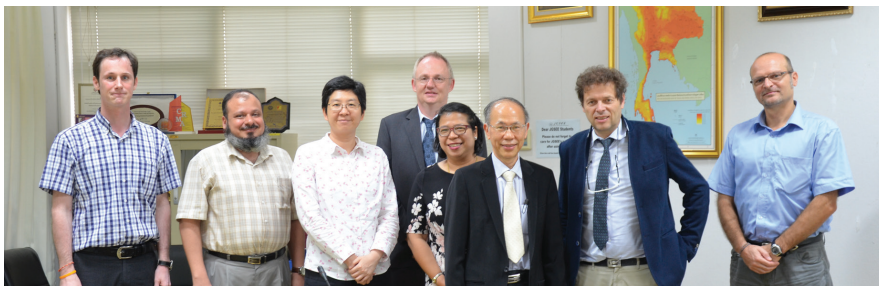


In addition, several side events were held prior to and during the conference, including: the JICA supported Science and Technology Research Partnership for Sustainable Development (SATREPS) Pre-conference Workshop on “Innovation for Sustainable Society - How New Energy can innovate our Economy and Life?”, the 3rd Regional EU-ASEAN Dialogue Initiative (READI) on “ASEAN Network of Excellence on Green Energy Research” (ANEGER) meeting, the 12th Sustainable Energy and Environment Forum (SEE Forum) meeting, the Low Carbon Research Network (LoCARNet) meeting, and concurrent sessions on “New Modern Energy Consumers in the Mekong Subregion” (MECON), and “South East Asian collaboration for Ocean Renewable Energy” (SEACCORE).



SMOU Signing Ceremony between CIRAD and JGSEE-CEE

On 21 October 2014, Dr François Cote, the Director of the CIRAD department on Performance of Tropical Production and Processing Systems (PERSYST), and Assoc Prof Dr Sirintornthep Towprayoon, the Director of JGSEE, signed a Specific Memorandum of Understanding for collaborative research and tertiary education activities with a focus on bioenergy in South East Asia. This SMOU comes under the general MOU already signed between CIRAD and KMUTT. In order to implement this cooperation at JGSEE, CIRAD has assigned the services of Dr Patrick Rousset, a CIRAD researcher from the PERSYST Department under the BioWooEb Research Unit, starting since January 2014.



Contribution to Research Arena

Third ANEGER Meeting at KMUTT



The 3rd Meeting of the ASEAN Network of Excellence in Green Energy Research (ANEGER) was held on 17 November 2014 at KMUTT. The event was organised by JGSEE-CEE and KMUTT under the support from the Regional EU-ASEAN Dialogue Instrument (READI).

The meeting gathered network members and external experts from Thailand, Indonesia, Malaysia, Vietnam and Europe. They joined the event to share their experiences on international networking and collaboration, including, the Joint International Postgraduate Program on ASEAN Energy and Environment (or JIPP in short), the Thailand Research Fund (TRF) supported project under the International Research Network (IRN) Scheme and the ASEAN Bioenergy Science, Technology and Innovation (STI) project. A session was also dedicated to discussions aiming at developing a joint research proposal under the network framework.

During the event, the READI team leader, Dr Stefan Hell, delivered some welcome remarks and provided updates on the READI activities and future projects. Another highlight of the event was the contribution of Prof Tony Bridgwater, a well recognised expert in thermal conversion of biomass for production of fuels and chemicals from Aston University, UK, who delivered a talk on "Experience in EU Bioenergy Networks".

The next and final ANEGER meeting is planned to be held back-to-back with the ASEAN COST sessions and ASEAN-EU Dialogue Meetings next year in Bangkok.

Visit of Prof François Weiss from the Energies of the Future Carnot Institute, France



On 17 November 2014, JGSEE-CEE was privileged to welcome Prof François Weiss, a senior scientist from CNRS, France. Prof Weiss is the head of the Energies of the Future Carnot Institute. He is a specialist in Materials Sciences with a research focus on superconducting and functional materials.

Representatives from the French Embassy also joined the meeting which aimed at exchanging information and identifying potential areas for research collaboration between JGSEE and the Carnot institute.

Following this visit, Prof Weiss also joined the SEE 2014 conference in which he was invited as a keynote speaker for a talk on “Strengthening Partnerships between Research and Industry for Future Energy Challenges”. The venue of Prof François Weiss was partly supported by the French Embassy.

Visit of Dr Laurent Li from the Laboratory of Dynamic Meteorology, France



JGSEE-CEE was honored to welcome Dr Laurent Li, a senior scientist from CNRS working on Earth Climate in the Laboratory of Dynamic Meteorology (LMD in short) in Paris. The research activities of Dr Li cover a large spectrum of climate and environmental resources, including, atmospheric general circulation, coupling of ocean and atmosphere, scale interaction in the climate system, and impacts of climate change. During his visit at JGSEE, he delivered a special talk on “Recent Development in Climate Model Research and its Applications”. Over 25 researchers from Thailand as well as representatives from the French Embassy attended his talk.

