

SEED-Net *News*

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



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Volume 4 Issue 2: July - September 2008 Review

Alumni Story: Vivid Memory of My Ph.D. Days
Regional Workshop on Mechanical and Aerospace Engineering 2008
Environmental Engineering To Collaborate with WHO
Sustainable Geological Engineering and Geo-Resources Education
First Interdisciplinary Conference: Natural Resources & Materials 2008

Alumni Story

VIVID MEMORY OF MY PH.D. DAYS



By Dr. Nan Thidar Chit Swe
AUN/SEED-Net alumni member at
University of Yangon, Ph.D. graduate in
Electrical & Electronics Engineering
from Chulalongkorn University

Almost four years away, the past was still clear in my memory. Hard as I tried, it would not paint a complete picture of my Ph.D. student's days with colors and composition but sketch with rough strokes of brush a little here and there. I still remembered vividly the day that I got the news about my Ph.D. scholarship. At that time I was a fresh master graduate and staff member in University of Yangon. My professor Dr. Sein Htoon told me that I got the scholarship from JICA and he was so happy to tell me this news.

On October 26, 2004, I arrived at Donmuang Airport after flying for an hour from my country. This was my first time to go abroad and I was so excited and worried about everything there. I heard that Ms. Cho Cho Thet who was AUN/SEED-Net student from my country would pick me up at the airport, but we had not known each other before and I did not know her look. "Can I find her easily at the airport?" I thought and looked for her. Suddenly I saw my name on a white card in one lady's hand. I was so happy that I found the right person. Fortunately, she was not only from my country but also we would study in the same laboratory - Semiconductor Research Laboratory (SDRL) in the Department of Electrical Engineering, Chulalongkorn University. Cho Cho Thet brought me to the laboratory and introduced me to Thai students there. I was the second foreign student in SDRL but luckily all students seemed to be friendly (and later I found out that they were really friendly and treated me like a family). After that, she brought me to the office of Dr. Chanin Wissawinthanon who would be my advisor for the Ph.D. study.

At first I expected an old, gray-haired professor as my advisor, but it was very different from my expectation. Actually Dr. Chanin was about my age, thin and looked young. He asked me about my trip, accommodation, and study background. Would he help me in my study? This was my first impression to him. After studying with him for a month, I found out that my thought was absolutely

wrong. I was his first Ph.D. student so he was very active and guided me with enthusiasms. He expected a lot from me in studies. He gave me many books to read and pushed me a lot to get results in my theoretical calculation and experiments. We regularly held a discussion on two times per week. At first we supposed that each discussion might take one hour, but we always spent 2-3 hours. I never found him angry with any cases except my studies.

I have another co-advisor in Chulalongkorn University. He was Prof. Dr. Somsak Panyakeow, the most experienced professor in my department. He taught me solar cell technology and laser engineering. Actually, he was very good in teaching and was the first person who introduced me the engineering from a technical point of view. I got not only knowledge in studies but also the art of teaching from him. He always taught me to love difficulties and challenges in my research life and encouraged me to fight until I win.

My first two years in Chulalongkorn University was very tough. Many course work, English test, Ph.D. qualifying exams, all were waiting for me. So many stresses and so many exams pressured me a lot. Fortunately, warm kindness from international friends in my dormitory and friends in my laboratory as well as encouragement from my teachers helped me overcome all difficulties. I did well in all exams and submitted some papers to national and international conferences within two years.

