# INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS

Nov 1974 No. 20

# **NEWS LETTER**

# ASSOCIATION NEWS

#### FINANCIAL POSITION

1973 was the first year with our new publisher and changed system of financing the Association. A comparison of 1972 with 1973 shows that the annual profit of the Association roughly doubled, although the profit is exaggerated because the Elsevier Royalties, which were generally paid rather late, have extended into 1973. The true position is that our profits have increased by about 50%. This was achieved in spite of a 2/3rd reduction in the subscription for ordinary members and the introduction of Junior membership at 1/3rd the old cost. In addition, the Royalties obtained from the Publisher are reduced from about f.14.000 (20% of net profit on a sale of about 1500 copies) to f.8.000 (25% of net profit on a sale of about 2000 copies).

The improvement was achieved partly by an increase in membership which brings in about f.3,000 more than the combined membership dues and subscriptions in 1972. It is mainly due to the low cost, to us, of the journal which cost the Association only f.8000 for nearly double the number of copies instead of f.17.000 to f.20,000 under the old arrangement.

# **SEDIM NICE 75**

## Financial Support

The Association has some funds to assist Junior Members, under 26 years of age who are bona fide students, to attend the Congress at Nice. The funds will be distributed according to need and the numbers who apply.

 ${\tt IUGS}$  has made a grant to the Association to help the attendance of members from the Third World.

Applications are invited for assistance. They should state the cost of attendance at the Congress, including field excursions, and also the amount of support already obtained. Applications should be sent to the Treasurer to arrive by 1st June 1975. Decisions on the amount for each individual will be made by Council during the Congress.

It should be pointed out that in neither case are the funds substantial. While no promise can be made until we know how many apply, the student fund might be able to make grants up to the US \$25.00 and the INGS up to US \$200.00.

## Third Circular

It is expected that this will be ready during December but, owing to the postal strike in France, despatch may be delayed.

#### THEME 7

#### PROGRESS IN THE KNOWLEDGE OF DIAGENESIS

Directors: H. Füchtbauer. Geol. Institut Ruhr-Universität 463e Bochum Universitätsstr. 150

> B. Tissot. Inst. Français du Pétrole B.P. 18 F-92502 Rueil Malmaison France

Though the final subdivision of the theme will depend on the received papers, we suggest the following preliminary subdivision:

1. Diagenesis of clastic sediments

 Diagenesis of carbonate sediments
 Diagenesis of evaporites and siliceous sediments
 Diagenesis of organic matter
 Scales of diagenesis and their comparison (e.g. clay minerals, authigenic silicates, fluorescence, reflectance of organic matter, preservation of spores and pollens, etc.)

The titles together with a short explanation of the intended paper (about 2 sentences) should be sent as soon as possible.

The abstract should be sent immediately in order to enable a decision on the acceptance of the paper to be made.

The full manuscript (in duplicate; up to 6 pages plus figures) must arrive prior to December, 1, 1974.

We want to encourage workers in the field of diagenesis to cooperate with us by sending us their suggestions or by announcing a talk. Material dealing with organic matter should be sent to B. Tissot, the rest to H. Füchtbauer.

# WORLD NEWS

#### AUSTRALIA (from J.G. Byrnes)

In 1975 heavy mineral mining of high dune areas is expected to be underway in two areas of the eastern Australian coast. In both of these high parabolic dunes reach several hundred feet elevation and extend a few miles from the shoreline. Concurrent mining of dunes and source strands is likely. Thus, roughly complementary suites of littoral versus aeolian quartz and heavy minerals should be available. Persons interested in the possibility of obtaining samples may obtain details from John G. Byrnes, Geological and Mining Museum, 36 George Street, Sydney N.S.W. 2000.

