

INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS

NEWSLETTER

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ASSOCIATION NEWS

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Italy

The present summary appeared in a Programme Report edited for the 26th I.G.C. and sponsored by the Italian Research Council. It is due to M. Gnaccolini and M. Gaetani - Università Piazza Gorini - Milano, and covers the period 1976-1980. The original report contains an interesting bibliography.

Terrigenous deposits

The researches on terrigenous sediments carried on between 1976-1980 concerned the following main topics :

- turbidites,
- fluvial, deltaic and shallow marine deposits.

Most of the contributions were devoted to the description and interpretation of turbidite facies and facies associations in different areas of the Apennines. Paleogeographic reconstructions have been tried in turbidite basins of Southern Alps and of Central Apennines. Finally, researches devoted to establish general criteria for interpretation of thin-bedded turbidite facies have been carried out in Pyrenees, Spain.

Major interest of the Italian scientists in the study of continental to shallow marine terrigenous sediments is testified by the increasing number of contributions devoted to this matter. Fluvial, lacustrine, deltaic and shallow marine sediments, Triassic to Recent in age, have been examined. The main objectives of this research have been either the paleogeographic reconstructions and the analysis of the sedimentary processes.

Carbonate deposits

Progresses in this field were obtained both in regional sedimentological analysis and in case history studies. The range of interest spanned from Triassic till the Recent, and investigated area were Southern Alps, Apennines, Sardinia, and Sicily. Recent carbonate sedimentation was analyzed in Red Sea and New Mexico.

Netherlands
(from Tj. Van Weering)

An inquiry was held amongst the various Universities in the first half of 1980 concerning the sedimentological research and related activities carried out in the departments of Geology. The following summary was compiled of answers received before June 1980; more will come later on Institutions which answered after this date.

Groningen State University
Department of Geology
Melkweg 1
Groningen

H.J. Veenstra, A.M. Winkelmolen : - Sediment transport in the Wadden tidal flat area and along the adjoining part of the Dutch coast. Studies of grain size, rollability, sorting, heavy mineral constituents.

A.M. Winkelmolen : - Sediment transport. Studies of progressive sorting, size and shape of river- and tidal flat sediments. Flume experiments.

Wageningen Agricultural University
Department of Pedology and Geology
P.O. Box 37
Wageningen

J.D. de Jong :

- Though not actually carrying out sedimentological research, involved in various research objects.

with A.P. Oosterom :

- Quaternary geology, pedology, geomorphology and sedimentology of the coastal area of Kenya (East Africa).

with A. v. Vliet (Shell) :

- Sedimentology of an Eocene sub-sea fan near San Sebastian, Spain.

with P.W. Smit :

- Sedimentology of a Devonian Coastal barrier system in Alberta-Canada.

University of Amsterdam
Geological Institute
Nieuwe Prinsengracht 130
Amsterdam

Th. B. Roep :

- Stratigraphic - sedimentological analysis of Tertiary basins in S.E. Spain.
- Sequences in sub-recent and recent coastal barriers of the W. Netherlands.

with J.J. Hermes, J. v. Hinte and students :

- Relation of the geology of the Tertiary basins in S.E. Spain to Messinian events.

with H. v. d. Poel :

- Regional synthesis of Tertiary basins in S.E. Spain.

with G. Postma :

- Mass flow in a Pliocene marine fan near Almeria.

with K. Kleverlaan :

- Tortonian Deep Sea Fan turbidity sequences.

Delft Technical University
Laboratory of Fluid Mechanics
Stevinweg 4
Delft

H.J. Geldof with A.R. Slot :

- Development of a new sedimentation balance to enable accurate measurements of fall velocities of both fine and coarse sand particles.

OCEAN MARGIN DRILLING PROGRAM
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(from Thomas Davies)

The Ocean Margin Drilling Program (OMDP) is a scientific research project which will use an advanced drilling system with full well control and greater environmental tolerances to investigate strata which are beyond the capabilities of open hole drilling with the GLOMAR CHALLENGER. Although, as its name implies, the main thrust of the program is toward examination of continental margins, it includes drilling to determine the nature of the oceanic crust (Layer 3) and investigating the paleoenvironmental development of the Weddell Sea. More than half of the OMDP will be devoted to drilling in the thick sedimentary sequences of the passive margins of the Atlantic and Gulf of Mexico.

OMDP provides an exciting opportunity for cooperation between scientists in industry, academia and government. It is planned that the cost of OMDP will be shared between the petroleum industry and the U.S. Government. At the time of writing, ten oil companies have agreed to support the first year of the program.

Intellectual leadership for the program is provided by scientific advisory committee consisting of representatives of the participating U.S. academic organizations and petroleum companies. As a starting point for future planning, the SAC has adopted a model drilling program proposed by an interim planning committee which met in Houston, March 3-7, 1980. 1981 will be devoted to synthesis and review of existing data from regions selected as candidate areas for investigation by OMDP. This regional synthesis effort will form the basis for a science program specifying pre-, syn- and post-drilling experiments, and will be used to determine the scientific feasibility of the program and its cost effectiveness. If such is determined, additional studies, as required, will be initiated in late 1981. The first drilling would be planned for 1984.

Information regarding the status of OMDP, the report of the interim planning committee, and a short summary of its recommendations entitled "OMDP - Preliminary Science Program" are available from JOI Inc., Suite 512, 2600 Virginia Avenue NW, Washington DC 20037.

FUTURE MEETINGS

July 12-15, 1981

ENGLAND (Reading)

Sediment diagenesis : Recent developments and applications to reservoir geology.

NATO Advanced Study Institute for postdoctoral scientists and advanced students.