Dr Li was also invited to the SEE 2014 conference as a keynote speaker to deliver a talk on “Climate Change: New Perspectives and New Challenges”. The venue of Dr Laurent Li was partly supported by the French Embassy.

Special Talk Addressing Sustainability by Dr Halog from the University of Queensland, USA



On 4 December 2014, JGSEE-CEE had the pleasure of welcoming Dr Anthony Halog from the University of Queensland, USA. Dr Halog visited JGSEE through his connection and common research interests on sustainability issues with Prof Shabbir H Gheewala, the head of LCSAL.

At the occasion of his venue to JGSEE, Dr Halog delivered a Special Talk on “System Transformation: Transitioning towards Low Carbon, Resource Efficient, and Circular Economy for Global Sustainability”. The talk was attended by 15 researchers and PhD students with similar interest in this field of expertise.

The presentation of Dr Halog was very informative. Several topics and funding schemes were identified which LCSAL and Dr Halog’s teams could further consider to initiate collaboration in the future.

Contribution to ASEAN Community

Joint International Postgraduate Program on ASEAN Energy and Environment



On 18 November 2014, JGSEE-CEE organized a press conference for the Joint International Post-Graduate Program on ASEAN Energy and Environment (or JIPP in short) at the Anantara Bangkok Riverside Resort & Spa in Bangkok. As part of this program, 5 participating institutions have agreed to collaborate, including: 1) The Institute of Technology, Bandung (ITB), Indonesia; 2) the University of Malaya (UM), Malaysia; 3) the University of the Philippines (UP), Philippines; 4) the Hanoi University of Science and Technology (HUST), Vietnam; and 5) JGSEE-CEE under KMUTT, Thailand.

During the press conference, Assoc Prof Dr Bundit Funtammasan, the vice-president for research of KMUTT, presented the views of KMUTT on ASEAN Education on Energy and Environment while Assoc Prof Dr Sirintornthep Towprayoon, the director JGSEE-CEE, introduced JIPP. The representatives of the 4 member universities, including, Prof Iman K Reksonwardojo from ITB, Prof Nasrudin Bin Abd Rahim from UM, Dr Rizalinda de Leon from UP, and Prof Pham Hoang Luong from HUST, also shared their views on the program.

JIPP aims at providing ASEAN students with an opportunity to study and perform research on energy topics related to both their own country and other ASEAN countries. This process should be achieved through co-supervision between the member universities. Via this program, students should also be able to learn and gain experience concerning the current situation of energy and environment in ASEAN and spend at least one semester of study abroad in one of the member universities.

JIPP offers a unique trans-boundary human resource development opportunity for interested students. It includes a network of experts and tools to address and find answers to current energy and environmental challenges in the ASEAN region. This program should also contribute to improve collaboration in research and development among the universities of the member countries and ultimately lead to enhanced power of negotiation and economic competitiveness of the region. Moreover, JIPP constitutes a forum that should enable to strengthen research collaboration and sharing of knowledge in energy and environment in ASEAN.

Visit of the Asian Development Bank



On 17 September 2014, representatives from the Asian Development Bank (ADB) and the Public Debt Management Office (PDMO), Ministry of Finance, including, representatives from PERDO visited JGSEE-CEE at KMUTT and its laboratory facilities at Bangkhunthian campus.

This visit aimed at reviewing the laboratory equipments of JGSEE to request for potential support from ADB under the Research Infrastructure Development for Technology transfer Project (RIDT). Also, potential support under the initiative of PERDO for JGSEE's visiting professors was discussed.

Contribution to Knowledge Platform

Climate Data Analysis & Vegetation Monitoring using R Training

JGSEE-CEE successfully organized the training on "Climate Data Analysis & Vegetation Monitoring using R" that was held during 14-17 October 2014 at KMUTT. The training aimed at introducing the open source R programming tool to environmental and climate scientists and demonstrating how common climate and satellite data analysis can be carried out using R. The training was composed of theoretical presentations and hands on sessions. The lectures covered basics of climate and satellite data, remote sensing, and R programming while the practical sessions were dedicated to resolving exercises using R.

The event was very successful with over 20 participants from the academic sector as well as representatives from the private and government sector of Thailand, Vietnam, Malaysia and Myanmar being trained. Other related trainings are planned to be organised in the future as there is an increasing interest from scientists in the region in using R for data analysis.



Contribution to MTEC Training Course on Water Footprint Assessment

The National Metal and Materials Technology Centre (MTEC), NSTDA, organized a training course on "Water Footprint Assessment" during 15-16 October 2014 at the Swissotel Le Concorde Hotel in Bangkok.

As part of this training, Dr Thapat Silalertruksa (LCSAL researcher), a UNEP certified Thai Water Footprint trainer, was invited to deliver a presentation on "Water Footprint Impact Assessment and its Applications for Water Resource Management"

The training was very successful with over 50 participants from the industrial and educational sectors joining the course.



