## **Green Asia Short Term Fieldwork Assignment - March 2015**

From March 10<sup>th</sup> 2015 an assortment of approximately 40 Kyushu University (KU) staff and students embarked on a short term fieldwork assignment to Bangkok Thailand. The first event involved a visit to the Phayathai campus of Mahidol University (MU) which was located in downtown Bangkok. The day's activities were focussed on a series of presentations by students and staff of both KU and MU. A sizable delegation of MU students attended the seminar and participated actively.

After a brief introduction of MU by the Dean, Prof. Skorn Mongkolsuk, the activities and research focus of the Faculty of Science were also discussed. This was followed by an introduction of Green Asia (GA), Novel Carbon Resource Sciences (COE) and Campus Asia (CA) programs by Prof Nagashima of KU. A key note lecture by Prof Tsuji followed, entitled "synthesis of core-shell types of micelle nanoparticles in solutions and their applications."

Following a short coffee break which facilitated active discussions between the students and staff of both institutions, the lecture series was continued by Assist Prof Sunintaboon from MU who discussed the "fabrication of amine-functionalized polymeric particles and their potential applications." Next Assist Prof Spring from KU gave an overview of the "recent innovations in electro-optic polymeric materials and chromophore design." After lunch the afternoon session began, which was primarily focussed on student participation. A total of 8 students delivered their research presentation of 10 minutes duration, each followed by a short discussion. The delegation then split into 2 groups, the GA staff accompanied the KU and MU students on a laboratory and Phayathai campus tour, while the remaining KU Profs discussed their research collaborations with MU colleagues. Overall it was a very productive day, enjoyed greatly by all those who participated.

The 12<sup>th</sup> of March involved a short excursion to MU Salaya campus which was located on the outskirts of the capital. This was a very modern, fresh and innovative looking campus with beautiful architecture and large landscaped grounds. After arrival at the Faculty of Science building we received a brief introduction regarding the history of this new campus by the Assistant Dean, Associate Prof. Taweechai Amornsakchai, followed by a more specific overview of the Department of Chemistry Polymer Group and its research activities by the Program Director, Prof. Pranee Phinyocheep. KU was also initially introduced by Prof Koyama leading up to his key note lecture entitled "research and development of alternative refrigerants for heat pump and air-conditioning systems in japan." Prof. Siwaporn Meejoo Smith. of MU then presented her research into the "thermoelectric properties of non-sintered carbon nanotube/sodium cobalt oxide composite."

Following a short coffee break, the student centred afternoon session began which involved presentations by 13 students in total. Each student was allowed 10 minutes to present followed by a short Q&A session. Upon the conclusion of the afternoon session, the KU delegation embarked upon a laboratory tour of the Chemistry Department and a trip by bus around the campus grounds. All members of the KU delegation were left with an excellent impression of Mahidol University. The academic and English ability of the Thai students was exceptional, giving us all a renewed motivation for the continuing globalization of KU.

The 2<sup>nd</sup> part of the short term fieldwork assignment involved a visit to the Daikin Industries Thailand factory which was organized by Prof Koyama. During this highly interesting and educational excursion, the KU delegation firstly received a brief introduction of the background, product line and future potential of the Daikin Thailand plant by the Daikin managerial staff. Upon completion of a very active Q&A session we were divided into two groups (Japanese and Overseas) and embarked upon a detailed and comprehensive factory tour. During this tour a Daikin staff member carefully explained the various aspects of production, and how the Japanese concept of "Kaizen" had been successfully applied to each stage in order to enhance the efficiency of the overall process. The tour was greatly enjoyed by all those who attended and left us with an excellent impression of Daikin Industries Thailand.

The remaining day (March 14<sup>th</sup>) included a chance for the KU delegation to experience the various aspects of Thailand's rich and vibrant culture, as well as the numerous important historical sites in and around Bangkok.