

INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS

NEWSLETTER

Nº 44 - JUNE 1979

ASSOCIATION NEWS

AUSTRALIA (from P. Davies)

I received a long report from Peter about the sedimentological activities (researches in progress and preliminary results) at the Australian Bureau of Mineral Resources. Due to the lack of space and to the fact that I want to publish this very interesting report in extenso, it will appear in the August Newsletter.

TURKEY (from D. Leflef)

In recent years the interest in Sedimentology and Sedimentological Research activities has increased rapidly in Turkey. In this letter I will report only the activities of the Geological Department of M.T.A.

(Mineral Research and Exploration Institute of Turkey).

The activities of other Departments of M.T.A., the other Institutes and Universities, so far I can get information from these foundations, will be reported in forthcoming issues of this Newsletter.

1. OBJECTIVES OF THE SEDIMENTOLOGICAL RESEARCH GROUP OF THE GEOLOGICAL DE-

PARTMENT OF M.T.A.

We set up in 1975 a Sedimentological Research Group in the above mentioned department with the aim to study different sedimentary environments in Turkey and spread the knowledge of Sedimentology. We wanted to attract the interest of other Earth Scientists in Sedimentology, and see whether they would give more emphasis to sedimentology in their own research or would actively participate into one of the Sedimentological Projects.

That was what now actually happened. The number of our co-workers increased from 1975 to 1979 with fresh-blood from Universities from 4 to 15, and also the members of I.A.S. in Turkey from 1975 to 1978 from 4 to 16.

Some of our co-workers are now able to set up their own sedimentological projects. We are also involved in many national and international projects. The Turkish Geologist in the field is not more only interested in map-work, but also he wants to know about the sedimentological aspects of the basins. We did consulting work for other departments of M.T.A. and helped and gave advice to some Ph. D. and Master Students from some Universities in Turkey and abroad, who have field-work in Turkey. We also give lectures and arrange seminars in the field of Sedimentology in M.T.A. and in some Universities.

2. PROJECTS CARRIED OUT IN OUR RESEARCH GROUP

(1) The Continental Sedimentation and Paleogeography of the Miocene Basin in Usak Region, Western Anatolia, Turkey.

This area was a good starting point for our researches, because it exposed very good sections, in lateral and vertical sense, beginning with alluvial fan deposits and ending in deltaic ones. In-between we could see fluvial deposits (with channel deposits both braided and meandering, low-sinuosity types) together with flood-plain, and flood-plain lakes, lake and lake-shore deposits.

Our Research Group was well-trained during the studying of the above mentioned environments of this Miocene Basin, especially to distinguish the different types of primary sedimentary structures.

The results of this project were given as a paper in the last I.A.S. Congress, which was held in Jerusalem/ISRAEL.

(2) The Continental and Marine Tertiary Basins of Southern Aegean Area of Turkey.

After we found out the depositional characteristics of the Conti-

mental Miocene Basins, we were more interested in their transitional and marine counterparts. Therefore we shifted our project area to the South.

Here we found a different type of basin development in a different time-epoch. The Upper Oligocene contains continental deposits followed in Aquitanian times by marine incursions. We have accordingly here a sequence of continental, coastal plain and marine deposits. During the Late Aquitanian the area was tectonically tilted and then again invaded, in Burdigalian times, by a marine transgression, which persisted until Helvetian times. The sediments we encountered here are continental and shallow-marine (reef-building).

The upper Miocene and Pliocene show different types of continental deposits, which also contains macro-mammal fauna. The research in this area still continues.

(3) IGCP/Unesco Project Nr. 25 "Stratigraphic Correlation of Tethys-Paerethys Neogene".

We are involved in this project, of which I am the National Representative since 1976.

We compiled for this project (as a first step) the stratigraphic sections of the Neogene Basins in Turkey from previous works done in Turkey.

But the data so collected were insufficient. Therefore we are also trying to contribute to this project with our research work in the Neogene Basins, and will present some of our results in the next "VIIIth International Congress on Mediterranean Neogene" which will be held in Athens/GREECE, between 27th September and 2nd October 1979.