>> Continued on page 4



Dr. Nan Thidar Chit Swe, Prof.
Dr. Yasuhiko Arakawa, and Dr.
Chanin Wissawinthanon

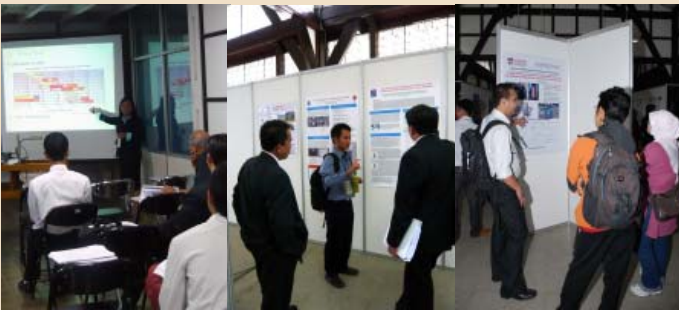
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The Regional Workshop on Mechanical and Aerospace Engineering was held jointly with the Inauguration of Indonesia Section of Japan Society for Mechanical Engineering (JSME) International Chapter on July 23 - 24, 2008 at Institut Teknologi Bandung (ITB), Indonesia.

The workshop provided an opportunity for faculty members from AUN/SEED-Net member institutions, Japanese Supporting Universities, as well as other academic institutions, government agencies and industries to share their work and research experiences; while the special section of JSME offered an opportunity for experience exchange between Indonesian and Japanese mechanical engineers, including those from Japanese companies in Indonesia. Besides, AUN/SEED-Net students at ITB, Nanyang Technological University (NTU), and Indonesian students were assigned to present their research work in poster session and oral presentation of the workshop.

Regional Workshop on Mechanical and Aerospace Engineering 2008



Top: Group photo of the workshop participants
Above: Research presentations by AUN/SEED-Net students catching interest from the participants

The member institutions discussed during the workshop on the issue of network sustainability; and it was agreed that strength of each institution must be clarified in order that they could collaborate more efficiently. Knowledge dissemination should be in a two-way fashion for more effectiveness and benefits. Also, they must seek external grants from local industry and expand university-industry linkage to sustain the network after the AUN/SEED-Net Project termination.

The next workshop will be held in Indonesia again, with advance call for papers as well as larger participation from industry and local community to create a stronger network.

Environmental Engineering To Collaborate with WHO



The 1st Regional Conference in Environmental Engineering in the theme of "Environmental Challenges Facing the ASEAN Region" was organized by University of the Philippines-Diliman (UP) in Manila on September 8-9, 2008. Several technical paper presentations were made in both plenary and parallel sessions by participants. One of the technical paper presentations at the plenary session was made by a special guest speaker, Dr. Terrence Thompson, Regional Advisor on Environmental Health, Western Pacific Regional Office, World Health Organization (WHO), on "Overview of Water Safety Plans". The parallel sessions were divided into four groups, namely 1) Water Quality and Modeling, 2) Treatment and Management of Hazardous Wastes, 3) Environment and the Academe, and 4) Biotechnology with a total of 26 paper presentations made by ASEAN participants and Japanese professors. AUN/SEED-Net scholars at UP also had a chance to present their research work.

The participants welcomed WHO's interest to financially support research activities in water resources/water safety theme, though the exact amount and the scope of support could not be yet concluded. UP would draft a proposal on the collaboration with WHO with statements on the issue of intellectual property. Moreover, Prof. Dr. Genandrialine L. Peralta, ex-coordinator for AUN/SEED-Net at UP who is now working with WHO, reiterated the WHO proposal for integration of its water safety plan into university curricula. The proposal was positively responded in general from the participants and was expected to be discussed in each member institution, since the change of curricula could not be made by the institution alone but to be approved by concerned ministry.

Next conference will be held by Institut Teknologi Bandung in Indonesia in 2009.

Sustainable Geological Engineering and Geo-Resources Education



During the workshop

At Mae Moh Coal Mine

Apart from keynotes from Japanese professors, papers from Member Institutions' participants and AUN/SEED-Net PhD student in Japan, poster and academic presentation from an AUN/SEED-Net alumnus and five AUN/SEED-Net students' researches presented by their advisors, there were also five presentations from non-Member Institutions; namely, Khon Kaen University (Thailand), Prince Songkhla University (Thailand), and University of New South Wales (Australia). Representatives from Department of Primary Industries and Mines of Thailand, Electricity Generating Authority of Thailand (EGAT), and mining companies in Thailand and Laos also joined this workshop.

