



REPORT OF MEETINGS

IGCP Project 274 Seminar on Coastal Evolution in Asia/Pacific Bangkok, Thailand, 24-25 November 1988

International Symposium on Coastal Evolution, Management and Exploration in SE Asia IPOH, Malaysia, 4-10 September 1989

Under the joint auspices of the Chulalongkorn University, UNESCO, IGCP and ESCAP, a Seminar on "Coastal Evolution in Asia/Pacific" was held in Bangkok on 25 November 1988, preceded by a one-day fieldtrip with visits to a deep clay pit SE of Bangkok (contact Pleistocene/Holocene marine deposits) and a coastal development area in the SW threatened by coastal erosion. The Seminar was attended by *ca.* 30 persons from 10 countries. Eight papers were presented that dealt with various regional and thematic aspects of coastal change, volcanic activity and hazard mitigation. The meet-

ing successfully prepared the ground for a discussion on increased regional cooperation in SE Asia and the Pacific.

As such, the Bangkok Seminar contributed indirectly to the success of the Project-sponsored International Symposium on "Coastal Evolution, Management and Exploration in SE Asia", held in Ipoh, Malaysia 4-10 September 1989. This Symposium (and second annual meeting of IGCP Project 274), made possible by the Geological Survey of Malaysia and superbly organized by Mr. T. Suntharalingam and his team, attracted participation of 67 persons from

21 countries (representing all continents but South America). Among the hand outs were a volume of 49 (extended) abstracts, an 86 pp. volume on "The coastal Zone of Peninsular Malaysia" (with contributions by 5 authors), and an excursion guide. The first edition of the Quaternary Geological Map of Peninsular Malaysia was presented at the occasion of the Symposium.

Of the 29 papers presented, 23 involved relative sea-level changes, coastal evolution and management in the Austral-Asian-Pacific region (West India: Quaternary carbonates; Bangladesh: Late Quaternary evolution of the Ganges Delta; South and West Sri Lanka: Conservation of post-glacial morphology; Indonesia: crustal movements in the eastern Sunda Arc, coastal erosion in Bali and sediment transport on the inner continental shelf, relative sea-level change in the Sunda Strait; Malaysia: progradation and erosion of mangrove shorelines, geomorphology, coastal management and tourism; Thailand: coastal development of the SE sector; Vietnam: stratigraphy, sea-level changes and problems of coastal management and exploration; P.R. of China: coastline changes of the yellow sea, eolianites; Eastern and northern USSR: sea-level changes, climate, crustal movements, coastal evolution and human adaptation; Japan: response of mangrove habitat to rising sea levels, comparison of relative sea-level changes between Japan and East coast of China, hydroisostasy in the Pacific, sea-level change and evolution of Yoron Island (Ryukyu Islands) and the Southern Mariana Islands; Australia/Papua New Guinea: sea-level rise and evolution of estuaries; and New Zealand: eustatic and tectonic effects on the evolution of coastal geomorphology. Six papers dealt with coastal evolution of parts of the African and US East coast, records of sea-level high stands during the last 100,000 years in SW Spain, and the question of how global evidence of coastal evolution during the Last Interglacial can be used for predicting consequences of higher sea levels from the Greenhouse Effect.

Fieldtrip

Over 40 persons from 20 countries took part in the 5-day fieldtrip to the NW and NE sectors

of the coastal plain of Peninsular Malaysia, including a fascinating visit to the Pantai tin mine. The objective of the excursion, which was ably prepared and guided by Drs. Aleid Bosch, Prof. H. D. Tjia, Mr. T. Suntharalingam, and Mr. Kammaludin bin Hassan, was to demonstrate the Quaternary, especially Holocene, sedimentary sequences, coastal morphology and soil formation in relation to the influence of pre-existing topography, relative sea-level change (a fall of at least 3 m during the last 5,500 years), sediment availability, and temporal and spatial differences in force and direction of prevailing winds (wave energy) and currents.

