

# **INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS**

**Feb  
1975  
No. 21**

## **NEWS LETTER**

## **ASSOCIATION NEWS**

### SEDIM NICE

Many papers have been submitted to the theme directors and it looks as if the scientific discussions will be exciting. If you have submitted a title and an abstract, but have not completed a paper, you may still be invited to speak by the director. I hope that the final circular will have reached you by now. It has been ready for some time, but its despatch has been delayed by Air France. There is an omission regarding the hotel accommodation in that Category D, E, and F hotels and student accommodation were omitted from the pink booking form. Check your 2nd circular for the price and book for these categories if you wish by writing under the 'remarks' section. Remember reduced Registration Fees are allowed only for those who are paid up members for both 1974 and 1975.

CHANGES IN STATUTES

At its last meeting the Bureau considered changes in the Statutes so that they may both correctly reflect current procedures and practices and enable improvements to be made in the future organization and conduct of the Association. Proposals will be put before members at the Nice Congress, to be voted upon at the Assembly.

Probably the most important change that has taken place in the conduct of the Association during the last 3 years has been the role of the Bureau. According to the present Statutes this consists of the President, Vice-President, General Secretary and Treasurer. Up to 1972 it rarely, if ever, met between Congresses. Since that time it has met 7 times, at least twice a year. Council members have been invited as well as Bureau members. The President, General Secretary, Treasurer and Editor have attended all meetings. The Vice-President, the Chairman of the Publications and Membership Committees have attended some meetings and two Council members have once been able to attend. An enlarged Bureau has therefore become the body where the affairs of the Association are discussed and decisions, which previously either were not taken or were left to individual officers, have been made. The whole Council has been informed of the discussions through Minutes and letters and has been asked to make decisions on major matters of policy.

The proposed changes in the Statutes are intended to:-

1. Strengthen the Bureau from four to eight people by including the Editor, an additional Vice-President and the Publications and Membership Secretaries and by giving it the power to conduct the business of the Association, though all important matters of policy will be approved by the Council. The General Assembly will vote on all important issues of the Association.
2. Allow the Bureau to act as a Nominating Committee for all posts, rather than have special Nominating committees. We doubt whether individual Nominating Committees will work in our Association because they will be unlikely to meet and in practice the Bureau is the only body that can watch the overall balance of Bureau and Council members.
3. Allow the Bureau rather than the General Assembly, which only meets every 4 years, to establish subscription levels. With present inflation we need this flexibility.
4. Add National Correspondents in the Statutes. We feel they have been, on the whole, a great success. They are essential for the effective running of the Association.
5. Eliminate the standing committees of the Publications Policy and Membership and replace them by Secretaries with power to constitute

*ad hoc* committees. Our experience has been that Committees are not very effective, since they cannot meet and it is preferable, when issues arise, for Secretaries to create special committees for particular purposes.

6. Include a second Vice-President to allow greater flexibility in choice of President and Vice-President and to increase the strength of the Bureau.

#### REGIONAL MEETINGS AND SPECIAL PUBLICATIONS

Two further Special Publications, possibly associated with Regional Meetings, are being planned. One will be "Recent and Ancient Lake Deposits" with a meeting possibly in 1976. Anyone with ideas or possible contributions should contact Albert Matter, Geol. Inst., Univ. Bern, Sahlistrasse 6, Bern. The other will be "Sedimentation in the North Sea or Continental Shelves of Western Europe" and will involve a meeting in Holland in 1977. It is being organized by Dr. S.D. Nio, Geological Institute, Garenmarkt, Leiden.

#### MEMBERSHIP LIST

A new Membership List is being prepared. It is doubtful whether this will be ready to be sent with this issue of Sedimentology but it will be despatched with the May issue.

#### BACK NUMBERS OF SEDIMENTOLOGY

New members may obtain the previous year's issues of Sedimentology by paying their member's subscription for the previous year. Issues of Sedimentology for earlier years back to 1973 may be obtained by paying half the current cost to Institutions to Blackwell Scientific Publications (i.e. £9.00 at present). Pre-1973 issues may be obtained from Elsevier at a cost of Dfl.64.00 per half yearly volume.