(4) The Marine and Continental Tertiary Basins of the Malatya Region, Eastern Anatolia, Turkey.

One of our Research-Group members, Y. HAKYEMEZ who was trained in the projects Nr. 1 and Nr. 2, set-up a new project with a micropaleontologist, S. ÖZGEN from our Geological Department, to study the sedimentology, biostratigraphy and paleogeography of the Eocene, Oligocene and Early Miocene shallow marine deposits as well as the Paleocene and Pliocene continental sediments of the Malatya Region, Eastern Anatolia.

The shallow marine sediments consist of beach, nearshore, shoreface, transition zone and shelf environments; there also are reefs, longshore bars and channels in these environments.

The continental sediments consist of alluvial fans, braided and meandering rivers, and lacustrine environments.

(5) The Depositional Environments of Pleistocene and Recent Clastic sediments in the Malatya Region, Eastern Anatolia, Turkey.

In recent years sedimentological research has also been directed to the study of Pleistocene and Recent sediments and the sedimentary aspects of Quaternary landforms. Research in this field is largely aimed at evaluating paleogeography, paleoclimatology and neo-tectonism. It has been undertaken by our Research-Group member M. KARABIYIKOĞLU; his

studies are mainly concentrated on clastic sediments with particular emphasis on the interpretation of sedimentary structures, textural parameters and paleocurrent patterns in terms of process-response models and statistical analyses. At present, he is working on a project concerning the depositional environments of the Pleistocene and Recent clastic sediments of the Malatya Region, Eastern Turkey.

(6) IGCP/Unesco Project Nr. 96 "Messinian Correlation Programme".

M. KARABIYIKOGLU has also been taking an active part in the IGCP's Messinian Correlation Programme and has presented a paper on this subject entitled "Depositional Environments of Upper Miocene/Pliocene Deposits of the Gelibolu Peninsula, the Dardanelles, Turkey" in the 4th International Meeting of the Messinian Correlation, held in Rome in October 1978.

3. CONGRESSES AND FIELD EXCURSIONS

(1) Overseas Excursion of the Xth International Congress on Sedimentology, which was held in Turkey.

One of the Post-Congress Excursions, namely the Z-1 Overseas Excursion of the Xth International Congress on Sedimentology was held between 22nd and 26th of July in Turkey. This excursion brought geo-scientists to the "Mesozoic and Cenozoic Deep Marine Sediments in the Central Anatolian Basin".

The first trip was held in the Mesozoic-Cenozoic Sediments (mainly Olistostromes, Turbidites and Ophiolitic Melange), east of Ankara (Kırıkkale Area), under the leadership of T. NORMAN from the Middle East Technical University, Ankara.

The second trip was held in the Sungurlu Area (Cankiri-Corum Basin). The marine and continental sediments, ranging in age from Lower Eocene to Pliocene were discussed by M. SENALP from M.T.A.

The third excursion, conducted by S.L. GOKCEN from Hacettepe University, Ankara, concerned the south of Haymana, SW-Ankara. Here mainly Upper Cretaceous and Lower Tertiary resedimented deposits and different types of turbidites were demonstrated.

According to the attending scientists, these trips were highly interesting and it was unfortunate that not too many people participated. It was suggested also that a paper be published about these areas.

(2) XXXVIth Congress and Plenary Assembly of I.C.S.E.M., November 24th-December 2nd 1978 - Antalya.

The 36th Congress and Plenary Assembly of the International Commission of Scientific Exploration of the Mediterranean was held in Antalya from November 24th to December 2nd 1978.

About 70 papers on Marine Geology and Geophysics were presented. The papers can be classified according to their subjects as follows :

- Back-arc basins with contributions on relations between Aegean and Anatolian Geology.
- Special Session on the use of submersibles and other techniques for sea floor investigations.

- Active margins, ophiolites and structure of the Eastern Mediterranean.
- Neogene Paleo-oceanography and Sedimentology.
- Geology of Antalya and Adana Regions.

The papers submitted during the meetings will be published as a report. The XXXVIII Congress will be held in Monaco in 1980.