Aside from site visit to Mae Moh Coal Mine in Lampang province, the workshop was arranged back to back with the Asian Mining Education Network Foundation Seminar, where approximately 90 participants including delegates from AUN/SEED-Net members, universities and mining companies in Asia and Australia attended.

The regional workshop in 2009 would be held in the Philippines by the University of the Philippines-Diliman.

Sustainable geological engineering and geo-resources education was the main focus for the 1st AUN/SEED-Net Regional Workshop in Geological Engineering, organized by Department of Mining and Petroleum Engineering, Chulalongkorn University, in Chiangmai, Thailand, on July 31 - August 1, 2008.

After presenting the overview and sustainability of mining industry in each participating country, the participants concluded that "school on the move" should be set up to provide opportunities for students to learn from various mining sites around the ASEAN region; mining education in the region should be standardized by founding Mining Council; and benefits of mining to the community should be publicized.



Ms. Keophousone Phonhalath, our alumna at National University of Laos, with her research poster.

First Interdisciplinary Conference: Natural Resources & Materials 2008

The Regional Conference on Natural Resources & Materials, the first conference in interdisciplinary areas of AUN/SEED-Net, was arranged by Institute of Technology of Cambodia (ITC) in Phnom Penh during August 18-19, 2008. It was attended by over 50 participants, including ASEAN Foundation Executive Director and staff, AUN/SEED-Net alumnus from Universiti Sains Malaysia (USM), AUN/SEED-Net PhD student in Japan, one participant from Pannasastra University of Cambodia and some more from SEACAP (South East Asian Consortium for Access and Preservation).

The participants from Member Institutions brainstormed to set out interdisciplinary activities under the area of natural resources and materials, which comprise short-term activities like provision of higher degree scholarships as well as collaborative research and long-term activities such as human capital development through short courses and training, technical or study visits to other Member Institutions, involvement of expert group to solve common problems in ASEAN, development of community based research on common problems in ASEAN, development of community based journal to share success stories of research and development to foster ASEAN cooperation and solidarity, and development of industrial linkages. Expected research topics in the area of Natural Resources/Materials were defined, which include value adding of natural resources materials, recycling/reuse/reducing, natural resources for construction, sustainable development and human capital in extraction of natural resources, and natural resources for water treatment.

The next workshop will be organized by Gadjah Mada University in Indonesia in 2009.



Alumni Story

VIVID MEMORY OF MY PH.D. DAYS

>> Continued from page 1

During January to September 2007, I worked as visiting research student at Research Center for Advanced Science and Technology, University of Tokyo, as a part of my Ph.D. Sandwich Program. I stayed at Tokyo International Center (TIC, JICA), which was not only good but also near Komaba Research Campus of University of Tokyo where my laboratory situated. There I did my experimental work under supervision of my Japanese co-advisor Prof. Dr. Yasuhiko Arakawa. He is a very famous professor in my field and I was so lucky to work with him. He gave me a chance to explore the nature of modern research and guided me to approach research problems from modern experimental point of view. I remembered vividly that summer morning when he asked me, "Do you want to go to Kyoto University or Hokkaido University?"

At that time I was so worried about my experiments and thought that visiting somewhere was a waste of my time. He caught my mind and explained, "*Doing the experiments in the lab is good, but you should know what is happening in the modern technology in other universities and in the world. After that you can distribute not only your knowledge but also your experience to your institution.*" After that he asked one of his associate professors to arrange my visit to Kyoto University. Because of him, I had a chance to visit many laboratories in Kyoto University and meet great professors, talking with and gaining knowledge from them.

Studying in University of Tokyo was a great time for me. Doing experiments, learning modern technology, and walking under sakura trees; all would never be erased from my dreams. After completing the research program, I went back to Chulalongkorn University and wrote thesis. Finally, I defended my thesis in front of my teachers and thesis committee and passed exams with flying colors before returning to my country on May 15, 2008.



