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一、News & Events

【SOE Holds the 7th National Ph.D. Candidates Academic Conference】

The 7th National Ph.D. Candidates Academic Conference, seminar on new theories, methodology and technology in environmental science and engineering, and the 1st Ph.D. Candidates Environmental Forum between Canada and China was held at SOE from October 16 to 18, 2013. Around 130 Ph.D. Candidates from more than 40 universities and research institutes, including Tsinghua University, Peking University, Beijing Normal University, Research Center for Eco-Environmental Sciences at Chinese Academy of Sciences, Tongji University, Harbin Institute of Technology, Nanjing University, Shanghai Jiaotong University and Zhejiang University, attended the conference. This year’s conference set a new record in the number of participants.

At the opening ceremony, Prof. He Kebin, Dean of SOE, and Prof. Huang Xia, Director of the State Key Joint Laboratory of Environmental Simulation and Pollution Control, delivered opening speeches respectively. Academician Jiang Guibin from the Research Center for Eco-Environmental Sciences, Chinese Academy of
Sciences, and Prof. He Kebin delivered keynote reports titled, “Environment & Health: Beyond the Molecular Era” and “The Feature and Control of PM$_{2.5}$ in China”, respectively.

In the 3-day conference, the Ph.D. Candidates took part in warm discussions upon many fields of environmental science and engineering, covering water pollution control and resource, air pollution control, solid waste pollution control and resource, environmental economic management and policy, environmental chemistry and toxicology, ecology and climate change. The conference received over 150 papers from more than 40 universities and research institutes in China, and most papers were written in English. In addition, the conference set up a special sub-forum titled “Ph.D. Candidates Environmental Forum between Canada and China”. Eight Ph.D. Candidates from the University of Manitoba, the University of Calgary and the University of Alberta, Canada, were invited to the sub-forum.

**【SOE Associate Prof. Jia Haifeng Gains ASCE-EWRI Visiting International Fellowship Award】**

Recently, Mr. Carmen Bernedo, President of the International Academy Award Committee of the ASCE-EWRI, conferred on Associate Prof. Jia Haifeng from SOE, THU, the Visiting International Fellowship Award of World Environmental and Water Resources Congress through vigorous nomination, application, and assessment procedures.

This award is issued by ASCE-EWRI International Council, nominated and applied by the peer-experts from the United States or Canada, and granted to 3 to 5 international scholars who made outstanding contributions in the field of water environment annually. The winners will be invited to attend the World Environmental and Water Resources Annual Congress organized by ASCE-EWRI and give academic reports at the congress.

**【2013 Tsinghua Alumni East China Environmental Forum Held】**

The 2013 Tsinghua Alumni East China Environmental Forum was held in Hangzhou, Zhejiang, on November 17. The forum was co-hosted by the Tsinghua Alumni Association, SOE, East China Association of SOE Alumni and Hangzhou Xingyuan Filter Technology Co., Ltd. Around 100 alumni working in the field of environment protection from Shanghai, Jiangsu, Zhejiang, Shandong, Anhui, Jiangxi and Fujian attended the forum.

On the forum, SOE Dean He Kebin introduced the activities SOE carried out in the past year. Mr. Zhang Quan, President of the East China Association of SOE Alumni, Prof. Du Pengfei, Chairman of SOE Council, Ms. Xu Xiaoya, Vice President of Hangzhou Xingyuan Filter Technology Co., Ltd., Mr. Yan Yuegen, General
Manager of Puritek (Nanjing) Co., Ltd., and Mr. Wang Yongyi, CEO of Qingdao Gold Hisun Environment Protection Equipment Co., Ltd., delivered speeches on Shanghai clean air, water security supervision, the deeply dewatering process of sludge, integrated treatment for wastewater in the Chemical Industrial Park, and the application of disinfection technology in water treatment, respectively.

Before the forum, the 2nd Council Meeting of East China Association of SOE Alumni was held, and new councils and vice presidents were co-opted.