## GERMANY (from Hans Füchtbauer)

The following papers were presented at the annual meeting of the Geologische Vereinigung on "Continental Sediments" held at Bochum from 28th February to 2nd March 1974:-

#### Fluvial Sediments

T.R. WALKER (Boulder, Colorado) "Diagenesis in first-cycle non-marine arkoses". H. FÖRSTER (Aachen), A. HAGEDORN, J. HAARS (Würzburg) "Cretaceous continental sediments and their diagensis in the Shirkuh-Massiv, Central Iran". E. BACKHAUS (Darmstadt) "Limnic and fluvial Sedimentation in the Triassic Buntsandstein, S.W. Germany." D. HEIM (Mainz), R. LEGGEWIE, R. EL-NAJJAR, H. FÜCHTBAUER (Bochum) "Grain size distribution" and primary Components in the Triassic Buntsandstein". K. SCHWAB, A. SCHÄFER (Mainz) "Tectonics and continental Sedimentation in the middle section of the Rio Toro, Eastern Cordillera, N.W. Argentina! H. FALKE (Mainz) "Differences in Sedimentation between Autunian and Saxonian (Lower Permian), Middle and Western Europe". K. BRENNER (Stuttgart) "Paläogeography and origin of the Middle Keuper (Upper Triassic) S. Germany". A. LEJAL-NICOL (Paris), H. KALLENBACH, R. GLAESER, J. ZÖLLER (Berlin) "Sedimentology and Flora of postcarboniferous formations in the Central Sahara" S.M. CASSHYAP (Bochum) "Cyclic characteristics and lithofacies analysis of coal-bearing sediments in the Bochumer formation (Westfal A 2), Ruhr-Gebiet, Germany: K. HOFFMANN (Langenberg) "Investigation of the Morondava delta (Malegasy)" K.W. TIETZE (Marburg) "Sedimentology and Geomorphology of the lower Mississippi River during the 1973 flood" H. IBBEKEN (Berlin), J. RUMOHR (Gottingen) "Modern fluvial Sediments of the S.E. Calabrian "flumare" eroded from the Calabrian Massif and deposited in the Ionian Sea, S. of Italy". M.J. MÜLLER, J.F.W. NEGENDANK (Trier-Kaiserslautern) "Opaque heavy minerals in Terraces of the Mosel and Tributaries" G.H. EISBACHER (Vancouver, Canada) "The Molasse facies of the Canadian Cordillera". M. NADJI (Tehran, Iran) "Continental Sediments of Iranian basins". P.J. BUREK (Tubingen) "Magneto-Stratigraphy: Correlation of clastic Sediments"

J. BRUUN-PETERSEN (Copenhagen), R. FUGLEWICZ (Warsaw), W.E. KRUMBEIN (Heligoland), T.M. PERYT (Warsaw) "Stromatolites, Ripple-marks and desiccation cracks as environment indicators in the main basin of the Buntsandstein (Lower Triassic)" W.E. KRUMBEIN, (Heligoland), Y. COHEN (Israel) "Relations between biogene, clastic, and evaporitic Sedimentation in a mesothermal monomictic lake (Sina)". H.E. REINECK (Wilhelmshaven) "Sand layers in mud Sediments of the deeper part of the lake Constance". A. LAMBERT (Zürich, Schweiz) "The influence of bottom currents on the transport of Timnic sediments". K. KELTS (Zürich, Schweiz) "Holocene sediments and magnetic stratigraphy from Lake Zug and Lake Zurich, Switzerland". H. GREINER (Fredericton, Canada) "The Albert Formation of New Brunswick, Canada: a Paleozoic model for lacustrine environments. K.R.G. STAPF (Mainz) "Microfacies and Geochemistry of Carbonate rocks, Lower Permian "Rotliegendes", Saar-Nahe Basin (S.W. Germany)". D. MEISCHNER, J. PAUL (Göttingen) "Sedimentological analysis of Pliocene lake of Willershausen (W. of the Hartz Mts)". M. WOLFF (Bochum) "Limnic limestones and dolomites in the Nördlinger Ries basin and the Steinheim basin (S. Germany)".