(3) XXXIIIth Congress of T.J.K. (Geological Society of Turkey) was held between 5th and 9th of March 1979 in Ankara.

At about 1 400 geo-scientists attended this Congress. Sedimentology was represented with the following papers :

- Sedimentary characteristics and paleogeographical interpretation of the Mudurnu-Göynük Basin in Jura and post Jurassic times (S. SANER)
- The Stratigraphy, Sedimentological Characteristics and Geology of Flysch assemblages South of Bornova, Izmir (F. YAGMURLU)
- The Sedimentary Melange (Olistostromes) of Sile (F. BAYKAL + M. ONALAN)
- The Sedimentology of Karaisali Limestones (Miocene) (N. GÖRÖR)
- Primary Sedimentary Structures found in different parts and formations of Turkey, and their Interpretation (O. LEFLEF)
- The Sedimentological Investigation of Neogene Evaporites in the Cankiri-Corum Basin (O.N. ERGUN)
- The interpretation of sedimentary environments of the Oligocene deposits in the area of Kesan and Marmara Ereglisi and its importance in determining the genesis of lignites (M. SENOL).

FUTURE MEETINGS

March 1980

GERMANY (Bochum)

First European Meeting of the International Association of Sedimentologists.

March 26th - 29th, 1980
Bochum (F.G.R.), Ruhr-Universität

The need for a more informal European meeting of the I.A.S. results from the holding of the I.A.S. Congress in Israel in 1978 and in Canada in 1982, places which many people found to be too faraway.

Above all, we would like to invite young scientists to present their work in progress and to participate in discussions with people from other countries working on similar problems. We will try to minimize the local costs. In order to maintain the informal atmosphere, we will have no official gatherings but plenty of time for personal discussions.

We are planning to have two parallel sessions with only 15 minutes talks plus 10 minutes of discussion, but we hope to keep the number of oral presentations below 100. Instead, we will solicit poster presentations and ad-hoc workshops, for which most of the afternoon should be reserved. In order to give as many scientists as possible the chance to present their work, each person should contribute only one single-author paper or maximum two co-author papers. There will be no invited papers nor official fieldtrips.

Please submit a short abstract or poster notice indicating your main results before 31.8.1979 (definite deadline !). We will then arrange the program and ask you individually to submit, if wanted, a longer summary (2-3 pages, including small drawings but no photographs and a few references) before 31.12.1979.

These summaries or the abstracts will be published in a special I.A.S. abstract series. We will not rewrite them but use them as they are for offset or xerox. This abstract-book will be sent out to the participants by the end of February in order to enable them to see the summaries before the meeting. We will try to make this a valuable publication of sedimentology by including authors and subject indexes. The language used at the meeting and in the abstract-book will be English.

The program and time table of the meeting will be included in the October I.A.S. Newsletter, together with a registration and lodging form. The registration of participants should be sent before 31.12.1979 (at the latest !) to :

Prof. Dr. H. Föchtbauer
Ruhr-Universität Bochum
Institut für Geologie
Universitätsstrasse 150
Postfach 10 21 48
4630 Bochum 1 (Germany)

It should be accompanied by a cheque of DM 40,- which includes registration fees and the abstract-book. Only registered participants will receive the abstract-book. It will, however, be possible for non-participants to buy this volume from the treasurer after the meeting.

July 1980

FRANCE (Paris)

26th International Geological Congress

Sessions of the International Geological Congress have been held every four years since 1878. The 26th session will celebrate the Centenary of this organization convened under the auspices of the International Union of Geological Sciences.

Organization Committee : Chairman : Jean AUBOUIN
Secretary General : Paul SANGNIER

Timetable : - 26 June to 5 July - Pre-congress scientific excursions
- 7 to 17 July - The Congress will meet at the Palais
des Congrès at Porte Maillot
- 18 to 27 July - Post-Congress scientific excursions

Scientific Program

1) Opening Scientific Meeting : Leading specialists will survey five main themes concerning the current state of scientific progress.