【2013 Tsinghua Alumni South China Environmental Forum Held】

The 2013 Annual Meeting of South China Alumni Association of SOE and Tsinghua Alumni South China Environmental Forum was held in Guangzhou, on November 30. The forum was co-hosted by SOE and the South China Alumni Association of SOE, THU. Around 120 alumni from the School of Environment and its predecessor departments in Guangdong, Guangxi, Hainan, Hunan, Sichuan, Hongkong, Macao and other places in China were present. Guests participants engaged in environmental protection also attended the forum.

Mr. Zhang Jinsong, President of the South China Alumni Association of SOE, summed up the situation of the South China Alumni Association this year. SOE Dean He Kebin introduced the current situation of SOE. Mr. Lie Zengbiao, Secretary-General of Tsinghua Alumni Association in Guangzhou, welcomed this annual meeting to be held in Guangzhou and encouraged Tsinghua alumni to win glory for SOE.

During the section of keynote speeches, Prof. He Kebin, Dean of SOE, Prof. Hu Hongying, Vice Dean of Graduate School at Shenzhen, THU, Mr. Wang Shaolin, Chief Engineer of Guangzhou Water Authority, Mr. Chen Tao, Deputy General Manager of Everbright Environmental Protection (China) Limited, Mr. Zhang Zhuo, Assistant to the President of Shenzhen Leo King Environ. Group, Mr. Feng Yubin, Chairman of MCB Equipment (GD) Co., Ltd., made keynote reports on various hot environmental issues currently. They introduced the frontier achievements, explored the professional content, proposed the practical topics, and shared their successful experience, which won warm applause from the alumni attending the forum.

At the end of the forum, SOE Prof. Jing Wenyong made the closing statement, appealing to the alumni to make contributions to the development of SOE and the environmental career in China.

二、Research & Achievement

【The 3rd International Seminar on Environmental Simulation and Pollution Control Held】

The 3rd International Seminar on Environmental Simulation and Pollution Control and the 8th Symposium
on Environmental Simulation and Pollution Control was held in Beijing, China, from November 7 to 8. It was co-hosted by the State Key Joint Laboratory of Environmental Simulation and Pollution Control and the Chinese Society for Environmental Sciences. SOE Prof. Huang Xia, Director of the State Key Joint Laboratory of Environmental Simulation and Pollution Control presided over the seminar.

Prof. Bruce E. Logan from the Pennsylvania State University, Academician of American Academy of Engineering, Associate Editor of ES&T, Prof. Armistead G. Russell from the Georgia Institute of Technology, USA, SOE Prof. Zhou Jizhong, member of Thousand Talents Program, and other well-known experts were invited to attend this seminar. A total of 8 special lectures were given by these experts, covering the areas of pollution treatment and new energy development, air pollution detection and simulation, the applications of molecular biology in eco-environment, the progress and challenges of anaerobic treatment technology, hydrometeorology and water monitoring. Around 300 experts and scholars from more than 50 universities and research institutes in 9 countries attended this seminar. The participants had a warm discussion upon the following themes: 1) air pollution control; 2) new technologies of environmental monitoring; 3) transformation, control mechanism and technologies of toxic persistent pollutants; 4) new theories and technologies of water pollution control; 5) environmental pollution and human health; 6) theories and technologies of drinking water purification; 7) improvement and ecological restoration of water environment; 8) greenhouse gas reduction and global climate; 9) control, planning and management of regional environmental pollution; 10) migration and transformation principles of pollutants in multi-media and multi-interface environment. They also introduced their own research progress. According to the scientficity and novelty of the topics and the live performances, 9 Student Encouragement Awards were awarded at the seminar.

【Tsinghua Environmental Forum Invites Experts from Worldwide】

✧ The 51st Session: Environmental Toxicology and PM$_{2.5}$ in China

Academician Jiang Guibin from Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, and Prof. He Kebin from SOE, THU, delivered academic speeches titled, “Environment & Health: Beyond the Molecular Era” and “The Source and Control of PM$_{2.5}$ in China”, respectively, on the 51st Environmental Forum on the morning of October 16. Around 130 Ph.D. students from THU and other universities in China attended the forum.