#### Aolian Sediments

M. SARNTHEIN (Kiel) "Transport of dune sand at the edge of the Sahara".

#### Pyroclastic Sediments

V. LORENZ (Mainz) "The pyroclastic sediments of the Permian Saar-Nahe basin. H.U. SCHMINCKE, (Bochum) "Pyroclastic sediments". W. MEYER, J. STETS, P. WURSTER (Bonn) "Depositional fabrics in the tuffs of the Laacher Sea".

## Solls, crusts, and diagenesis

J. LIETZ (Köln) "Partial lithification of Pliocene fans, Gran Canaria (Canary Islands)". D. ORTLAM (Hannover) "Composition and significance of fossil soil horizons, Permian and Triassic (Germany)". H. KULKE (Bochum) "Carbonate and sulphate crusts in Central Algeria". D.K. RICHTER (Bochum) "Terrestrical formation of Mg-Calcite and Dolomite in dolomitic rocks". H. FÜCHTBAUER (Bochum) "On diagenesis of non-marine sandstones". D.K. RICHTER, U. ZINKERNAGEL (Bochum) "Cathodoluminescence investigations of Permotriassic sedimentary rocks, Central Alps".

Most of these contributions will be published in a forthcoming issue of Geologische Rundschau (63,3) in German or in English.

#### MOÇAMBIQUE

An Earth Sciences Department has now been established in the Instituto de Investigação de Mocambique. The department has 3 divisions: (1) a Laboratory Division comprising a sedimentological laboratory, a chemical laboratory and one for thin section preparation, (2) Geomorphological and Cartographical Division comprising a fluvial geomorphological and hydrology section, a littoral geomorphological division and Oceanography, (3) Geochemistry Division.

#### MOCAMBIQUE (continued)

Research projects in progress are (1) Sedimentology and evolution of the littoral south of the Save (2) inventory of the potentials of nonmetallic primary materials in the Lourenço Marques district (3) Sedimentology and hydrodynamics of the Espirito Santo estuary and the Lourenço Marques Bay (4) geomorphology and fluvial dynamics of the Umbeluži River basin.

The staff are Professor Dr. G. Soares de Carvalho (Head of Department), Dr. A. Freitas Tavares (Assistant), Dr. A. Casel Moura ((Assistant) and Dr. Maria Eugénia S.A. Moreira Lopes (Assistant in Geography at the Lourenço Marques University).

#### NEW ZEALAND (from P. Ballance)

#### CURRENT RESEARCH

#### Key to Institutions:

- Department of Geology, University of Auckland.
- (2)

- Department of Earth Sciences, University of Walkato, Hamilton.

  Geological Survey, P.O. Box 30368, Lower Hutt.

  Department of Geology, Victoria University of Wellington.
- N.Z. Oceanographic Institute, D.S.I.R., P.O. Box 8009, Wellington. Department of Geology, University of Canterbury, Christchurch.
- Department of Geography, University of Canterbury, Christchurch.
- (9) Geological Survey, Sedimentation Laboratory, c/o University Post
- Office, Ilam, Christchurch. (10) Department of Geology, University of Otago, Dunedin.

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#### Recent sediments

- (a) Studies of lake sediments, particularly beach dynamics in fluctuating hydro-electric storage lakes; P.B. Andrews (9), R.A. Pickrill (8), J. Irwin (6).
- (3), M.R. Gregory (1). The South-eastern South Island; R.M. Carter et al., (10).
- (c) Beach and shore line processes on exposed coasts, dynamics and sediment budgets; eastern South Island; R.M. Kirk and students (8) North Island; J.C. Schofield (2).
- (d) Shelf sediments, terrigenous; K.B. Lewis and R.H. Kerzler (6), M.R. Gregory (1), J.C. Schoffeld (2).
  - (e) Shelf and slope sediments, L.R. Carter (6).