#### PAYMENT OF SUBSCRIPTIONS

At present 80 1973 members have not paid their 1974 subscriptions in spite of 2 reminders. Only about 150 1974 members have paid their 1975 subscriptions. Another point is that for some reason the bank charges Dfl.5.00 for each guilder subscription and Dfl.1.00 for each one paid in dollars. We intend (1) to send subscription statements in future separately from Sedimentology, in spite of the extra mail costs (2) to make it easier to pay subscriptions by making arrangements for members to pay, if possible, in local currencies. Meanwhile please pay in dollars if possible (present exchange rate Dfl.40.00 = US \$18.50, Dfl.24.00 = US \$11.00).

#### SPECIAL PUBLICATION NO.1 "PELAGIC SEDIMENTS"

This is now out. It can be ordered direct from Blackwell Scientific Publications, Osney Mead, Oxford, U.K. Price £8.00 (\$20.00). Price to members £5.50 (\$13.50). See it and you will appreciate its value. By helping the sale of this publication you help the Association. We have put up the capital for it. Return from it will be reinvested in future Special Publications.

# WORLD NEWS

## INDIA (from Supriya Sengupta)

The Indian sedimentologists were busy with a variety of problems in 1974. February '74 issue of the News Bulletin gives a list of the topics which were actively pursued during the year. Following is a summary of the additional information which has been received in course of the year.

### Calcutta University

Sedimentologists of Calcutta University, besides continuing the geomorphological and sedimentological investigations in the Teesta river valley in the Eastern Himalayas, are also conducting a special study of the Bhandar limestone belonging to the Proterozoic Vindhyan of the Central India. This includes a study of stromatolites and other life forms in the Precambrian.

### Indian Statistical Institute (ISI), Calcutta

ISI sedimentologists continued their studies on the Gondwana and Proterozoic sedimentary rocks of the Godavari valley in the Andhra Pradesh. The problem of origin of the Proterozoic microcrystalline rocks is being examined. The hydrodynamic implications of the primary current structures in the fine grained carbonate rocks are also being investigated. A study of the depositional environment of the Kota limestone (Lower Jurassic), believed to be of fresh water origin, is also underway.

The programme of study of the Recent fluvial sediments of the Usri river near Giridih, Bihar is continuing. This study has already yielded useful information on the mechanism of growth of the fluvial point bars and the direction of sediment transport in these bars.

A new technique for the analysis of "weight frequency data" (sieve data) has been developed in collaboration with the statisticians of the Institute. A paper on this technique was presented in the International Symposium on Statistics organised by the Institute in December.

### Jadavpur University

Besides continuing the investigation of the Proterozoic tidal deposits of the Madhya Pradesh and Rajasthan, the sedimentologists of the Jadavpur university have also undertaken a petrological study of the Banded Iron Formation of Keonjhar, Orissa.

A Ph.D. thesis has been completed on the sedimentology of the Nimar-Bagh-Lameta complex in the Nimar District, Madhya Pradesh.

### Lucknow University

Sedimentologists of Lucknow University are busy with a number of sedimentological problems:- (1) Modern river deposits of the Gangetic alluvium. (2) Depositional environments of the Vindhyan rocks (in the Son valley and Maihar). (3) Genesis of the glass sand deposits of Uttar Pradesh. (4) Sedimentological studies of the Siwaliks and a comparison with their modern analogue, the Gangetic alluvium. (5) Sedimentological and palaeoecological studies of the Tethyan sediments of the Himalayas.

### Mysore University

In the Department of Post-Graduate Studies and Research in Geology of the Mysore university, sedimentologists are studying the Late Precambrian Kaladgi and Badami groups of rocks. Lithostratigraphy, structure, palynology and sedimentology of these rocks are being studied in detail in several areas of the Belgaum and other districts of the Karnataka state.

Following are the abridged titles of the doctoral research programmes completed in this department: (1) Lithostratigraphy, sedimentation and structure of the Kaladgi group of rocks around Bagalkot, Karnataka state. (2) Early and Late Precambrian sedimentation around Bilgi, Bijapur district, Karnataka state. (3) Geology (with special reference to the Kaladgi groups) of the area around Lokapur and Kaladgi, Bijapur district, Karnataka state. (4) Geomorphology and lithostratigraphy of the Cuddapah groups around Mussukota area, Ananthapur district, Andhra Pradesh.

### Other News

The Geological, Mining and Metallurgical Society of India celebrated its Golden Jubilee in October, 1974. Two symposia were organised on this occasion: (1) Evolution of the orogenic belts of India. (2) Geological history of the platform areas of India. 26 out of the 59 papers which were presented in the two symposia dealt with sedimentological topics comprising the Precambrian, Gondwana and Tertiary sediments of India (including the Himalayan Siwaliks). A number of Indian universities, the Oil and Natural Gas Commission, the Geological Survey of India and other research institutes contributed papers to these symposia.