The speech given by Academician Jiang Guibin was mainly around the research frontier of environmental chemistry and toxicology. He summarized the research progresses made at home and abroad in recent
years and proposed the top ten challenges and promising future research directions in this field. The speech given by Prof. He Kebin was mainly about the global supply and demand situation of energy resources, the characteristics of energy production and consumption in China, and the energy-related environmental problems. He introduced the close relationship between China’s urban environmental issues and the development of industrialization and economy, the cola-based resource type and the characteristics of energy production and consumption in China.

Prof. Jiang Guibin is an Academician of the Chinese Academy of Sciences and the Director of the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences. His research area involves chemical form, analytical instrument, environmental process and toxicology and the environmental applications and effects of nanomaterials, etc. Prof. He Kebin, Dean of SOE, THU, Chang Jiang Scholar, Director of the State Environmental Protection Key Laboratory of Combined Air Pollution Resources Control, has been long engaged in the research area of the theories and technology of air pollution control.

✧ The 52nd Session: Advances in Membrane Technology for desalination and reclamation: a Singapore Perspective

Prof. Anthony G Fane was invited to deliver an academic speech, “Advances in Membrane Technology for desalination and reclamation: a Singapore Perspective”, on the 52nd Tsinghua Environmental Forum on the afternoon of October 18. Prof. Huang Xia presided over the forum.

In his speech, Prof. Anthony G Fane mainly introduced the research on the Reverse Osmosis (RO), Forward Osmosis (FO), Membrane Distillation (MD) and other processes, as well as their applications. He also showed the research on a new kind of membrane, which was synthesized by using permeable protein.

Prof. Anthony G Fane from the University of New South Wales (UNSW), Sydney Australia, is the former Director of United Nations Educational, Scientific, and Cultural Organization (UNESCO) Center for Membrane Science & Technology at UNSW and the first Director of the Singapore Membrane Technology Center (SMTC) at Nanyang Technological University (NTU). He is also the former Editor for the Journal of Membrane Science. His research interests lie in membrane technology and their applications in water treatment. He has published hundreds of SCI papers and made great contributions in the field of membrane technology. He was also awarded the International Water Association (IWA) Membrane Technology Award and many other awards.

✧ The 55th Session: Solid Waste Engineering: Test Tubes, Landfills and Models

Prof. Morton A. Barlaz from North Carolina State University, USA, gave an academic speech on “Solid Waste Engineering: Test Tubes, Landfills and Models” to around 30 faculty members and students on the 55th Environmental Forum on November 14. SOE Prof. Wang Hongtao presided over the forum.
During the lecture, Prof. Barlaz analyzed the current state of solid waste control in USA from the aspects of test tubes, landfills and models, and focused on the application of life cycle assessment in solid waste control. In addition, He also expressed his views on several hot issues such as the development trend of solid waste control, the disposal of landfill leachate and the emission of harmful landfill gases. At the end of the forum, the teachers and students attended the forum took part in discussions with Prof. Barlaz upon the analysis software for solid waste control and other issues.

Prof. Morton A. Barlaz, Head of Department of Civil, Construction, and Environmental Engineering at North Carolina State University, USA, Associate Editor for peer-reviewed journals (Waste Management and Journal of Environmental Engineering), Member of Science Advisory Committee for the International Waste Working Group (IWWG), and Co-Chair of the Bi-Annual Global Waste Management Symposium.

三、Exchanges & Cooperation  
【ADB Vice President Visits SOE and Speaks on the 53rd Environmental Forum】

Dr. Bindu N. Lohani, Vice President of Asian Development Bank (ADB), visited SOE on the afternoon of October 30. Provost Yuan Si, Vice President of THU, met with Dr. Lohani and exchanged ideas on environmental protection and water security. Dr. Lohani noted that ADB would continue to support the development of the Asia-Pacific Center for Water Security. And both sides agreed to enhance knowledge-sharing in the field of water security in the future. Prof. He Kebin, Dean of SOE, Prof. Du Pengfei, Chairman of SOE Council, and Mr. Xia Guangzhi, Deputy Director of the International Office attended the meeting.

During the talk, both sides exchange gifts. Vice President Lohani gave a book named “Asian Water Development Outlook 2013” to Vice President Yuan Si, and received a peer-reviewed journal named “Frontiers of Environmental Science & Engineering (FESE): Special Issue on Water Security” from Vice President Yuan Si.