- (c) North Island terrigenous sediments, V. Weigel, M. Topping, L.L. Wakefield, T.P. Barter, R.J. Richardson, B. Ricketts (1).
  - (d) North Island carbonates; C.S. Nelson (3), M.R. Gregory (1).
  - (e) Clay mineralogy; T. Kume (3).

#### Antarctic sediments

- (a) Beacon Group (Devonian-Triassic, largely continental). P.J. Barrett, J. McPherson, R. Plume (5).
- (b) Recent lake, glacial, aeolain and soil deposits; T. Healy, A. Wilson, C. Hendy (3).

## Recent Publications in other than Sedimentological Journals

- Andrews, P.B., 1973, Late Quaternary continental shelf sediments off Otago Peninsula, N.Z. N.Z. Jour. Geol. <u>Geophys</u>. 16, 793-831.
- Armon, J.W., 1974, Late Quaternary Shorelines near Lake Ellesmere, Canterbury, New Zealand. N.Z. Jl. Geol. Geophys. 17, 63-74.
- Ballance, P.F., 1974, An inter-arc flysch basin in northern New Zealand: Waitemata Group (Upper Oligocene - Lower Miocene). <u>Jour. Geology</u> 82, 439-71.
- Childs, C.W., Ward, W.T., Wells, N., 1974, Rattling iron concretions from the Waikato Coal Measures. N.Z. Jour. Geol. Geophys. 17, 93-101.
- Force, E.R., 1974, A comparison of some Triassic rocks in the Hokonui and Alpine belts of South Island, New Zealand. <u>Jour. Geol.</u> 82, 37-49.
- Gregory, M.R., Thompson, S.A., 1973, Recent sediments of Waitemata Harbour. Report of the Waitemata Harbour Study, Auckland Regional Authority, 33p.
- Hayward, B.W., 1974, Whitianga Group sediments (rhyolitic) of the Table Mountain Area, Coromandel Peninsula. <u>Journ. Roy. Soc. N.Z.</u>, 4, 161-75.
- Kirk, R.M., in press, Aspects of Surf and Runup Processes on Mixed Sand and Gravel Beaches. <u>Geografiska Annaler</u> (Sweden).
- in press, The Production of Fluorescent Sand Tracer for the Detection of Sand Movement. Geologiska Föreningen Forhandlingar (Sweden).
- Lewis, K.B., 1973, Erosion and deposition on a tilting continental shelf during Quaternary oscillations of sea-level. N.Z. Journ. Geol. Geophys. 16, 281-302.

## Deep-sea Drilling Project, sediments

Leg 28, Antarctic water, P.J. Barrett (5). Leg 29, Southern Tasman Sea, P.B. Andrews (9). Leg 30, South-west Pacific, G.J. van der Lingen (9) and J.V. Eade (6).

## Sedimentation on active continental margins

- (a) West coast, South Island, Cretaceous-Lower Tertiary separation of N.Z. from Australia; M.G. Liard (9), R.M. Carter et al., (10).
- (b) Volcanic arc sedimentation, northern North Island, Upper Cenozoic; P.F. Ballance, B.W. Hayward, L.L. Wakefield (1).

#### Volcanogenic sediments

- (a) Permian-Triassic volcanic arcs in South Island; D.S. Coombs, B.F. Houghton, Y. Kawachi, C.A. Landis (10).
- (b) Upper Cenozoic arcs, northern North Island; P.F. Ballance, B.W. Hayward (1). D.N.B. Skinner (2).
- (c) Quaternary acid volcanics and far-travelled derivatives; S. Self, D. Seward, W. Topping, R. Howorth (5); A. Hogg, J. McCraw, H. Gibbs (3).

#### New Zealand Geosyncline (Permian-Jurassic)

- (a) Western (Hokonui) Shelf Facies; south Island, C.A. Landis et al., (10); North Island, P.F. Ballance, D.A. MacFarlan (1).
- (b) Eastern (Axial) "eugeosyncline" factes; South Island, J.D. Bradshaw, D.W. Lewis (7), P.B. Andrews (9), K.B. Sporli et al., (1); North Island, K.B. Sporli et al., (1).