### UNITED KINGDOM (from John McManus)

In the United Kingdom sedimentology activities are channelled through the British Sedimentological Research Group, now affiliated to the Geological Society of London. Its recent annual meetings held in Oxford (1972) Aberystwyth (1973) and Cambridge (1974), have generally been attended by over 200 people, representing a great diversity of sedimentological interests for the membership embraces biologists, chemical and civil engineers, geographers and geologists. Studies from Universities, government research institutions, and industrial concerns include experimental and field work from an almost global range of areas and from a wide variety of sedimentological environments.

The financing of sedimentology is mainly from government funds either by the Natural Environment Research Council through the Institute of Geological Sciences and the Institute of Oceanographic Sciences, or by Universities receiving special research grants or studentships from Research Councils, or acting independently by means of University funds. Independently financed sedimentological organisations such as the Robertson Research Group, Illing & Partners or other consultants are largely commercial enterprises. Exploration of the North Sea has led to many industrial hydrocarbon oriented sedimentologists operating within U.K. for various oil companies. With perhaps over 3000 sedimentologists working in U.K. such a review cannot refer to all the work in hand.

### Sedimentology in the Scientific Civil Service

(i) The Institute of Geological Sciences maintains two Continental Shelf Units whose remit is principally to produce inventory maps of superficial sediments and subsurface geology in British waters. They also collate hydrocarbon data from offshore drilling programmes. On land the I.G.S. maintains a staff of over 100 geologists many of whom are responsible for areas of sedimentary rocks. Data processing, and storage and retrieval of information feature amongst several centralised operations.

(ii)(a) The Institute of Oceanographic Sciences (Taunton Group) concerns itself primarily with process, with study groups working around coasts of England on sand wave motion, sediment dynamics and budget in specific bays and sea areas and the properties and behaviour of fluid muds.

(b) The Wormley Group of I.O.S. undertakes inventory mapping of sediment type and bed forms, studies sediment transport paths, the evolution of the Continental Shelf, slope and submarine canyons, and also sedimentary geochemistry including diagenesis. It has a general remit to examine the processes of deeper marine waters.

Both IOS and IGS groups have access to advanced instrumentation and major research vessel time allowance, and as such dominate marine sediment work in U.K. Nevertheless University based workers have made substantial contributions with allocated ship time, and large areas of the S.W. Approaches, the English Channel, the Celtic Sea and Bristol Channel have been mapped and are still the subject of process studies from Universities such as Bristol, Aberystwyth, Swansea, Bath, U.C. London. Other marine areas are studied from U.C. Swansea & I.C. London (Med'n) U.C. Wales (Bangor) and U. of Leeds (Atlantic Ocean).

(iii) The Hydraulics Research Station (Wallingford) is at the forefront of studies in applied sedimentology, being especially active in near-shore, estuarine and fluvial sediments and fundamental studies such as in sediment transport phenomena, rates of migration, numerical modelling of sedimentation etc.

(iv) Within the Universities the diversity of activity is greater. With the exceptions of tidal flat studies in the Wash from Imperial College and the investigations of Swansea Bay and the coasts of Aberystwyth, few inshore marine programmes are in hand. Beach texture and

cliffline recession problems are studied at East Anglia, Glasgow, Leicester & Nottingham, with some drift rate determination from Aberdeen & Dundee.

Modern estuaries are studied at Dundee, Aberystwyth, Bristol, East Anglia, Exeter, Lancaster, Sheffield, St. Andrews, Queen Mary College London and Kingston & City Polytechnics. Belfast deals with the sediments of ancient indented estuaries.

The deltaic environments, both modern and ancient, feature highly at Keele where Collinson has led expeditions to the Tana River delta of Norway. Ancient deltaic sequences are studied at Swansea, Keele, Lancaster, Oxford and Reading.

Ancient shallow marine clastic sediments are studied at Derby College, Reading and Oxford and deeper marine 'flysch' formations at Cambridge, Manchester, Edinburgh and Oxford.

Modern process studies of fluvial environments are in hand at Cambridge, East Anglia, Glasgow and Keele, with Belfast, Dundee, Lancaster & Leeds, also active in rivers. Ancient fluvial deposits are being studied at most of these centres and at Bristol, Swansea, Oxford and Reading.

