

## PECS 2012 Conference: History of PECS

by Prof. J. van de Kreeke

During the 1950s and '60s, coastal engineers and coastal oceanographers focused on different problems with regard to estuaries. Coastal engineering problems related mostly to stability of tidal inlets, land reclamation and the closure of estuaries and bays for storm surge protection. Solving these problems required knowledge of tides and tidal currents. In contrast, coastal oceanographers tended to concentrate on tidal mean properties including salinity, stratification, gravitational circulation. While coastal engineers derived their tools from hydraulics, coastal oceanographers relied on geophysical fluid dynamics.

In the seventies the coastal engineers started to face different types of problems relating mostly to water quality. Because water quality is largely determined by tidal mean motions, the coastal engineers began to seek help from coastal oceanographers. As a result of this the coastal oceanographers detected an interest in their work that had been absent in the community of blue water oceanographers.

The logical place for the two disciplines to meet and exchange ideas seemed to be the biennial International Conference on Coastal Engineering (ICCE). Unfortunately, the forum of the ICCE became increasingly focused on the nearshore, relegating estuarine problems to the status of stepchild. It was at the ICCE of 1976 that a small group of coastal engineers and coastal oceanographers realised that their interests would be better served by a specialty conference focusing on the physics of estuaries. The idea was to have this conference at the same venue and either directly preceding or following the ICCE. This idea ultimately was abandoned because it was difficult to find host institutions in some of the places where the ICCE was held.

With the intent of focusing on estuaries, the first conference was organised in September 1978 in Hamburg. The second conference did not take place until 1984 in Miami. Since 1984 conferences have been held every two years. With the inclusion of physics of coastal seas in 1990, the conference series became known as PECS. A complete list of the conferences, chairpersons and host institutions is given below.

PECS has an advisory board consisting of the chairpersons of the previous meetings. The board ensures that future conferences adhere to the above mentioned objectives. The board also selects the venue of future conferences. Organising a conference and publishing conference papers is the sole responsibility of the local organising committee.

### List of Past Conferences

1. 1978 Hamburg, Germany - organised by Jürgen Sündermann, University of Hamburg, Institute for Oceanography.  
Proceedings: *Mathematical Modeling of Estuarine Physics*, Eds.: J. Sündermann and K. P. Holz, *Lecture Notes on Coastal and Estuarine Studies*, Springer-Verlag.
2. 1984 Miami, Florida, USA - organised by Jacobus van de Kreeke, University of Miami, Rosenstiel School of Marine and Atmospheric Science.  
Proceedings: *Physics of Shallow Estuaries and Bays*, Ed.: J. van de Kreeke, *Lecture Notes on Coastal and Estuarine Studies*, Springer-Verlag.
3. 1986 Qingdao, China - organised by Huatong Wang, Ocean University of Qingdao.  
Proceedings: *Physics of Shallow Seas*, Eds: Huatong Wang, Jinyong Wang and Hua Day, China Ocean Press.
4. 1988 Monterey, California, USA - organised by Ralph Cheng, U.S. Geological Survey.  
Proceedings: *Residual Currents and Long-term Transport*, Ed.: R.T.Cheng, *Coastal and Estuarine Studies*, Springer-Verlag.
5. 1990 Gregynog, Wales, UK - organised by David Prandle, Proudman Oceanographic Laboratory, Bidston Observatory.  
Proceedings: *Dynamics and Exchanges in Estuaries and the Coastal Zone*, Ed.: D. Prandle, *Coastal and Estuarine Studies*, American Geophysical Union.
6. 1992 Margaret River, Australia - organised by Charitha Pattiaratchi, University of Western Australia.  
Proceedings: *Mixing in Estuaries and Coastal Seas*, Ed.: Ch. Pattiaratchi, *Coastal and Estuarine Studies*, American Geophysical Union.
7. 1994 Woods Hole, Massachusetts, USA - organised by David Aubrey, Woods Hole Oceanographic Institution.  
Proceedings: *Buoyancy Effects on Coastal and Estuarine Dynamics*, Eds.: D.G. Aubrey and C.T. Friedrichs, *Coastal and Estuarine Studies*, American Geophysical Union. *Sediment Transport and Buoyancy in Estuaries*, Ed.: D.G. Aubrey, *Journal of Coastal Research*, Special Issue No. 25, 1997.
8. 1996 The Hague, The Netherlands - organised by Job Dronkers, National Institute for Coastal and Marine Management.  
Proceedings: *Physics of Estuaries and Coastal Seas*, Eds.: J. Dronkers and M.B.A.M. Scheffers, A.A. Balkema Publishers.
9. 1998 Matsuyama, Japan - organised by Tetsuo Yanagi, Ehime University.  
Proceedings: *Interactions between Estuaries, Coastal Seas and Shelf Seas*, Ed.: T. Yanagi, Terra Scientific Publishing Company, Tokyo.
10. 2000 Norfolk, Virginia, USA - organised by Carl Friedrichs, College of William and Mary, Virginia Institute of Marine Science and Arnoldo Valle-Levinson, Old Dominion University, Center for Coastal Physical Oceanography.  
Proceedings: *Special issues of Continental Shelf Research - 2002*, 22(11-13) and 22(18-19), Eds.: C.T. Friedrichs and A. Valle-Levinson.

11. 2002 Hamburg, Germany - jointly organised by Hans Burchard, Institute for Oceanography of the University of Hamburg, and Iris Grabemann and Jens Kappenberg, GKSS Research Centre, Geesthacht, Germany.  
Proceedings: Special issue of Ocean Dynamics - 2003, 53(3), Eds.: H. Burchard, I. Grabemann and J. Kappenberg.
12. 2004 Mérida, Yucatán, México - organised by Paulo Salles, Institute of Engineering, National Autonomous University of Mexico.  
Proceedings: Special issues of Ocean Dynamics - 2005, 55(5-6) and 2006, 56(3-4), Eds.: P. Salles and A.J. Souza.
13. 2006 Astoria, Oregon, USA - organised by David Jay, Civil and Environmental Engineering Department, Portland State University, Oregon.  
Proceedings: Special issue of Continental Shelf Research - 2009, 29(1), Eds: P. MacCready and D.A. Jay.
14. 2008 Liverpool, England, UK - organised by Alejandro Souza, Proudman Oceanographic Laboratory, Liverpool.  
Proceedings: Special issue of Ocean Dynamics.
15. 2010 Colombo, Sri Lanka - organised by Charitha Pattiaratchi, The University of Western Australia.

Proceedings: Special issue of Ocean Dynamics.

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