

SEED-Net *News*

Quarterly Newsletter of the ASEAN University Network/Southeast Asia Engineering Education Development Network



AUN/SEED-Net Secretariat

Bldg. 2, Room 109-110, Faculty of Engineering,
Chulalongkorn University, Bangkok, Thailand 10330
Phone: +66-2218-6419 to 21 | Fax: +66-2218-6418
Send your stories or comments to: info@aun-seed.net
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Students' Achievements
Regional Conferences and Workshops

PhD Sandwich Program
is now open for application until
May 31, 2009. To apply, go to
[http://www.seed-net.org/
application_form.html](http://www.seed-net.org/application_form.html).

Students' Achievements



Mr. Fauzun, PhD Sandwich student in the field of Manufacturing Engineering at University of Malaya (UM) sent by Gadjah Mada University, Indonesia, won a gold medal in the research project competition held at the UM Research, Invention & Innovation Expo 2009 (UMExpo 2009) during January 13-15, 2009. The competition was very tight with less than 8% of 292 participants receiving gold medals for best invention, innovation and idea. His PhD research project on "Smart Mold" also won a silver medal of the Invention & Innovation Awards at the Malaysia Technology Expo 2009 (MTE2009) held on February 19-21, 2009.

◀ Mr. Fauzun presenting his research project at UMExpo 2009

Mr. Jay Arre Toque, PhD student in field of Manufacturing Engineering, received the Best Student Paper Award for excellent presentation of his paper entitled "Multispectral Imaging: The Influence of Lighting Condition on Spectral Reflectance Reconstruction and Image Stitching of Traditional Japanese Paintings" at the International Conference on Imaging Theory and Applications (IMAGAPP/VISIGRAPP 2009) organized in Lisboa, Portugal, on February 5-9, 2009. Mr. Toque was sent by University of the Philippines-Diliman to study under AUN/SEED-Net's Doctoral Program in Japan at Kyoto University and Master's Program at University of Malaya (UM), Malaysia.



▲ Mr. Jay Arre Toque and his award certificate

Dr. Khamphong Khongsomboon in the middle with Assoc. Prof. Dr. Kazuhiko HAMAMOTO, his advisor from Tokai University, NUOL Vice President Assoc. Prof. Dr. Saykhong Saynasine, NUOL Dean of Faculty of Engineering Assoc. Prof. Dr. Boualinh Soysouvanh, and other NUOL staff. ▶



In March 2009 National University of Laos (NUOL) celebrated the first doctoral graduate from the AUN/SEED-Net's Doctoral Degree Program in Japan, Dr. Khamphong Khongsomboon. Dr. Khamphong was sent to study in Information & Communication Technology at Tokai University in Japan after completing his master's degree from King Mongkut's Institute of Technology Ladkrabang in Thailand, also under the AUN/SEED-Net's sponsorship.



Upcoming Events

Find latest schedules and more details at <http://www.seed-net.org/calendar.php>

May 22, 2009	The AUN/SEED-Net Coordinator Meeting 2009 @ Bangkok, Thailand
July 30-31, 2009	The 1st Regional Conference on Biotechnology @ Manila, the Philippines
August 6-7, 2009	The 2nd Regional Conference on Natural Resources & Materials in conjunction with the 2nd National Conference on Earth Sciences and Technology @ Yogyakarta, Indonesia
August 27-28, 2009	The Earth Sciences International Conference (ESIC): The 2nd AUN/SEED-Net Regional Conference on Geological and Geo-Resources Engineering and the 2nd Taiwan-Philippines Earth Sciences Conference @ Manila, the Philippines

Collaborative Research and Development in Chemical Engineering among Academe, Industry, and Government in the ASEAN Region

The AUN/SEED-Net Regional Conference in Chemical Engineering on “Collaborative Research and Development in Chemical Engineering among Academe, Industry, and Government in the ASEAN Region” was held by De La Salle University in Manila on January 22-23, 2009. Among 96 attendants, some came from local and Taiwanese non-member institutions and Shell PHP. Guest speakers in the plenary session included Hon. Joseph Emilio A. Abaya, Chairman of Committee on Science and Technology House of Representatives of the Philippines, Engr. Edgar O. Chua, Country Chairman of Shell PHP, and Prof. Dr. Hiroo NIYAMA, Director of Tokyo Institute of Technology Office in the Philippines. Totally there were 32 papers submitted and 29 presented, plus 8 poster presentations.

The participants discussed mainly on accreditation/benchmarking of research practices and facilities in the chemical engineering field. For network expansion, linkages with educational institutions have been started but more efforts must be taken to reach SMEs and industries.

The next conference will be hosted by Ho Chi Minh City University of Technology in September 2009.