After the meeting, Vice President Lohani was invited to the 53rd Tsinghua Environmental Forum, and delivered a speech entitled “Asian Water Security and Knowledge Sharing”. In his presentation, Dr. Lohani analyzed the water environmental problems faced in China by studying some new cases of water security. He also introduced the duties of ADB and proposed some solutions to the water security problems.
The Asia-Pacific Center for Water Security set at SOE was jointly established by ADB and THU in 2011. Dr. Bindu N. Lohani has been appointed as the Vice President of ADB since 2007.

【U.S. EPA Administrator Gina McCarthy Visits SOE and Speaks on the 57th Environmental Forum】

A delegation from the U.S. Environmental Protection Agency (EPA), led by their administrator, Mrs. Gina McCarthy, visited SOE on the morning of December 10, 2013. SOE Dean He Kebin met with the visiting group at SOE and exchanged ideas for the environmental problems and challenges faced in China currently.

Administrator McCarthy later delivered a speech titled “An Essential Partnership: U.S. and China Action on Air Pollution and Climate Change” on the 57th Environmental Forum. Prof. He Kebin presided over the forum. Around 200 faculty members and students were present.

McCarthy shared her views on several issues, including the environmental problems faced in China at present, the environmental problems once faced in the U.S., the damage to the environment and public health caused by air pollution and climate change, the relationship between economic development and environmental protection, the establishment of China-US partnership to jointly cope with the environmental problems.

At the end of the forum, the teachers and students attending the forum took part in discussions with McCarthy upon carbon capture, vehicle emissions, environmental education, and responsibilities for developed and developing countries to cope with climate change and etc..

Mrs. Gina McCarthy is the Administrator of the U.S. EPA. Appointed by President Obama in 2009 as Assistant Administrator for EPA’s Office of Air and Radiation, Gina McCarthy has been a leading advocate for common-sense strategies to protect public health and the environment.

【VIU President Visits SOE】

A delegation from the Venice International University (VIU), Italy, led by their new President, Prof. Agar Brugiavini, visited SOE, THU, on the afternoon of October 23. Dean of SOE He Kebin, Vice Dean Zuo Jian'e and Dean Assistant Liu Shuming, met with the delegation at Room 205 of SOE.

During the meeting, the two sides had a deep discussion on the working plan of the Sustainable Development Exchange Project between THU and VIU in 2014, including students and faculty exchanges. They also discussed the implementation details of sending SOE students to VIU for Global Environment
Program in 2014, which was reached at Venice in early October.

Meanwhile, Prof. Agar Brugiavini expected THU to send outstanding teachers to teach short-term courses at VIU and to play a more active role in the VIU Union. Prof. He Kebin recalled the history of cooperation carried out between VIU and THU, and expected the two sides to take their own advantages to make new progress on mutually beneficial cooperation in the future.

【Secretary for Transport and Public Works of Macao SAR Visits THU】

Six People from the Transport and Public Works of Macao Special Administration Region (SAR), led by their Secretary Lau Sic Io visited THU on December 9. Mr. Deng Wei, Deputy Director of THU Council, Mr. He Kebin, Dean of SOE, Mr. Du Pengfei, Chairman of SOE Council, Mr. Zhang Xu, Deputy Chairman of SOE Council, and Mr. Liu Shuming, Director of the Foreign Affairs received the visiting group.

On behalf of THU, Mr. Deng Wei welcomed Mr. Lau’s visit and introduced the research development at THU, especially the research and international cooperation in the field of environmental science. THU adheres to the scientific research directions and carries out the research work based on the national major strategic needs and the frontiers of the science and technology in the world. Mr. Deng expected this visiting to promote further cooperation between Tsinghua and Macao SAR, and also make contributions to the development of Macao SAR through combining THU research strengths with the development features of Macao SAR.

Mr. Lau Sic Io thanked THU for its long support for the development of Macao SAR, and introduced the development of Macao SAR. THU has already established a close environmental cooperation with Macao SAR. He hoped that the two sides could further deepen the cooperation in the future.

