

THE CROUCHER FOUNDATION

Workshop on

Regional Eutrophication and NOWCAST Model for Hong Kong

The University of Hong Kong

November 18-19, 2002

Second Announcement



<http://www.aoe-water.hku.hk/news.htm>

Objectives:

The main objective of this two-day Workshop is to discuss issues related to the development of a regional coastal eutrophication management model and a real-time HAB forecasting (NOWCAST) system. Hydrodynamic and water quality models, in-situ field monitoring systems and remote sensing measurements will be reviewed. Representative work on eutrophication modelling in Hong Kong's coastal waters will be presented.

This Workshop is a continuation of the Croucher Foundation Advanced Study Institute (ASI) on *Recent Developments in Coastal Eutrophication Research: Prediction, Decision Support Systems, and Management* held in February 5-12, 2001 (http://www.hku.hk/civil/dept_activities/asi/). After the weeklong inter-disciplinary meeting, it was concluded that there was a need to; develop a Hong Kong water quality and eutrophication modelling system; conduct a comparative study between the eutrophication of Hong Kong and Bohai Bay, a vast semi-closed area with increasing frequency of red tides in North China; and continue research on sediment-water interactions and mitigation of Harmful Algal Blooms (HAB) in Hong Kong and Mainland China.

Specific issues to be addressed include the problem needs, input data requirements and operation modes of different types of nowcast/forecast models, successful practices, continuing technical training, water quality planning and management, sewage strategy, previous lessons on disaster management in Hong Kong. The formulation of regional eutrophication models and the integration of model and real time data into a forecast system will be discussed.

Workshop Director:

Professor Joseph Hun-wei Lee (The University of Hong Kong)

Organising Committee:

DM Anderson (Woods Hole), PA Davies (Dundee), GH Jirka (Karlsruhe), WS Lung (Virginia), RSS Wu (City University of Hong Kong).

Invited Lectures:

“Dynamics of the Red Tide Dinoflagellate *Alexandrium* in the Gulf of Maine: Results of the ECOHAB-GOM Program”

- Don Anderson, Woods Hole Oceanographic Institution, Massachusetts, U.S.A.

“Water Quality Modelling: a Historical Perspective”

- Winston Lung, University of Virginia, U.S.A.

“Modelling Flows with a Free Surface that contains Large Gradients”

- Guus Stelling, Delft University of Technology, The Netherlands.

“Influence of Land-based Activities on the Coast in Bohai Sea”

- Meng Wei, Chinese Research Academy of Environmental Sciences, Beijing, China.

“Advances in Modelling Paradigms and Data Analysis Techniques in the Aquatic Environment with Applications to Harmful Algal Bloom Prediction”

- Arthur E Mynett, Delft Hydraulics and UNESCO-IHE Delft, The Netherlands.

Contributions to be presented at the workshop include:

“*Modelling of Eutrophication and Red Tide Problems in Hong Kong Waters: Some Lessons for Disaster Management*” – Joseph Hun-wei Lee, The University of Hong Kong

“Eutrophication in Hong Kong Waters: Why Isn't It Worse?” – Paul Harrison, Hong Kong University of Science and Technology

“An Overview of the Engineering and Environmental Feasibility Studies of the Way Forward for the Harbour Area Treatment Scheme (HATS)” – John Gall, CDM Camp Dresser & McKee International Inc.

“Modelling the Fate and Transport of Sediment in the Pearl River Estuary” – Onyx Wai, The Hong Kong Polytechnic University

“Bio-optics and Remote-sensing Reflectance Measurements in Hong Kong Waters: Assessment of their use in Algae Blooms Monitoring” – Jay Chen, Centre for Coastal and Atmospheric Research, Hong Kong University of Science and Technology

“Hydrodynamic Characters of Bohai Sea” – Tao Jianhua, Dept. of Mechanics, Tianjin University, China

“High Resolution Modelling of Flow and Transport in Constructed Tidal Wetland: Case Study of Talbert Marsh” – Feleke Arega, University of California at Davis, U.S.A.

Registration Fee:

There will be no registration fee charge for invited Workshop participants.

Venue:

The Workshop will be held in Graduate House (<http://www.hku.hk/gradhse>), The University of Hong Kong.

Workshop Organisation: The Workshop is intended to be a high level event where the state-of-the-art of the selected topics will be presented by lecturers of international standing. The invited lectures in the morning sessions will be followed by discussion and selected short contributions. A half-day technical visit will be arranged. This meeting will facilitate interaction between scientists and engineers, academics and policy makers. In addition to established researchers and practitioners, postdoctoral researchers and doctoral students actively working on related research are particularly welcome. The lectures and contributions will be printed and made available at the Workshop.

Accommodation and Travel: Accommodation for overseas participants will be arranged at the Robert Black College (<http://www.hku.hk/rblack>) or nearby residence of The University of Hong Kong, in close proximity to the Workshop venue. The cost is around US\$70/night. Please contact the Workshop Secretariat for accommodation arrangements. Participants should make their own travel arrangements; visitors from most countries do not require a visa. The climate in November is pleasant, with an average temperature of 20-24 degree Celcius.

Further Details and Enquiries:

Further details on the technical programme and other arrangements of the Workshop will be available on the Workshop homepage (<http://www.aoe-water.hku.hk/news.htm>) and in the Final Announcement. For queries please contact the Workshop Secretariat: Ms. Wai-Ling Tse, Department of Civil Engineering, The University of Hong Kong, Pokfulam Road, Hong Kong. Tel: (+852) 2859-2670; Fax: (+852) 2559-5337; Email: eutrohk@hku.hk.