## Eastern "geosyncline" (Cretaceous - Cenozoic)

J.T. Kingma (9), I.G. Speden (4), M.J. Isaac, P. Hill (1).

## Palaeozoic Sediments, South Island

M.G. Laird (9).

#### Flysch Basins

Cenozoic, North Island, P.F. Ballance (1), G.J. van der Lingen (9). Palaeozoic, South Island, M.G. Laird (9).

## Cenozoic shelf sediments

- (a) South Island terrigenous sediments; G.J. van der Lingen, G. Warren (9), D.W. Lewis (7).
  - (b) South Island carbonates, D.W. Lewis (7).

#### NEW ZEALAND (continued)

- Lewis, K.B., 1974, The continental terrace. <u>Earth Science Reviews</u> 10, 37-71.
- \_\_\_\_\_\_\_, Kohn, B.P., 1973, Ashes, turbidites, and rates of sedimentation on the continental slope off Hawkes Bay. N.Z. Journ. Geol. Geophys. 16, 439-54.
- van der Lingen, G.J., 1973, Ichnofossils in deep-sea cores from the Southwest Pacific. In Burns, R.E., Andrews, J.E., et al., 1973, Initial Reports of the Deep Sea Drilling Project, Vol. 21, 693-700.
- Packham, G.H., van der Lingen, G.J., 1973, Progressive carbonate diagenesis at Deep Sea Drilling sites 206, 207, 208 and 210 in the Southwest Pacific and its relationship to sediment physical properties and seismic reflections. Ibid. 495-522.
- Pickrill, R.A., in press, Littoral Drift Systems Along the NE Coast of the South Island. <u>N.Z. Jl. Geol. Geophys</u>.

Geogr. in press, Origins and Evolution of the Wairau Bar. N.I.

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#### International Geological Congress Tour 58C

Some of the Tours of the 1976 IGC will be in New Zealand. No. 58C will be devoted largely to sedimentary rocks in the northern two-thirds of the South Island, a combination of excellent sediments and superb scenery. Organised by Malcolm Laird and Doug Lewis, the tour will include study of Early Paleozoic turbidites, sediments of the Carboniferous-Jurassic New Zealand Geosyncline, Cretaceous alluvial fans and fluvial deposits; Tertiary flysch and subaqueous mass flow deposits; relationships between Tertiary sedimentation and volcanism; spectacular examples of Quaternary tectonic and glacial features; and modern braided rivers.

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Harold Reading (Acting General Secretary) Department of Geology) Parks Road Oxford. OX1 3PR, U.K.

## I.A.S. - STATEMENT OF PROFIT AND LOSS ACCOUNT FOR THE YEAR 1972

Income:		Expenses:	
Membership dues Subscriptions Sedimentology Back vol. Sedimentology Contribution Elsevier to Editorial costs Royalites Elsevier Publ. Co.: Sedimentology Bank Interest Donations, currency exchange differences etc.	4,343,69 20,464,82 249,32 750,00 15,290,05 1,385,07 359,28	Elsevier Publ. Co.: Sedimentology Back vol. Sedimentology Postage Editorial costs Office expenses (printed matter, circulars) Treasurer: Clerical help Auditors' fee (est.) Bank charges Bad debts (membership dues) Travel expenses council meetings Miscellaneous	17,226.00 136.82 4,890.43 3,628.15 1,381.75 2,645.00 675.00 918.47 1,207.05 819.31 532.90
	f 42,842.18		# 42,B42.18

