Hydrographic Family

Working back then as an aeolian specialist in collaboration with marine scientists, I never could have guessed that 10 years later I would be the new editor-in-chief of HydroInternational! Well, here I am. Some 15 years ago, I chose to become a physical geographer. January 2009 is exactly 10 years since the start of the MAST-3 INDIA (INlet Dynamics Initiative: Algarve) field project, in which I was fortunate to participate as a research assistant and became familiar with the attractive atmosphere of a huge global marine project. After INDIA, my career took off in a slightly different direction and I got involved in nature conservation in coastal areas. Recently, I started working for HydroInternationaland, by way of introduction, I visited some conferences and booth shows. Once again, I felt that atmosphere: the hydrographic world is like one big family!

The INDIA project focused on a small tidal inlet located in the Ría Formosa barrier system, in the Algarve (Portugal). The aim was to measure and understand the processes driving the natural migration of tidal inlets. Tidal inlets and barrier islands occupy some 12% of the world's coastlines and are amongst the most dynamic coastal features. Coastal erosion in and around tidal inlets due to migration, tidal flooding and storm events threaten heavily populated communities and industry. The INDIA project was set to understand the fundamental physical drivers of tidal inlet changes and to develop and assess methodologies to predict medium- to long-term morphodynamic behaviour, through the combined use of field observations and numerical modelling.

The huge field campaign consisted of offshore measurements (permanent wave buoy); bathymetric and hydrodynamic surveys of the whole area; inlet-mouth data gathering deployments made from a jack-up barge (packed with equipment); and beach experiments conducted to investigate processes in the surf zone including alongshore sediment transport, current/wave conditions and wave run-up for marine sand transport, and four types of measuring methodologies used for studying aeolian transport of sand over the beach. Furthermore, measurements were made using three meteorological stations (one of them mobile in the field), a video tower on Barreta Island monitoring the inlet mouth and three radar systems (surface current radar, coastal ocean surface radar and X-band radar). A beach and surf zone crawler (BSC) arrived at the latter end of the main fieldwork phase, straight from trials in the UK. Ten years later, vast progress has been made to what were then new approaches to field measurements and technical innovations. The BSC is an example: a result of technology crossover from the offshore energy and military sectors, and a forerunner of today's AUVs and ROVs. In addition, the X-band radar system has proven its purpose with commercial development underway. Read about this for yourself in the feature on page 18.

Before leaving you to read this new issue, I would most emphatically like to thank my predecessor, Leeke van der Poel, for his commitment to HydroInternationalover the past years and for taking the magazine forward to where it is today. As I heard someone commenting, "There is no other appropriate monthly magazine on hydrography and nautical charting in the world". Leeke, I will navigate the ship onwards, 'steady as she goes'! I look forward with interest and enthusiasm to bringing you the new developments in research news, technical innovations and business. From now on, I'll be on the hunt for stories and I look forward to meeting you as a reader of our magazine. Enjoy!