AUN/SEED-Net's 1st Regional Conference in Global Environment

The 1st Regional Conference in Global Environment on “Global Environmental Management Practices in the ASEAN Region” was organized on February 2-3, 2009 by University of the Philippines-Diliman in Manila, the Philippines. Participants came from member institutions, Japanese universities, National Center for Disease Prevention and Control Department of Health, National Center for Transportation Studies, and World Health Organization. There were 23 papers presented in four sessions: Global Environmental Management Initiatives & Technologies, Prevention and Mitigation of Climate Change Impact, Environmental Assessment and Management, and Large Area Monitoring of Environmental Change.

After the presentation sessions, the participants separated into different groups according to their research interests, namely (1) Technologies for Climate Change, (2) Environmental Assessment and Management System, (3) Large Area Monitoring of Environmental Change, and (4) Environmental Concerns in Maritime Industry. Each group was assigned to review the future plan, to discuss research themes and sub-themes as well as appropriate courses/subjects under Global Environment area, to assign Japanese universities and member institutions for each theme, to initiate collaborative research projects, workshops and joint research with related agencies, and to create E-forum among them.

Ho Chi Minh City University of Technology will be the host of the next conference.



Regional Conference on Materials 2009

Universiti Sains Malaysia (USM) was the host of the 1st AUN/SEED-Net Regional Conference on Materials 2009: Leading the Path of Engineers in Penang, Malaysia, during February 16-17, 2009. There were 60 oral presentations and 64 poster presentations made and shared among 160 participants. Five oral presentations were made by Japanese professors through separate plenary sessions, while the rest of the oral presentations were made by participants from Member Institutions, AUN/SEED-Net students and alumni, researchers, academicians, engineers and students from USM and other local universities as well as USM's industrial partners. Main research themes of the materials engineering field are nanomaterials, biomaterials, and advanced composite materials.

On the first day, one session was dedicated to poster presentation competition. Awarding criteria included scientific content, accuracy in results discussion, new findings, poster design and presentation style. An AUN/SEED-Net student from Vietnam won the best award from this competition.

The next conference will be arranged in Thailand by Burapha University in November 2009.



AUN/SEED-Net's Regional Conference on Disaster Mitigation

The first AUN/SEED-Net's Regional Conference on Disaster Mitigation was held in Kuala Lumpur, Malaysia, on March 3-4, 2009 by Universiti Sains Malaysia (USM). It attracted over 90 participants from Japanese supporting universities, member institutions, local and abroad universities, and the private sector. Various research topics under the umbrella of disaster mitigation were discussed extensively, including landslide and debris flow control, erosion control, groundwater hazard, and earthquake. In 2009, the network received a few master's applications from applicants interested in ground water hazard, landslides and tunneling. However, it still needs more applications for the earthquake area.



For network sustainability, the participants would seek for additional fund from other sources and promote cooperation with other networks; e.g. AquaTrain Project (EU - England - Japan cooperation) funded by EU during 2007-2010, and its CALIBRE Project involving universities in Asia e.g. Laos and Vietnam. The member institutions are welcome to join it by contacting Prof. Dr. Dwikorita Karnawati (Gadjah Mada University - UGM), Prof. Koichiro WATANABE (Kyushu University), or Prof. Junji KIYONO (Kyoto University). Prof. Hiroshi FUKUOKA (Kyoto University) also introduced to the meeting the International Consortium on Landslides (ICL), funded by UN, NGOs and government organizations with Kyoto University as main executor.

The consortium has its own journal and is setting up "Global Corporation Network of International Program on Landslides (IPL)", aiming at international cooperative research and capacity building on landslide risk mitigation, notably in developing countries.

The next conference will be held by UGM in Bali in January 2010, in conjunction with the international symposium.



Regional Workshop on ICT

On March 3-4, 2009 King Mongkut's Institute of Technology Ladkrabang (KMITL) and Tokai University co-organized the Regional Workshop on Information and Communication Technology (ICT) titled "Information and Communication Technology for Ubiquitous Society". The workshop took place in Bangkok with 115 participants from member institutions, AUN/SEED-Net students and alumni, and professors from eight Japanese universities, namely Tokai University, Hokkaido University, Keio University, Kyoto University, Kyushu University, Toyohashi University of Technology, Tokyo Institute of Technology, and University of Tokyo.



A number of research works related to ICT were presented and discussed. In addition, KMITL announced the establishment of the International College, a new body that will manage all international programs and supervise AUN/SEED-Net master's students. To avoid confusion about research topics at KMITL, students in the International College will involve primarily in Computer Engineering. The International College will select and publicize proper topics on its web site for prospective students to study and choose the **interesting** ones prior to entering KMITL, so that students and academics' needs can be combined more effectively.

Gadjah Mada University will host the next workshop in **Yogyakarta** in February 2010.

ASEAN Civil Engineering Conference

On March 12-13, 2009 the first ASEAN Civil Engineering Conference (ACEC) took place in Pattaya, Thailand, with Burapha University as the organizer. Almost 100 participants from member universities in ASEAN and Japan attended the conference and presented 53 research papers from four subfields of Civil Engineering (Transportation Engineering, Geotechnical Engineering, Structural Engineering, and Construction Engineering and Management) in parallel sessions.