Later, representatives on behalf of SOE and Lau Sic Io held discussions and reached an agreement on further enhancing the cooperation in environmental science and technology. Both sides expressed that the future exchanges and cooperation would be devoted to supporting Macao SAR to develop into a world tourism center and cultivating local environmental talents of Macao SAR.

四、Student Development

【The 2nd Tsinghua-Dow Sustainable Development Innovation Challenge Competition Wraps up】

The 2nd Tsinghua-Dow Sustainable Development Innovation Challenge Competition concluded on November 2 in SIEEB, which was hosted by SOE and sponsored by Dow Chemical Company.

The Dow Sustainability Innovation Competition began to receive entries school-wide this year, and got strong support from relevant departments in the process of registration and organization of this
competition. Finally, 13 teams from 6 departments, including School of Environment (SOE), Department of Chemical Engineering, Department of Thermal Engineering, School of Architecture, School of Aerospace and School of Material Science and Engineering, were selected to the final, with works of high quality.

After presentations, question defenses and vetting committee reviews, Hamid Arandiyan, sophomore Ph.D. student from the Division of Air Pollution Control, won the first prize with his project, “Novel Green 3D Catalyst on CH4 Combustion for Vehicle Emissions Control: Highly Environment Protection”. The team led by Li Zetang, fifth-grade Ph.D. student from the Division of Groundwater & Soil Environment, won the second prize with their project, “Wind-Prevention and Sand-Fixation Benefit of the Electrostatic Wind Technology Based on Flexible Nano Generator”.

【SOE Excels in the 21st Graduate Sports Games】

The 21st THU Graduate Sports Games was held at the East Sports Ground on October 28. Players from SOE maintained competitive advantage as a traditional strong team, and won the championship of Female Group B, the third place of Male Group B and the third in total score, respectively.

In addition, Ms. Wen Rou broke the school record of the women’s softball game. Ms. Wu Yuqiao won championship in the women’s 100-meter sprint and women’s 4 × 100 meter relay race champion. Student Liu Xin won the third in the men’s 1500-meter race of Group B.

【SOE International Student Hamid Awarded Tsinghua Top Grade Scholarship】

The 2013~2014 Tsinghua Top Grade Scholarship winners have been announced recently. Ph.D. student Hamidreza Arandiyan of SOE, successfully won this honor, becoming the first international student who received this award since the set-up of the Top Grade Scholarship.

Hamid graduated with his bachelor’s degree from the Iran Azad University, later got a master’s degree from the Iran University of Science and Technology. He was admitted to SOE, THU, to obtain his doctoral degree in the direction of air pollution control in environmental science and engineering. His supervisor is Prof. Li Junhua. Hamid has been working very hard in study and research since the enrollment. The average score of his degree courses was 92.4. He has already published 14 papers, including 5 SCI papers published in the prestigious international academic
journals in the field of environmental catalysis, of which he was the first author. He has received a number of honors such as the first-grade Comprehensive Graduate Scholarship and the first prize of Tsinghua-Dow Sustainable Development Innovation Challenge Competition.

【SOE Student Li Xiao Elected as President of the ISIE Student Chapter】

The Student Chapter of the International Society for Industrial Ecology (ISIE Student Chapter) held the general election recently. Ph.D. Student Li Xiao of 2012 Class from SOE, THU, was elected as the president of the ISIE Student Chapter.

Li Xiao, a Ph.D. student from the Division of Environmental Management and Policy, is under the supervision of Associate Prof. Shi Lei. His main research area is the industrial ecology. He was elected as Council Member of the ISIE Student Chapter. In the past year, he participated in the work of the student chapter seriously. Together with other council members, Li Xiao organized the 3rd Young Scholar Seminar of the Industrial Ecology in June 2013, in Ulsan, South Korea.

The ISIE is the highest academic society in the field of industrial ecology, which focuses on cultivating young students and scholars. The ISIE Student Chapter was formed in 2002, and it is an important part of the ISIE. The ISIE Student Chapter brings together nearly 1,000 student members from all around the world, providing them with a learning, communication, employment platform.