

# Major Points for 2015 Shanghai International Internship

(For detailed activities, please refer to the last two pages' summary)

## 1. 2015 International Student Conference on Environment and Sustainability (ISCES)

- 1) More than 30 universities participated in this conference. I believe the students learnt a lot from this conference, not only from the experiences of China, but also from those of other countries. Our students were very active and always played an important role in presentations and discussions. The seminars or presentations are not only on the concept of sustainability, but also related with how to manage the real systems in a sustainable way, like transportation, building, etc.
- 2) Number of students from Tsukuba: 16 (5 free+ 11 supported by themselves); while other universities: 1-3 free (usually 1 for each university, no other students supported by themselves)
- 3) No Japanese students from Tsukuba, also no Japanese students from other Japanese universities like Hokkaido.
- 4) Expenditure of each student (the 11 additional students) in the conference: totally 620 RMB (about 10,000 JPY) including meals, insurance, and conference materials.
- 5) All the students bought their own flight tickets (about 25,000-28,000JPY), excluding Rajeev who won the scholarship from the conference.
- 6) Prof LI Fengting (Tongji) told me they could help to receive more students from Tsukuba in the future if the students could find some financial support.
- 7) It's possible for us to have our annual SUSTEP meeting in Tongji or near Tongji at the same time of ISCES in the future. Every year this ISCES will be held around 5<sup>th</sup> June.





## 2. The Two Additional Days' Field Trip

- 1) 16 students from Tsukuba and 4 students from Tongji joined the two days' trip.
- 2) One of our graduates, Dr. QIAN Xiaoyong (Supervisor: Prof Zhang) who graduated last July helped us and contributed a lot to the first day's trip to Shanghai suburb: Shanghai Xidi Dairy Farm, and a demonstration base for integral prevention and control of agricultural non-point pollutions in Qingpu Modern Agricultural Park.
- 3) The students had the chance to access to the real farm and experienced the applicable technologies related with energy and resources recovery from livestock industry. They also had chance to experience the difference of the farmers' life with or without consideration of pollution control for this kind of industry.
- 4) One of our Doctoral students, Mr. ZHENG Wei (Supervisor: Prof Zhang) helped us a lot for the second day's trip. The students learnt the gap between scientific research and application in practice, and also the difference in technologies for different wastes and wastewaters.
- 5) It's feasible for us to arrange this kind of international internship annually.
- 6) It's better to enroll Japanese students into this activity in the near future (not only SUSTEP students)?





## **Summary of 2015 Shanghai International Internship**

The 2015 Shanghai International Field Appraisal/Special Internship was conducted during June 2-9, 2015. This internship was carefully designed with the combination of an international student conference (2015 International Student Conference on Environment and Sustainability, i.e. 2015 ISCES) with two additional days' field trip particularly focused on applicable technologies and management systems of waste and wastewater treatment in China. The internship was implemented jointly with Tongji University (China), Shanghai Academy of Environmental Sciences (SAES), and the Department of Ecology and Environment (DOEE), Yangtze Delta Region Institute of Tsinghua University, Zhejiang Province.

The participants took part in the 2015 ISCES during June 3-6. Before the workshop, forum, seminar and reports designed for the conference themes, they visited Shanghai Urban Planning Exhibition Hall, People's Square, Suzhou River Mengqingyuan Environmental Protection Theme Park, Yangshupu Water Supply Plant, Expo Area, Bay Beach Wetland Park, China Art Museum, Lujiazui Financial Center, etc. Then they joined the workshop on Green City and Sustainable Transportation, Forum on Sustainability in Higher Education, and presentations related with Green Life Style, Ecosystem and Climate Change, and Sustainable Development and United Nations (UN). During this conference, the participants were actively involved in each activity and they also played a leading role in group presentations and debates.

On June 7 they together with the students from Tongji University visited a dry anaerobic digestion project for biogas production from manure in Shanghai Xidi Dairy Farm, and a demonstration base for integral prevention and control of agricultural non-point pollutions in Qingpu Modern Agricultural Park (SAES). There they learned how to recover energy and resources through waste and wastewater treatment and pollution control, and how to use them for a better agricultural environment.

On the last day, the participants visited Jiaxing Union Municipal Wastewater Treatment Plant, Advanced Industrial Wastewater Treatment and Recycling Project in

Zhejiang CENWAY New Materials Synthesis Co. Ltd., and Yangtze Delta Region Institute of Tsinghua University, Zhejiang Province. They experienced the difference in technologies for treating domestic wastewater and industrial wastewater, and the importance of treated water recycling and reuse. Also, they put forward their specific viewpoints on the important aspects like process selection, treatment efficiency and management systems, especially on the eco-toxicity of wastewater before and after treatment.

This internship was designed and implemented as a part of strengthening SUSTEP (Sustainability Sciences, Technology and Policy) Program. We sincerely appreciate our Chinese counterparts, such as Prof. Fengting Li and Prof. Zhichao Wu in Tongji University, Associate Prof. Xiaoyong Qian in SAES, Prof. Rui Liu and Dr. Wei Zheng in DOEE, Yangtze Delta Region Institute of Tsinghua University, Zhejiang Province. From the bottom of our hearts, we thank them for their careful arrangement, generous guidance and support to enable this successful internship.

This internship was partially supported by Japanese Grant Aid for Human Resource Development Scholarship (JDS) Program, and was organized by the Master's Program in Environmental Sciences and Doctoral Program in Sustainable Environmental Studies at the Graduate School of Life and Environmental Sciences, the University of Tsukuba.

We are grateful for their supports. Our last but not least thanks go to Ms. Zidi Wang, Ms. Lu Liu and Ms. Hui (Tongji), and Ms. Kondo and Ms. Fukuda (Tsukuba) who helped us a lot to arrange and guarantee the internship activities smoothly and successfully.