To sustain the network and activities, the participants agreed to establish three committees for future arrangement of the ACEC: Advisory Committee, Editorial/Technical Committee, and Organizing Committee. A website platform would be set out for paper submission and review, and conferences would be open to the public and the industry to gain more recognition and to seek additional fund for conference organizing. Besides, Chulalongkorn University as the host of this field announced the foundation of Engineering Faculty Journal, to publish academic papers in any engineering fields. Papers from the member institutions were also invited. Some ideas were proposed to support connection and mobility of academicians in the field, e.g. setting up of ASEAN lecturers group and database of experts.

Next ACEC will be held in January or February 2010 in Laos by National University of Laos.



Regional Conference in Electrical & Electronics Engineering (EEE): ISMAC 2009

Chulalongkorn University (CU) and Hokkaido University (HU) co-organized the 1st AUN/SEED-Net Electrical & Electronics Engineering Regional Conference entitled "International Symposium on Multimedia and Communication Technology (ISMAC) 2009", on January 22-23, 2009 in Bangkok, Thailand. It attracted over 150 participants from member institutions, Japanese universities, non-member institutions, as well as Thai



Telecommunication Regulator - National Telecommunications Commissions (NTC), research agencies, and private sectors in telecommunication industry. The symposium successfully got technical sponsorships from CU, HU, NTC, and internationally-recognized academic societies in electrical engineering like Institute of Electrical and Electronics Engineers (IEEE) Thailand Section and Institute of Electronics, Information, and Communication Engineers (IEICE), Japan.

A total of 54 papers were accepted for presentation in this symposium. They were organized into 10 technical sessions and two special sessions covering key researches in Multimedia Signal Processing, Telecommunications Technology, Telecommunication Regulatory and related applications. ISMAC 2009 also features two keynote speakers: Prof. Ming-Ting Sun from University of Washington, USA, and Prof. Kenzo Takahashi, IEICE distinguished lecturer, plus an invited presentation from National Telecommunications Commissioner Prof. Prasit Prapinmongkolkarn and seven invited presentations from Japanese professors from Kyushu University, Tokyo Institute of Technology (TIT), and HU.

Strengthening the network and collaboration is one of the key issues among the discussions. Currently, CU, University of the Philippines-Diliman, TIT, and HU have jointly participated in the Japanese WINDS (Wideband Internetworking Engineering Test and Demonstration Satellite) project. The project aims for testing of video transmission over high-speed satellite communication which will make the transmission of live video lectures among the four parties possible and multicast broadcasting may be possible to other institutions in the near future. Another possible key for network strengthening could be done by building up the strong local section of academic societies such as IEEE and IEICE and to collaborate sustainably with sections in other member countries.

The next regional conference will focus on power and energy systems, to be held in September 2009 in Hua Hin, Thailand. As for ISMAC 2010, it would be sustained and next year's event would be held in Manila, the Philippines.



The Regional Workshop on New/Renewable Energy

The 1st AUN/SEED-Net Regional Workshop on New/Renewable Energy was held by Institut Teknologi Bandung (ITB), Indonesia, on March 12-13, 2009. In total there were 141 participants attending the workshop which was officially opened by welcome speech from Dr. Iman K. Reksowardojo, Organizing Committee, and opening speech from Prof. Dr. Djoko Santoso, Rector of ITB. Moreover, Dr. Filemon A. Uriarte, Jr., Executive Director of ASEAN Foundation participated in the workshop and gave a speech to all participants. This significantly showed continuous support and commitment to sustainable development of the network from all stakeholders.

A number of research works related to new and renewable energy were constructively presented and discussed by participants from member institutions, Japanese universities, AUN/SEED-Net students and alumni, non-member institutions, and different organizations including keynote presentations from Directorate General of Electricity and Energy Utilization, Department of Energy and Mineral Resources Republic of Indonesia, Indonesian Renewable Energy Society (IRES/ METI), and CEO Rekeyasa Industri.

The meeting recognized the difference of research interests and activities in energy field in Japan and in ASEAN. For instances, the research on "wind power" and "solar power" are popular in Japan, whereas the topics related to "bioresources" seem to be more general in ASEAN countries. Therefore, it is very important that the ASEAN countries should find their own topics and strategies; and Japanese supporting universities are ready and willing to provide technical/academic assistance to them. In this regard, the meeting would set up research agenda for the next millennium to work on together and seek financial support from the governments concerned; at the same time, the topic on creation of new regional society for the present world and appropriate lifestyle for current situation should also be taken into consideration.

The next conference will be held by Burapha University in Thailand in January 2010. It is expected to have appropriate proportion of the topics; and research outputs would be transferred to local society in order to seek support from outside the network.