

# 3<sup>rd</sup> International Short Conference on Applied Coastal Research



Figure 1. The Conference poster.

The 3<sup>rd</sup> International Short Conference on Applied Coastal Research was held from 2 to 4 June 2008 and was organized by Prof. Roberto Tomasicchio at the Department of Innovation Engineering of the University of Salento – Lecce, a famous antique and baroque town.



Figure 2. Venue of the Conference.

The Conference was organized by the International Association of Hydraulic Engineering and Research (IAHR), the Superior Council of Public Works at the Italian Ministry of Infrastructures, the Italian Association for Off-Shore and Marine Engineering and the Department of Innovation Engineering at University of Salento with the support of RIC-ENCORA through the Young Professional Exchange Programme (YPEP).

More than a hundred of experts, engineers, geologists, specialists and young researchers with an interest in Coastal Engineering participated to this event. They came from Spain, the Netherlands, Russia, Japan, USA, Croatia, Portugal and from almost all the Italian Universities (Genova, Padova, Bologna, Ancona, L'Aquila, Napoli, Salerno, Bari, Cosenza, Reggio Calabria, Catania, Palermo etc.) to participate to the 3<sup>rd</sup> SCACR, to present their recent works and to attend the lectures during the Conference.

The principal aim of the Conference was to give to the attendants information on the latest achievements of the researchers, academicians and users on coastal and port engineering. In addition to the lectures, a number of technical papers were presented during technical sessions.

Very interesting presentations were held by Prof. **Nobuhisa Kobayashi** (University of Delaware - USA), **Yoshimi Goda** (Yokohama National University – Japan), **Agustin Sanchez Arcilla** (UM/UPC, Barcelona, Spain).

These eminent scientists, together with young researchers with the presentations of their jobs, have illustrated, with abundance of data and examples, new techniques to face and solve the problems of coastal defense for beaches under erosion due to wave motion.

The coastal dynamic is a very complex phenomena and in the last years it has been worsened by the action of man, who, often, forgets to be the custodian of the natural goods devolved upon him "*perchè li custodisca e li coltivi*" (because he takes care and cultivates them) and turns into their destroyer.

The Conference underlined the economic value of the beaches (Dubai beaches, a new world tourist destination, increased from 71 km to 460 km) and, even observing the complexity and the variety of the different situations in reference to the form and exposure of the beaches, to the grain size and weaving of sands, to the wave climate etc., it pointed out new technical tools for the study of the erosion problems and for the planning of adequate remedies.

If, in fact, experts know the complexity of the problems, during the conference they had the possibility to learn about more modern and reliable tools of diagnosis and to deduce indications of appropriate ingegneristic interventions for beaches under erosion problems. It is comforting to know that today a reliable diagnostic study of a beach is possible with the use of the modern numerical models; the reliability of the available numerical models developed at academic level and tested on real field observations, is higher than that of physical models notoriously afflicted by scale problems, they are also more economic and quick. This new information must be brought to the attention of the public administrators, so they can know how to choose the actions to set through a specific knowledge.

The erosive problems of the beaches of Salento are of public knowledge, as some recent unhappy experiences of intentional works realized for beach defense revealed to be damaging interventions. In the future this cannot be allowed, since in Lecce, house of the Faculty of Engineering and of the Department of Innovation Engineering, proper scientific competences exist today to face and solve the erosion problems of the coasts of Salento.

The worthiness of the Conference, among the others, was to evidence such a happy local reality, but of international value, and the territory must know how to take advantage of this experience in the future.



Figure 3. Venue of the Conference, the expositions.

## THE PROGRAM

### I DAY – 2 June 2008

The session was opened by the Rector of the University of Salento Prof. Domenico Lafoglia, the Academic Dean of the Faculty of Engineering of Lecce Prof. Vito Dattoma, the Head of the Department of Innovation Engineering Prof. Lorenzo Vasanelli, the Professor of the Department of Innovation Engineering Prof. Roberto Tomasicchio, the Engineer Elio Ciralli from AIOM (Italian Coastal and Off-Shore Engineering Association) and PIANC (International Navigation Association) and the President of the order of Engineers of Lecce Eng. Daniele De Fabrizio.

The opening and welcome sessions were followed by a lecture and a technical session:

Lecture by Professor Yoshimi Goda from the Yokohama National University of Japan on: “Several topics on engineering applications of the random sea concept”.

I Technical Session: “Nearshore dynamics and sediment transport”.

### II DAY – 3 June 2008

Lecture by Prof. Yoshimi Goda on: “Surf zone hydrodynamics analyzed with new random wave breaking model”.

Lecture by Prof. Nobuhisa Kobayashi from the University of Delaware, USA, on: “ Beach nourishment”.

Session dedicated to the honour of Prof. Sandro Stura, University of Genoa, Italy.

Social dinner in the evening.

### III DAY – 4 June 2008

Lecture by Prof. Nobuhisa Kobayashi on: “Berm and dune erosion”.

Lecture by Prof. Agustin Sanchez-Arcilla from LIM/UPC, Barcelona, Spain, on: “Extreme wave storms and hazard assessment ” and “Evaluation of climatic hazards in coastal problems ”.

II Technical Session: “Wave-structure interaction ”.



Figure 4. During the Conference.

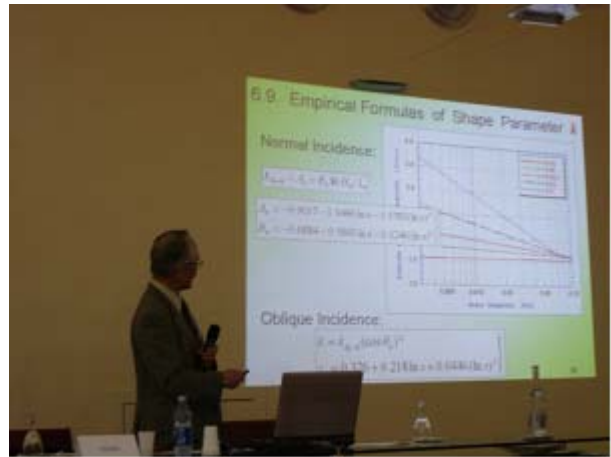


Figure 5. A presentation during the Conference.

Many young professionals and students participated to the Conference thanks to the Young Professional Exchange Program (YPEP) of ENCORA.

Students had the possibility to attend very interesting and high level lectures on crucial topics for coastal research and on the latest achievements and advances in scientific knowledge related to coastal engineering by some of the most important and well known Professors in the world.

Presentations of the technical sessions allowed them to earn more about the activities carried out in other institutions and present their own research work.

Young professionals demonstrated to be very satisfied since this event will be important for their future research activity and it has been an important opportunity to contact well-experienced researchers coming from all over the world, as well as to share experiences with other young colleagues.



Figure 6. Some of the participants.