



### Sediment Dynamics of Chinese Muddy Coasts and Estuaries

A workshop on 'Sediment Dynamics of Chinese Muddy Coasts and Estuaries' was held Sept. 5-7, 2009, in Guilin, SW China. Guilin is famous worldwide for its unique karst landscape. About 50 participants from China attended the meeting, with three colleagues from Australia and India. The workshop was organized by the State Key Laboratory of Satellite Ocean Environmental Dynamics, China, and co-sponsored by the Land-Ocean Interactions in the Coastal Zone (LOICZ) core project of the IGBP and IHDP and the International Center for the Environmental Management of Enclosed Coastal Seas (EMECS). Prof. Eric Wolanski and Prof. Zhongyuan Chen are LOICZ SSC and EMECS SPC members and attended the symposium.

The thematic presentations focused on:

- 1) Observation and instrument development;
- 2) Modeling for sedimentary processes;
- 3) Fluid mud transport and behavior;
- 4) Sediment effect on biogeochemical processes, and
- 5) Ecological and socio-economic impacts.

In his key-note presentation Eric Wolanski addressed advances in physics-biology links in fine sediment dynamics and their impact, and he also presented the new LOICZ budget methodology for nutrients in muddy estuaries. Zhongyuan Chen presented the comparative pattern of heavy metals and eco-health between the Nile Delta and the Yangtze estuary, and warned of significant degradation threats in the mega-estuaries of China from recent huge anthropogenic impacts as well as climate change. The discussions highlighted the LOICZ and EMECS-related targets and concepts, i.e. the socio-economic value of estuaries and wetlands and the role of integrated coastal management in China. A network of collaborators on this topic was established and plans formulated to seek funding sources to study the dynamics and the eco-health of Chinese muddy mega-estuaries from various international/regional organizations.



Photo – Prof. Eric Wolanski (left) and Prof. Zhongyuan Chen (right) attended the workshop.