DGNB Registered Professional Training

The German Sustainable Building Council (DGNB – Deutsche Gesellschaft für Nachhaltiges Bauen e.V.) in collaboration with JGSEE-CEE organized the DGNB Registered Professional Training that was held during 3-5 September 2014 at KMUTT in Bangkok. The training aimed at developing and enhancing the professional knowledge of participants regarding sustainability in the built environment. The three days training event was designed to provide participants with strong background knowledge in this wide-ranging and complex topic.

The event was a success gathering over 30 participants from the academic sector, as well as representatives from the private sector and non-profit organizations. A next training event will be held in February 2015.

Contribution to Society

First Stakeholder Meeting of the MECON Project



A stakeholder meeting on “Effective Energy Efficiency Policy Implementation Targeting ‘New Modern Energy Consumers’ in The Greater Mekong Subregion” was organized on 16 September 2014 at the Century Park Hotel in Bangkok. It aimed at disseminating the results obtained from the market and household surveys performed as part of the MECON project.

The researchers of the MECON project conducted household surveys on more than 300 low income households in Bangkok, Mae Hon Son, Pattalung, Sra Keaw, and Surin during February to April 2014. Moreover, more than 50 electrical entrepreneurs (including retailer shops, wholesalers, and producers) across the country were surveyed and interviewed to capture the situation of energy efficient household appliances in the market. During the meeting, a summary of the surveys was reported and discussed. The discussions also addressed the barriers preventing energy efficiency improvement and possible counter policies.

More than 30 participants from universities, NGOs, private and government sectors were actively engaged in the meeting. The second stakeholder meeting will be held again in April 2015 to publicize policy recommendations. For more information, please visit the project website at: www.meconproject.com.

Awards

JGSEE-CEE recognised for its Work on Climate Change Policy

On 9 September 2014, the European Union Delegation, the UK Embassy and the German embassy, in partnership with the Office of Natural Resources and Environmental Policy and Planning (ONEP) of the Ministry of Natural Resources and Environment, Thailand, organized a Global Joint Action Day on Climate Change at the Swissotel Nai Lert Park Hotel in Bangkok.



At the event, there was an official launch of the “Human Dynamics of Climate Change” (HDCC) maps in Thailand. The HDCC has been developed by the Met Office and funded by the Foreign and Commonwealth Office and the Government Office for Science. It draws on the latest and most robust climate science evidence, reflected in the UN’s Intergovernmental Panel on Climate Change’s (IPCC) latest assessment report and builds on the historic success of the UK’s “Four Degree Map” in 2009.

JGSEE is one of the eight selected Thai agencies working on climate change policy that received a poster-sized framed map from the Deputy Head of Mission of the British Embassy.

The Research and Researcher for Industry Program of TRF

The Research and Researcher for Industry (RRI) under the Thailand Research Fund (TRF) is a program designed to support research fund for lecturers or PhD students whose research areas target the private sector, community, or SMEs, and aim at innovating a system or a product that will build concrete commercial benefits and leads Thailand towards becoming a knowledge based economy.

In 2014, JGSEE-CEE has been granted the TRF-RRI scholarship for the research project on “Application of Electrochromic-Film Window Integrated with Anidolic Light Concentrator for Daylighting in Buildings in Tropical Region”. This project is a co-research work with DLT Co., Ltd., which is also providing financial support for implementation of the project. In this project, Dr Pipat Chaiwiwatworakul and Dr Surawut Chaungchote are the co-advisors of Mr Phapada Khunsriya (PhD student of JGSEE) who serves as a research assistant for the project.

Two TRF-IRN Projects awarded to JGSEE-CEE

The Thailand Research Fund (TRF) has initiated a new cooperative research program called the "International Research Network" or IRN in short. Out of the 5 projects awarded nationwide, two were awarded to JGSEE.

These include: (1) "Building Energy Efficiency and Higher Environmental Quality" from the BEST laboratory headed by Prof Dr Surapong Chirarattananon, and (2) "Investigating Land-ocean-Atmospheric Interaction Processes and Mechanisms to Enhance Understanding of Climate Variability and Impact in Tropical Southeast Asia" from the AGAR laboratory's sub-unit ESS-KMUTT that is headed by Assoc Prof Dr Amnat Chidthaisong.

Event

Upcoming DGNB Registered Professional Training

Date and Location

12 – 14 February 2015

KMUTT Bangmod Campus (venue to be announced)

Training program

12 February 2015

DGNB Making Sustainability Measurable
Sustainable Architecture
Energy Efficient Building Services
Site quality

13 February 2015

Building Comfort
Resource Efficient Building Design
Energy Efficient Building Envelope
Harmful Substances

14 February 2015

Daylight Usage in Buildings
Introduction to Life Cycle Assessment (LCA)
Introduction to Life Cycle Costing (LCC)
The DGNB Rating System

Target group

Professionals and Students (4th year bachelor and higher) dealing with the design, construction, and management of real estate (architects, engineers, developers, etc.).

Price

3,000 THB for students

9,000 THB for professionals*

* Group discount:

Special discount is applicable for group of professionals or for professionals accompanied by their students

REGISTRATION

Register by February 10, 2015

Promote and advance sustainable building across your country

Take advantage of the compact training program and make contact with international professionals

To register, please register via email:

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