Dr. Nan Thidar Chit Swe and Prof. Dr. Somsak Panyakeow

Over the past three and a half years I have learned a great deal about engineering, nanotechnology, and myself. I could not have got here I am today without collaboration, support, and patience of a great number of people. Once, one of my friends from Laos asked me why I was doing Ph.D. and I replied that

I liked challenges. Now I am considering about myself. I have got a lot of difficulties and challenges in Ph.D. days. Could I overcome them by myself? Of course, I tried to, but I also got guidance and encouragements from my teachers along with warm support from my friends. Without them, my work would not have been completed. Looking into the past years, some were satisfactory, some were not. Anyhow, I could say for sure that as Ph.D. student, I had been driving myself to learn a lot and I have gained a lot of experiences for my research life.

For all of these, I should say thanks to AUN/SEED-Net for financial support, kind help and warm heart to me and all students. Thanks to my advisors and all of my teachers for disseminating of knowledge to me and widening of my horizon. Many thanks to my friends for encouragement, support, friendship, and vivid memory for my stay in Arakawa laboratory and SDRL. Because of you, my days in Tokyo and Bangkok became more colorful.

Now I am in my country and working as a faculty member of University of Yangon. I miss my friends, jamjuree trees, sakura flowers and all of my teachers. I cordially invite you all to visit my country, exchange our culture and share our knowledge. The world is very small while the field of science and technology is very wide. One day we can meet each other in Yangon, Bangkok, Tokyo, or somewhere in the world as persons who try to improve modern technology. Then, we can exchange again our knowledge, experiences and culture. I do hope for these days.



Upcoming Events

November 12, 2008	AUN/SEED-Net Open House @ Ho Chi Minh City University of Technology, Vietnam
November 13, 2008	AUN/SEED-Net Open House @ Hanoi University of Technology, Vietnam
November 18, 2008	AUN/SEED-Net Open House @ Institute of Technology of Cambodia, Phnom Penh, Cambodia
November 24 - 25, 2008	The 1st Regional Conference in Manufacturing Engineering: Current Ideas, Trends, and Practices in Manufacturing Engineering @ Manila, the Philippines (http://www.dlsu.edu.ph/conferences/rcme)
December 4 - 5, 2008	The 1st ASEAN Civil Engineering Conference: Civil Engineering Innovations for Regional Development @ Pattaya, Thailand (http://conference.eng.chula.ac.th/index.php/acec2008)
January 22 - 23, 2009	The International Symposium on Multimedia and Communication Technology 2009: Emerging Technologies in Multimedia and Communication Technology @ Bangkok, Thailand (http://splab.cs.kitami-it.ac.jp/ismac2009/)
January 22 - 23, 2009	The 1st Regional Conference in Chemical Engineering: Research and Development in Chemical Engineering among Academe, Industry, and Government in the ASEAN Region @ Manila, the Philippines
February 2 - 3, 2009	The 1st Regional Conference in Global Environment @ Manila, the Philippines
February 16 - 17, 2009	The 1st AUN/SEED-Net Regional Conference on Materials 2009: Leading the Path of Engineers @ Penang, Malaysia (http://aunseednet.eng.usm.my/rcm2009.htm)
March 3 - 4, 2009	The 1st Regional Workshop on Geo-Disaster Mitigation in ASEAN @ Kuala Lumpur, Malaysia (http://mineral.eng.usm.my/geoenv2009.htm)
March 5 - 6, 2009	The 1st Regional Workshop on Information and Communication Technology: Information and Communication Technology for Ubiquitous Society @ Bangkok, Thailand
March 5 - 6, 2009	The 1st Regional Conference on Biotechnology: Biofuel @ Bangkok, Thailand
March 12 - 13, 2009	The 1st Regional Workshop in New/Renewable Energy @ Bandung, Indonesia

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