Studies of carbonate sediments are carried out at Liverpool, where Bathurst convenes periodic meetings. At Dundee, Nottingham, Reading, Cambridge, St. Andrews Imperial College, Kings College London, Oxford, Edinburgh and Kingston Polytechnic, shallow water carbonates are being studied. Carbonate pelagics are researched at Cardiff, Cambridge and Durham. Although most carbonates investigated are of tropical origin the temperate varieties are being examined at Aberystwyth and Edinburgh. Mesozoic carbonate palaeofacies studies are undertaken at Oxford (largely palaeoecological), the Open University, Leicester and at Kings College, London where they are largely petrographic. The Sebkah evaporite relationships continue to be studied at Imperial College although the localities and types of evaporite formation have varied.

East Anglia is perhaps the best known centre of modern glacial sedimentology in U.K. but work in this field is also carried out at Aberystwyth, Birmingham, Cambridge, Glasgow, Keele, Lancaster and Oxford, the latter considering ancient glacial deposits.

Volcanic sediments both modern and ancient are studied mainly at Imperial College, other workers being active at Dundee, Keele, Kingston Polytechnic. Some of these studies are largely statistical, dealing with grain size characteristics. Although size distributions are used by most workers statistical research as such is featured at relatively few universities, Aberystwyth, Cambridge, East Anglia, Dundee and Reading among their numbers. The use of computers is ubiquitous and numerical modelling is known to be in hand at Belfast, East Anglia, St. Andrews and Swansea.

Applied sedimentology of rivers is particularly strong at Lancaster

& Dundee where sediment yield from various catchments is studied, Harbour siltation studies are in hand at Aberystwyth, Dundee and Sheffield, and the sedimentary aspects of soil mechanics feature at Bristol, East Anglia & Strathclyde. These investigations are frequently fundamental process studies. Important work in the realm of fine sediments are carried out by Williams (Swansea), McCave (East Anglia) and Buller (Dundee). The ancient counterparts are studied extensively at Aberdeen, Cambridge & Southampton.

The dynamics of particle entrainment and motion, for long the field of Allen (Reading) and Francis (Imperial College) are studied in flumes at many places, but are subjects of field investigations at Bristol and Dundee. Fluvial process studies are of major importance in the research effort at Cambridge.

Sedimentary geochemistry, important at Manchester & Newcastle is also carried out at East Anglia, Edinburgh, Imperial College and St. Andrews.

Virtually every university department of geology includes in its programmes studies of ancient sediments of local interest, but many, such as Cambridge, Cardiff, Imperial College, Leicester, Oxford and Swansea have much more broadly based research groups, with interests from localities on every continent. A plethora of palaeographical environments is represented.

The 1974 B.S.R.G. meeting at Cambridge reflected an upsurge in interest from oil geologists. Papers covered a range of interest, including aspects of North Sea sediments, but there was a decline in the number of contributions in the fields of carbonate studies, following the general trend of recent years.

Special meetings on River Processes, and the Sediments of the Pennine Basin have been organised by B.S.R.G. and on "Nearshore sediment dynamics and sedimentation" by the British Geomorphological Research Group. A course on sediment transport in open channels was held at the University of Aston early in 1974.

#### VENEZUELA (from N.G. Muñoz J.)

The Department of Geology of Universidad Central has begun a graduate program in sedimentology toward the degree of Magister Scientiarum (M.Sc.) in Sedimentary Geology. The program is coordinated by Dr. Nicolás Gerardo Muñoz J. and is offered together with the program toward the M.Sc. in Petroleum Geology. For the special conditions of Venezuela, these programs have a dual character: the lecture periods are given, either normally during 16 weeks or as intensive courses. The latter permits registration of geologists that work outside Caracas, and also allows visiting professors to be hired for short periods.

During the last trimester of 1973, Dr. Arnold H. Bouma initiated the graduate program, as visiting Professor. Up to the end of 1974 the following lecturers have participated: Dr. A.H. Bouma, Dr. Claus H. Graf, Dr. Virgil Winkler, Dr. C. González de Juana, Mr. Gustavo Machado (Eng.), Mr.

L. Albano (Geol.), and Mr. G. Adams (Geol.). Dr. Wolfgang Sherer has given his course on Advanced Statistical Geology. For the first semester of 1975 Dr. A.N. Segovia will be visiting professor and Dr. N.G. Muñoz J. will lecture on Sedimentary Petrology.

As part of the graduate sedimentary activities of Universidad Central, an interesting air-coastal sedimentary trip was made over the Orinoco Delta Complex on a special plane of the Venezuelan Air Force.

