

Report of Travel Grant from the Royal Academy of Engineering

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With partially financial support from the Royal Academy of Engineering, I attended the 4th International Symposium on Environmental Hydraulics in Hong Kong, 15th – 18th December 2004. This series of conference started in 1991 in Hong Kong. Subsequently it has been held in Arizona in the USA. It is now managed by one of the International Association of Hydraulics Research (IAHR)'s sectional technical committee: Fluid Mechanics Section and has become an important event in this subject area. It attracted a wide range of researchers and engineers from well-recognised figures to graduate research students. There are more than 400 attendances from many countries over the world.

I made my presentation on the first day of the symposium (15th December) in the "Sediment Dynamic I" session. The title of the paper is "A PDA study of sediment transport in a sediment-laden flow for the estimation of pollutant fluxes at water/sediment interface" and the editor of the ASCE J. of Hydraulics Engineering, Prof. P. Julien chaired the session. We have demonstrated the advantage and disadvantage of an experiment facility DTC for sediment transport study. Several interesting questions were asked in the session and many more afterward individually. I felt that it was very beneficial.

I have also chaired a session on "Hydrodynamic Models II". Prof. Christodoulou And several other researchers presented interesting results. The session was quite successful. I attended the committee meeting of Fluid Mechanical Section of IAHR during the symposium. Professor Davis chaired the meeting and we have decided the venue of the 5th Symposium to be held in Arizona, the USA in 2007.

In the four days meeting, I was very please to have opportunities to attend many presentations and met many old friends as well as made some new friends. I have talked to young graduates about the opportunities of studying in the UK. I have also received several kind invitations to give seminars and finally I confirmed one visit with Professor Chen of ZhongShang University in Guangzhou since his university is on the way of my following-up travel.

After the symposium, I went to Guanzhou and gave a seminar in the Zhongshang University. Possible collaboration on water resources has been discussed. I also visited the Academy of China's Southern Oceanographer Institute which is nearby to Zhongshang. I held talks with Professor Huang on contaminated sediment and Professors Chao on remote sensing. Some of my previous research results on shallow island wakes have attracted their great attentions.

Subsequently, I flew to Shanghai to visit Tongji University as I planned. I worked together with Professor Q. Zhou, the Dean of the School of Environmental Science and Engineering. We exchanged ideas and prepared for a possible submission of research proposal to the Chinese National Science Foundation.

Then I flew to Zhenzhou to visit the Yellow River Water Conservation Commission, which is directly under the Ministry of Water Resources. Currently a Digital Yellow River project is undergoing and it involved hydrological information system, in which we have a long track record. A seminar has been given in their information centre and several useful contacts have been made. There are potential opportunities for future collaborations.

My final step in China was to visit Tsinghua University in Beijing as I planned. Since I have just been granted an Outstanding Youth Scientist Award from Chinese National Science Foundation, several days meeting has been held between me, the collaborator Professors Wang, Wu, and postgraduate students to discuss the technical and management issues of the research project associated to the award on sediment transport (2005-2008). Next visit has been agreed in summer 2005.