Lecturers include : R.G.C. Bathurst, K.O. Bjørlykke,
G.V. Chilingar, T. Elliott, H. Füchtbauer, N.P. James,
D.J.J. Kinsman, V. Schmidt, B. Velde, H.R. Wanless.

Topics : Compaction processes in terrigenous clastics; diagenetic reactions in sandstones; diagenetic reactions in clays; secondary porosity development in sandstones; facies controls on diagenesis in sandstones; carbonate ingredients and depositional models; controls on early diagenesis in carbonates; late diagenesis in carbonates, diagenesis in evaporites.

Further details from : Mrs. D.M. Powell,
Department of Geology,
The University, Whiteknights,
Reading, RG6 2AB
U.K.

Convenors : A. Parker and B.W. Sellwood.

September 21-25, 1981

GREAT BRITAIN (Keele)

2nd International Conference on Fluvial Sedimentology
Modern and Ancient Fluvial Systems

Field excursions before and after the meeting.

Further details and booking forms from :

International Fluvial Conference,
Department of Geology,
University of Keele,
Keele,
Staffordshire, ST5 5BG
England.

The meeting is being partly sponsored by IAS and it has been agreed that some financial support, in the form of bursaries will be available to younger members of the Association.

Members under 26 years of age, who wish to apply for bursaries should apply to the Treasurer :

Dr. Djin Nio, Treasurer IAS,
Institute of Earth Sciences,
University of Utrecht,
Budapestlaan 4,
P.O. Box 80.021,
3508 TA UTRECHT
Netherlands

FIELD COURSE =====

CLASTIC TIDAL DEPOSITS

The Comparative Sedimentology Division of the State University of Utrecht (Netherlands) is organizing a number of short field courses on clastic tidal deposits.

The main emphasis of the course will be on a comparison of features of recent, subrecent, and ancient tidal sediments, and the development of diagnostic criteria for tidal deposits. Distinctive features of different types of tidal environment (subtidal, intertidal, supratidal) will also be demonstrated in the field.

The course will be based in the SW part of the Netherlands, where the excavation of large construction pits gives a unique opportunity for the study of subrecent deposits at depths up to 15 m. below Mean Sea Level.

Some features of the course are outlined below.

1. PHYSICAL PROCESSES. A short introduction to tidal theory and sediment transport will be given, and the relationship of these processes to tidal bedforms observed in the recent environment will be discussed. Relationships between bedform morphology and migration, internal structures, and preservation potential will also be demonstrated.
2. BIOLOGICAL PROCESSES. Faunal and floral distributions will be observed in the field, and their effects on sedimentation discussed.
3. ENVIRONMENTAL STUDIES. The existence of reliable hydrographic charts dating back to the early 19th century and detailed echosounding maps dating back to 1959 allows the field areas studied to be placed in their historical context, and sites of maximum preservational potential to be identified.

4. ANCIENT ANALOGUES. Case histories of ancient tidal deposits currently being studied by members of the Department will be presented, and comparisons made with the deposits seen in the field.

5. FIELD TECHNIQUES. There will be opportunities to see sampling and measurement techniques demonstrated in the field - e.g. production of laquer peels and simple coring techniques.

DATES :

Course 1 : 20-24 April 1981

Course 2 : 4-8 May 1981

Course 3 : 25-29 May 1981 (Students only)

COSTS :

U.S. \$ 600 : professional geologists

U.S. \$ 350 : junior scientists (under 26) and university scientists

U.S. \$ 200 : students

These costs are inclusive of accommodation, food, working facilities and transport during the course.

Anyone wishing to participate in one of these courses is asked to write as soon as possible (and at least 4 weeks before the start of the course) to Dr. S.D. Nio, Comparative Sedimentology Division, Institute of Earth Sciences, Budapestlaan 4, 3508 TA UTRECHT, Netherlands, for full details and an application form. Each course will be limited to 20 participants.

EXTRA COURSE : It may be possible to hold an extra course on 14-18 September 1981. This is intended for people coming to Europe to attend the International Fluvial Conference at Keele, England. The extra course will only take place, however, if there is sufficient response - anyone interested please contact Dr. Nio as soon as possible.

NEW PUBLICATION

Marine Phosphorites - Edited by Y.K. Bendor

The material included in this volume (SEPM Special Publication 29) was presented at the Phosphorite symposium held at the I.A.S. Xth International Congress on Sedimentology, Jerusalem, Israel, July, 1978. The volume contains 20 papers on phosphous deposition worldwide. A list of the papers included in the volume may be obtained by writing to the Society of Economic Paleontologists and Mineralogists, Box 4756, Tulsa, Oklahoma 74104. It may be purchased for \$ 21.00 (U.S.) by SEPM members and \$ 26.00 (U.S.) by non-SEPM members.

LAST MINUTE NEWS

2nd I.A.S. Regional Meeting : Bologna, April 13-15, 1981

- All those who have registered (about 200 to date) will receive the final programme upon arriving to meeting place.
- Small grants destined to help the participation of Junior Members (under 26) are available. Please contact the organizer (see address below).
- A tentative list of the main topics which will be presented has been established and comprises :
 - deep-water clastics (mostly ancient);
 - fluvio-deltaic clastics;
 - evaporites, lagoonal, lacustrine and euxinic sediments;
 - shallow-water carbonates;
 - cherts and pelagites;
 - sedimentological structures and depositional processes;
 - pyroclastic deposits;
 - sedimentary petrography, geochemistry, diagenesis;
 - several papers can also be included under the item :
sedimentation and tectonics.

CL. MONTY,

General Secretary