During the 11 Latinamerican Geological Congress a special group, mainly of French geologists and sedimentologists, asked to be guided to the southern part of the Isla de Margarita (Venezuela) to see outcrops of the Eocene flysch basin and to collect foraminiferal samples. This trip was guided by Dr. N.G. Muñoz J. who worked on the petrology and sedimentary geology of this flysch for his Ph.D. thesis.

# FUTURE MEETINGS

4-29 August 1975

St. George's West, Bermuda

## Environments of Carbonate Deposition. Summer Seminar

An intensive study of production, deposition and diagenesis of carbonate sediments. Field trips, labs., lectures. Instructors:- Drs. C. Gebelein, P. Garrett. Partial fellowships available. Details from:- Bermuda Biological Station, St. George, Bermuda 1-15.

18-24 October 1975

Miami Beach, U.S.A.

## Carbonate Facies, Field Seminar

Comparative introduction to major facies of shallow water carbonates, environments of deposition, floras and faunas, criteria for recognition, geometry and early diagenesis. Comparison of recent and ancient examples of major carbonate facies (reefs, banks, bio herms and deposits of lagoonal mud, marine sand bars and associated facies) and consideration of porosity evolution in sedimentary carbonates. Instructors:- Robert M. Ginsburg and Wolfgang Schlanger. Fees \$800 + expenses \$500. Details from Comparative Sedimentological Laboratory, University of Miami, Fisher Island Station, Miami Beach, Florida 33139.

15-31 July 1975

Curitiba, Brazil

## International Symposium on the Quaternary

Details from Prof. J.J. Bigarella, Caixa Postal 5087, 80000 Curitiba.

16-23 July 1975

Mexico City, Mexico

## International Clay Conference

Details from Dr. L. de Pablo, Instituto de Geología, Aptdo 70296, Mexico 20 D.F.

30 Aug.-3 September 1975

Moscow, U.S.S.R.

## 8th Int. Congress on Carboniferous Stratigraphy and Geology

Details from Dr. S.V. Meyen, Geological Institute, Academy of Science, Pyzhevsky per 7. 109017, Moscow-17.

H.G. Reading  
(Acting General Secretary)

# PELAGIC SEDIMENTS ON LAND AND UNDER THE SEA

I.A.S. SPECIAL PUBLICATION NO.1

Edited by

Kenneth J. Hsu & Hugh C. Jenkyns

Proceedings of Symposium held in Zürich September 1973

This volume presents current views on the genesis and diagenesis of Recent and ancient pelagic sediments. Topics dealt with include undeformed shelf-sea chalks, pelagic rocks from fold-mountain belts including oceanic (ophiolitic) and associated continental margin assemblages, and sediments cored by the Deep Sea Drilling Project. Wherever possible Recent analogues have been invoked for interpretation of ancient pelagic deposits. This volume will be of interest to geochemists, oceanographers, palaeontologists, sedimentologists and stratigraphers.

1974. 448 pages, 200 illustrations. Paper, £8.00 (\$20.00) post free

Members of the International Association of Sedimentologists can obtain copies of these proceedings at the special price of £5.50 (\$13.50) post free.

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# INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS

The Association exists to promote the study of sedimentology and the interchange of research, particularly where international co-operation is desirable. Members of the Association (a) receive the journal SEDIMENTOLOGY, published 4 times a year, and are entitled to all issues of the year in which they subscribe, (b) receive Newsletters informing them of the past and future sedimentological activities throughout the world, (c) are entitled to reductions of fees at meetings sponsored by the Association. In addition to an International Sedimentological Congress once every 4 years, the Association sponsors smaller meetings designed to encourage the attendance of members from neighbouring countries.

Persons wishing to become members should complete the form below and send it direct to the Treasurer of the Association together with their subscription.

Payments of subscriptions should be made to the Treasurer of the I.A.S., Dr. S.D. Nio, Geological Institute, Garenmarkt 18, Leiden, The Netherlands. The account number is No. 45.10.60.555 (Postal Transfer No. 9200) at AMRO BANK N.V., Leiden, The Netherlands.

The subscription is D.fl. 40.00 (U.S. \$18.50). For those under 26 years of age the subscription is D.fl. 24.00 (U.S. \$11.00).

Please state name with payment.

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Qualifications \_\_\_\_\_

Date of Birth \_\_\_\_\_ (If under 26 on 1st January of year for  
which membership is desired)

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