

## COAST-01 Coastal flows and mass budgets

- Objective: The participants will achieve an introduction to coastal flows and transport of solutes
- Contents:
- The physics: Wind, currents, tidal streams; salinity, density
  - Mixing, dispersion, entrainment
  - Overview of analytical and numerical methods
  - Mass budgets for solutes; dilution, accumulation; decay, settling, bioaccumulation in the water column and at the seabed
  - Surface drift; littoral drift; flow around intakes and outfalls
- Who should attend: Engineers and technical specialists from the public and private sector with a need of an introduction to the subject
- Courseware: Selected slides and background documents as handouts and/or electronic files
- Certification: Attendance certificate (subject to 80 percent attendance)
- Duration: 3 lessons (2 hours each)
- Schedule: Lesson 1: Monday 20 October 2008 4pm - 6pm  
Lesson 2: Thursday 23 October 2008 4pm - 6pm  
Lesson 3: Tuesday 28 October 2008 9am - 11am
- Costs: \$ 400 per participant (inclusive of GST)  
*A discount of 20 percent applies to 3 or more participants from the same organization in the same course*
- Instructors:
- Thomas Uhrenholdt (DHI Singapore), coastal environment specialist, is educated as a civil engineer (MSc). He has worked extensively with advanced 2- and 3-dimensional modelling of hydrodynamics, sediment transport and water quality processes, in coastal as well as offshore areas, for hydraulic or environmental design, practical baseline and impact studies, routine monitoring and decision support
- Anders Malmgren-Hansen joined DHI in 1997 after 19 years with the Danish Water Quality Institute. Throughout his career, he has worked with aquatic environmental studies, including baseline studies, impact assessment (EIA) studies, and environmental optimization studies of coastal and inland surface waters, as well as related capacity-building. He has practical experience from Europe, Africa and Asia
- Ole Larsen, Director of the DHI-NTU Water & Environment Research Centre and Education Hub, MSc from the Royal Veterinary and Agricultural University (Denmark) and PhD from Technical University of Denmark, with a theoretical background covering geochemistry, hydrology and hydraulics. Practical experience from more than 40 development and consultancy projects within water management and hydraulic engineering, as well as related information technology and decision-support
- Enquiries and registration: DHI Water & Environment, tel. 6777 6330, e-mail: [info@dhi-ntu.com.sg](mailto:info@dhi-ntu.com.sg)