On the West coast, the SW monsoon, coming over Sumatra, delivers a mild wave regime. The western coastal plain is wide and underlain by fine grained marine sediments. In contrast, the NE monsoon produces seasonal high energy conditions on the East coast. Here, many cheniers and beach ridges occur. Fluvial deltaic deposits are more important than on the West coast. Furthermore, it is now apparent that there are widespread mangrove muds deposited about 6,000 years ago throughout the North Australian and Southeast Asian region. These deposits are particularly extensive within embayments in the pre-Holocene topography. The West Malaysian setting is slightly different from the North Australian, firstly in that it has a smaller tidal range, and secondly in that it is a much straighter coast. Two other important features in Malaysia have been the (1) mid-Holocene high stand of sea level, and (2) the development of peat swamp forest over the coastal plain.

In summary, the symposium and the fieldtrip highlighted an increasing awareness of (1) the relevance of coastal evolution research for the study of paleo-climate, paleo-oceanography and paleo-geodynamics and vice versa, and (2) the importance of coastal evolution data to calibrate models of the response of (tropical) lowland areas to future (relative) sea-level rise and other climate related factors.

For information about the abstract volume and other handouts of the symposium, please contact: Mr. T. Suntharalingam, Geological Survey Laboratory, P.O. Box 1015, 30820 IPOH, Perak, Malaysia.

Annual Project meeting in 1990

In 1990, IGCP Project 274 will focus on Quaternary coastal and shelf evolution in South America. From 18–24 November 1990 an international symposium on "Quaternary Shorelines: Evolution, Processes and Future changes" will be held in Ushuaia, Tierra del Fuego, Argentina. For information, please contact: Dr. E. J. Schnack, Laboratorios de Oceanografía Costera, Facultad de Ciencias Naturales, Casilla de Correo 45, 1900 LA PLATA, Argentina.

A regional conference on coastal and shelf evolution in northern South America and the southern Caribbean is planned to be held at Cayenne, French Guyana in the week preceding the Ushuaia meeting. Although the meeting in Cayenne has not yet been confirmed at the time of writing (24 November 1989), it is fully expected to take place. For information, please contact: Mrs. M.-T. Prost, Centre ORSTOM, BP 165, 97323 CAYENNE Cedex, French Guyana.

Orson van de Plassche
Leader IGCP Project 274
Institute of Earth Sciences
Free University
P.O. Box 7161
1007 McAmsterdam
The Netherlands

INTERNATIONAL GEOGRAPHICAL UNION COMMISSION ON THE COASTAL ENVIRONMENT

A regional IGU-CCE field symposium was held in Portugal from May 3 to 9, 1989, with special emphasis on human impacts of coastal natural systems. 35 participants covering 14 nationalities attended the meeting which was partly supported by a grant from the UNESCO Marine Sciences Division. The organizer was Dr. Maria Eugenia Moreira from the University

of Lisbon which, in conjunction with the Commission of Geography of Portugal, also supported the symposium.

An entire day was devoted to the presentation and discussion of 14 papers and 10 posters covering coastal topics in different parts of the world. Most of these are now being edited and will be published in 1990 in an issue of the *Journal of Coastal Research*.

The coast of Portugal south of Lisbon down to the Spanish border was visited during a four day field excursion. An amazing variety of coastal forms and different types of anthropogenic actions were encountered. Many of these situations provided argument for direct discussions. In the Alentejo region, sandy beaches and related foredunes, estuarine sedimentation, marine wetlands, rocky shores associated with Quaternary aeolianites were some of the highlights. Active cliffs and retreating barrier islands characterize the coast of Algarve where a booming tourist industry is competing for space. Examples of beach erosion enhanced by hard protection structures were presented in developed areas as well as cases of dune management and restoration programs in areas designated as protected.

A high quality guidebook provided excellent descriptions and illustrations for the sites visited in the field. This 90 pages document is available from the organizer of the symposium, Dr. Maria Eugenia Moreira, at a cost of US dollars 15 by surface mail and US dollars 18 by air mail. Inquiries should be directed to her at the following address: Universidade de Lisboa, Centro de Estudos Geograficos, Faculdade de Letras, Alameda da Universidade, 1699, Lisboa Codex, Portugal.

Roland Paskoff
Chairman IGU-CCE
University of Lyon