## I.A.S. - BALANCE SHEET AS AT 31 DECEMBER 1972

	f	£		ş	#
Stock	0.00		Foundation capital		
Prepaid expenses			31 December 1971 In addition:	42,526.73	
Editorial costs Office expenses, postage	3,950.00 142.90		Student Fund Publication Fund Donation AGIP	2,465.13 1,253.58 1,802.81	
		4,092.90			
Sundry debtors			Profit 1972	48,048.25 8,791.30	
Membership dues 1972 Royalties Elsevier Publ. Co.: Sedimentology vol.	379.05				56,839.55
17 (3 & 4), 18, 19 (est.	00,000,00		Items received in advance		
Bank interest Value added tax	115.00 1,125.75		Membership dues and subscriptions Sedimentolog	y 7,400.19	
		14,619.80			7,400.19
Bank balances			Sundry creditors		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
AMRO-BANK N.Y. Leiden (current account)	20,797,02		Elsevier Publ. Co.:		
AMRO-BANK N.V. Leiden (savings account)	27,508.52		Sedimentology 1972 Sundry debts	751.81	
			General secr., office exp. etc.)	2,026.69	
		48.305.54			2,778.50
		67.018.24			67,018.24
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## 1.A.S. - STATEMENT OF PROFIT AND LOSS ACCOUNT FOR THE YEAR 1973

Income:		Expenses:	
Membership dues Royalties (Elsevier Publ. Co) - (Blackwell Scient. Publ.) Bank Interest Donation I.U.G.S.	27,393.39 1,067.88 7,990.00 2,169.50 1,870.18	Reviews (Blackwell) Postage Editorial costs Treesurer: Clerical help and auditor Sundry costs Bad debts (membership dues) Exchange losses	8,375.32 3,415.76 3,883.00 5,514.79 1,924.75 311.71 327.15

	<u>Profit</u>	16,738.47
£ 40,490.95		f 40,490.95
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	1. <u>A.S.</u>	- BALANCE SHE	ET AS AT 31 DECEMBER 1973		
	f			f	£
Stock (printed matter)	100.00		Foundation capital		
		100.00	31 December 1972	51,318.03	
Prepaid expenses			In addition: Student Fund	2.465.13	
	1 150 00		Publication Fund	1.253.58	
Editorial costs	1,150.00		Donation AGIP	1.802.81	
		1,150.00	Boild Cloth That		
		.,		56.839.55	
Sundry debtors			Profit 1973	16,738.47	
			170771 1770		73,578.02
Membership dues 1973	665.00				/3,5/6.02
Blackwell	27.50 1,870.18		<pre>[tems received in advance</pre>		
Donation [.U.G.S. Bank interest	170.00			2 465 65	
Value added tax	311,33		Membership dues	3,469.60	
18 NE GROEF CEN	******				3,469.60
		3,044.01			5,705.00
			Sundry creditors		
Bank balances			Editorial costs	1,083,00	
1000 0400 H H I -1-1-	34,045.73		Sundry debts	1,378.96	
AMRO-BANK M.Y. Leiden (current account)	34,040.73		Printed matter/postage	2,075.48	
AMRO-BANK N.Y. Leiden	44.517.32		Clerical help	1,272.00	
(savings account)			-		
(00,000,000,000,000,000,000,000,000,000		78,563.05			5,809.44
		82,857.06			82,857.06
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## REMINDER

If you have not already done so please pay your 1975 subscriptions now. Reminder cards were sent with the last (August) part of SEDIMENTOLOGY. Remember you do not received SEDIMENTOLOGY or the Newsletter for 1975 until your subscription has been received.

To: The Treasurer, International Association of Sedimentologists, Geological Institute, Garenmarkt 1 B, Leiden, The Netherlands.
Family nameForenames
Mailing address
Title (Or, Miss, etc.)Country of Residence
Date of Birth(if under 26 on 1st January of year for which membership is desired)
I enclose 0.fl. 40.00/24.00 by International Money Order/Bank Transfer/Postal Transfer/Cheque, made payable to the International Association of Sedimentologists, C/o AMRO BANK N.Y., Leiden, The Netherlands, A/c no. 45.10.60.555, payment for the yearfor membership of the International Association of Sedimentologists.