

Journal Submission

Authors attending Coastal Processes 2013 will be invited to submit an extended version of their paper for possible publication in the International Journal of Sustainable Development and Planning, one of the Journals edited by the Wessex Institute.



Location

The volcanic island of Gran Canaria is the largest of the Canary Islands, located 180km from the northwest coast of Africa. The diverse island is home to wide sandy beaches, nature reserves, archaeological sites and picturesque villages, as well as modern, cosmopolitan cities and popular coastal resorts. Nearly half the island is a protected natural area, sheltering many species of plants which inhabit the unique mild microclimates and landscapes of the island.

Conference Venue

The conference will take place at the Seaside Hotel Palm Beach in Maspalomas, less than an hour by road from Las Palmas de Gran Canaria and the international airport. Nestled amongst sand dunes close to the beach, the hotel benefits from a wide range of leisure facilities, bars and restaurants offering high quality local and international cuisine.

Open Access

WIT strongly believes that removing the barrier to research published online will greatly aid progress in all scientific and technical disciplines, as well as all other spheres of knowledge. Most WIT conference and all journal papers are freely available online.

Submission Information

Papers are invited on the topics outlined and others falling within the scope of the meeting. Abstracts of no more than 300 words should be submitted as soon as possible.

Abstracts should clearly state the purpose, results and conclusions of the work to be described in the final paper. Final acceptance will be based on the full-length paper, which if accepted for publication must be presented at the conference.

The language of the conference will be English.

Online submission

wessex.ac.uk/coastal2013

Email submission

gwest@wessex.ac.uk

Submit your abstract with Coastal Processes 2013 in the subject line.

Please include your name, full address and conference topic.

Conference Coordinator

Genna West

gwest@wessex.ac.uk

Wessex Institute of Technology

Ashurst Lodge

Ashurst

Southampton

SO40 7AA

UK

Tel: +44 (0) 238 029 3223

Fax: +44 (0) 238 029 2853

For more information visit:

wessex.ac.uk/coastal2013



COASTAL PROCESSES 2013

3rd International Conference
on Physical Coastal Processes,
Management and Engineering



9 – 11 April 2013

Gran Canaria, Spain



WESSEX INSTITUTE
OF TECHNOLOGY

ADVANCING INTERNATIONAL KNOWLEDGE TRANSFER

Organised by

University of Las Palmas
(Canary Islands), Spain

Wessex Institute of Technology, UK

University of Parthenope, Italy

Sponsored by

WIT Transactions on Ecology
and the Environment

International Journal of Sustainable
Development and Planning

wessex.ac.uk/coastal2013

Following the success of the first two conferences on Coastal Processes held in Malta in 2009 and Naples in 2011, it has been decided to reconvene the meeting in Gran Canaria.

Coastal regions present a complex dynamic web of natural and human related processes. Although coastal zones are narrow areas extending a few kilometres on either side of the shoreline, and occupying a small strip of ocean and land, they play a very important role as they account for nearly a quarter of all oceanic biological production, which in turn supplies approximately 80% of the world's fish. About 60% of the human population lives in the coastal zone, and around 70% of big cities are placed in this narrow area. Concomitantly, more than 90% of the pollutants generated by human economic activities end up in the coastal zone.

The unstoppable demand of the coast for recreational and tourism activities has increased the need for shore and beach protection, as well as the construction of artificial beaches, ports and harbours. Most coastlines are subjected to the direct impact of wind waves, swell and storm wave activity. As a result, wind waves and wave driven currents are the dominant mechanisms controlling littoral sand transport and determining the nearshore morphology. In addition, many other physical phenomena, such as tides and associated currents, long waves and storm surges, amongst others, can play a significant role in the dynamic behaviour of the coastal zone.

Due to its great socio-economic importance, the physical aspects of the coastal processes have been of concern for decades, but recent advances in a number of areas, including satellite remote sensing, are giving rise to significant progress in this field. In particular, the use of satellite and imaging systems has significantly enhanced the monitoring and understanding of coastal processes.

Accordingly, it has become clear that the ocean side of the coastal zone represents a very sensitive and particularly vulnerable sector of the ocean to any kind of man-made action or natural extreme events. Consequently, the problem of environmental protection and conservation takes special relevance in this zone, and any decision concerning its viability must be preceded by a forecast of its consequences. Their adequate prediction is only possible on the basis of a clear understanding and careful analysis of the fundamental dynamic processes occurring in such areas.

A greater knowledge of sediment transport mechanisms at beaches may avoid some common mistakes of the past, consisting of uncontrolled development of groyne fields and seawalls, dam constructions on rivers that reduce sand supply to the coast, hydrocarbon and groundwater extraction inducing local ground subsidence and associated floods and erosion of coastal areas.

In order to reach satisfactory solutions for the demands imposed on the coastal areas and the protection of its environment, one needs to understand very different aspects and their interaction. The problems are essentially interdisciplinary, and scientists need to be able to exchange ideas with colleagues from other fields with a variety of different experiences. Thus, an acceleration of research is needed to improve the quality of the coastal processes prediction, together with critical understanding about the model results and their comparison with well-documented case studies and field experiments.

International Scientific Advisory Committee

G Rodriguez
University of Las Palmas, Spain

C A Brebbia
Wessex Institute of Technology, UK

G Benassai
University of Parthenope, Italy

R Aps
University of Tartu, Estonia

R Ernsteins
University of Latvia, Latvia

P Muñoz
Instituto Politecnico Nacional, Mexico

U Suursaar
University of Tartu, Estonia

Benefits of Attending

Conference Books Papers are published in paper and digital format and widely distributed throughout the world. At registration, delegates receive a USB flash drive containing the conference proceedings, and those of previous conferences in the series. Papers are also archived at <http://library.witpress.com>

Book Dissemination WIT Press ensures maximum dissemination of your research throughout the world through its own offices in Europe, the USA and its extensive international distribution network.

Digital Archive All papers in the conference books are permanently archived at <http://library.witpress.com> where they are available to the international community.

Open Access Open Access allows for the full paper to be downloaded from the WIT eLibrary archives, offering maximum dissemination. Delegates who opt for Open Access will receive a collection of books on related fields on a USB flash drive at registration.

Journal Papers Presenters at WIT conferences will be invited to submit an extended version of their conference paper to one of the International Scientific Journals edited by the Wessex Institute.

Networking Participants can present their research and interact with experts from around the world, becoming part of a unique community.

Conference Topics

Wave modelling

Hydrodynamic modelling

Effects of climate change in coastal zones

Coastal defences

Energy recovery

Sediment transport and erosion

Pollution and water quality

Planning and beach design

Coastal morphology

Coastal processes and navigation

Coastal processes and GIS

Bio-physical coastal processes

Remote sensing

Systems approach

Coastal zone management

Impact and recovery from tsunamis

Impact of storms and extreme events

Ecosystems modelling

Coastal lagoons

Coastal oceanography

Socio-environmental issues

Indexing and archiving of conference papers

Papers presented at Wessex Institute conferences are referenced by CrossRef and regularly appear in notable reviews, publications and databases, including referencing and abstract services such as **SCOPUS, Compindex, ISI Web of Knowledge, Index to Scientific and Technical Proceedings, ProQuest and Scitech Book News**. All conference books are archived in the British Library and American Library of Congress.

- Papers presented at Coastal Processes 2013 will appear in a volume of **WIT Transactions on Ecology and the Environment** (ISSN: 1746-448X, Digital ISSN: 1743-3541).

- All conference papers are archived online at <http://library.witpress.com> where they are immediately and permanently available to the international scientific community.