2) Sections : The proposed program covers almost the entire field of the Earth Sciences and is divided into 20 sections. The Organization Committee has also planned to have the work of the various international scientific organizations affiliated with the International Union of Geological Sciences integrated into the program of the Congress. Authors are free to choose their own subjects for communications and these should be sent to the Secretary General before 1 October 1979 for the publication of abstracts.

3) Colloquia : The program for the colloquia was chosen so as to illustrate the main themes of current scientific and economic interest. There will be seven in all and they will be chaired by leading scientific figures. Communications to the Colloquia are made by invitation only.

Excursions

The Organization Committee in association with the National Committees for Geology of 18 European countries has organized an attractive program of geological excursions. The chosen themes make it possible to offer Congress participants a survey of all aspects of the geology of Western Europe. 85 different excursions each lasting for 9 days are planned from 26 JUNE to 6 JULY 1980 or from 19 JULY to 26 JULY 1980. Since only a limited number of persons can participate in the excursions the places will be reserved by the Organizing Committee in October 1979 in the order in which the reservation forms were received.

Exhibition

An exhibition to be called "GEOEXPO 80" will be held in the same premises as the Congress from 7 to 11 July 1980. It will be open to all international institutions and will make it possible for exchanges of ideas and contacts to take place with scientists from all over the world.

Stats of Advancement of Congress Preparation

80,000 copies of the first circular were sent out in October 1977. By 1 December 1978 the Organization Committee had received 5,800 answers from 114 different countries and 4,000 persons had asked to take part in the excursions. The second circular is now available and contains the final registration form.

Those interested in participating in the Congress and wishing to receive the second circular should request it from the :

Secrétariat Général du 26ème Congrès Géologique International
Maison de la Géologie
77-79, rue Claude Bernard
75005 PARIS - FRANCE

March-April 1981

ISRAEL (Jerusalem)

International Conference on Aridic Soils - Properties, Genesis and Managements.

Aridic soils cover one third of the land surface. The lack of adequate data on their properties and distribution has frequently resulted in deceptive notions on the nature of soil resources in arid lands. Desert weathering and soil formation are no less complex than in other zones and merit a detailed scientific examination of all their aspects.

The soil is and will remain the main resource of arid lands, now providing the livelihood for some fifteen percent of the world's population. To devise a sound management and land use practice, one needs to know the properties and to understand the distribution pattern of the soils.

Interest in aridic soils and information about them is growing at present. An international conference on Aridic Soils is thus a timely meeting place for the exchange of information and ideas on the subject.

The Conference will comprise sessions of contributed papers, introduced by invited speakers. Poster sessions will also be held. During a five day field excursion we shall be able to examine the most important aridic soils of Judea and the Negev deserts and to see the recent management and land use as practiced and developed in these areas. Specific interest groups will also be able to hold meetings during and after the Conference. Tours to visit holy sites and places of archaeological and biblical interest will be offered as well.

Papers and posters are invited on all aspects of aridic soils, with particular attention to the following topics :

1. Translocations and transformations in aridic soils; gypcrete and calcrete forming processes; moisture regime as controlling factor in soil developments; biogeochemistry of aridic soils; biological cycles in arid ecosystems.
2. Weathering processes in hot and cold deserts; desert pavement and patterned grounds; desert varnish phenomena; soil structure and strength of aridic soils.

3. Soil properties and distribution in relation to desert landforms; spatial variations in runoff and erosion; persistence and erodibility of desert surfaces; paleosols in deserts.
4. Classification and evaluation of soil resources in arid regions; management of calcareous and gypsiferous soils; responses of aridic soils to management; possibilities of non-irrigated agriculture.

Participants wishing to present a paper related to one of the topics are requested to indicate the approximate title on the Provisional Registration Form. The deadline for ABSTRACTS and guidelines for the format of both oral and poster communications will be announced in the Second Circular, in Summer 1980.

Mail and requests for registration forms should be addressed to :

International Conference on Aridic Soils - Properties, Genesis
and Management
P.O. Box 3054
122 Hayarkon Street
Tel Aviv - Israel

Cl. MONTY,
General Secretary