



SCCS

IUGS Subcommittee on Carboniferous Stratigraphy

Dr W.H.C.Ramsbottom, Chairman

Dr R.H.Wagner, Vice-Chairman

Dr C.F.Winkler Prins, Secretary

Dr W.B.Saunders, Associate Secretary

Newsletter on Carboniferous Stratigraphy

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Editor: Dr Cor F. Winkler Prins
Bachlaan 16
2253 BA VOORSCHOTEN
The Netherlands

Professor T. Neville George, F.R.S., in memoriam*Ramsbottom, W.H.C. & R.H. Wagner*

Professor T. Neville GEORGE, a past Chairman of the Subcommittee, died on 18 June 1980, at the age of 76. He had a distinguished academic career at the universities of Swansea, Bristol and Glasgow, working mainly on Dinantian rocks in various parts of the British Isles. His early work as a Carboniferous stratigrapher and invertebrate palaeontologist was in South Wales, an area to which he returned in his retirement with a modern study of the Carboniferous limestones of the Gower Peninsula, his birthplace. His additional publications on the British Dinantian ranged from Ireland to the Midland Valley of Scotland, and included a broad synthesis of the Dinantian throughout the British Isles. His sharp intellect allowed him to summarise and analyse information most effectively and his syntheses were always closely argued and informative, though suffering to some extent from complicated prose.

He succeeded Professor van Leckwijck as Chairman of the I.U.G.S. Subcommittee on Carboniferous Stratigraphy on the latter's becoming Secretary General of the Union. He chaired the Subcommittee meetings in Sheffield (1967), Liège (1969), Pajares-León (1970), and Krefeld (1971). His firm handling of the general meetings at Sheffield and Krefeld and his grasp of essentials led to the achievement of an accepted regional chronostratigraphic classification of the Carboniferous in western Europe. The 'Krefeld Classification' has stood for the last ten years and has only recently been expanded in a number of proposals which remain to be evaluated by the Subcommittee. Professor George insisted on the separation of litho-, bio- and chronostratigraphy and where classifications ran counter to these principles he did not hesitate to point this out in print.

His incisive personality and logical mind combined to make him an effective chairman. He will be remembered also for his many contributions to science and missed by a large number of Carboniferous stratigraphers.

New Bureau of S.C.C.S.*Winkler Prins, C.F.*

As from the last session of the IUGS Commission on Stratigraphy during the XXVI International Geological Congress, Paris 16 July 1980, the composition of the Bureau has changed. Dr Alexis Bouroz, who had succeeded in 1974 the late Professor T.N. George as Chairman of the Subcommittee, was replaced by Dr William H.C. Ramsbottom, Dr Robert H. Wagner became Vice-Chairman, and Drs Cor F. Winkler Prins and W. Bruce Saunders remained in office as Secretary and Associate Secretary, respectively. I would like to thank Dr Bouroz for the work he has done for the Subcommittee and to congratulate our new Chairman and Vice-Chairman with their election.

Due to several circumstances (the prolonged term of office of the Secretary and the election of a new Chairman resulting in a tie; see News1. Carb. Strat., 1: 17-19), the Bureau will change its composition not at the next International Geological Congress, but in two years time, if there are no unforeseen changes before that time due to exceptional circumstances. In July 1982 Dr Wagner will become Chairman and Dr Ramsbottom Vice-Chairman, whilst Dr Saunders becomes Secretary with a new Associate Secretary to be elected before that time. Although this procedure is not quite in accordance with the statutes of the IUGS Commission on Stratigraphy, it has been accepted by its Chairman, Professor A. Martinsson.

Letter from the Chairman*Ramsbottom, W.H.C.*

Dear Colleagues,

As members of SCCS our prime task is to agree on some sort of unified nomenclature for the major divisions of the Carboniferous. If this is to be achieved we shall all have to make compromises, for a great deal of time and effort (and also money) is invested in our various existing classifications. As can be seen from the chart in this issue of the Newsletter (see 'Open forum') it would be a major achievement if we could, as a start, agree on just one major international boundary. This is the purpose of the SCCS Meeting in England and Ireland, August 25 - September 4, 1981. This meeting has been arranged in place of the proposed Algiers meeting which it proved impossible to organise. But although we cannot in the British Isles offer you the exotic delights of North Africa we can offer a warm welcome and a profitable and enjoyable get-together.

Our aim is to decide on a stratigraphical level which provides the best boundary between a 'lower' and an 'upper' division of the Carboniferous, without prejudice as to what these divisions might be called. Once a suitable stratigraphical level has been chosen we can then move on to the selection of an appropriate stratotype to act as a standard reference.

Although not everyone can attend our infrequent meetings this Newsletter exists to foster communication and all students of the Carboniferous are urged to make use of it, and to contribute by sending anything which might be relevant to Dr Winkler Prins or to me, for inclusion in the Newsletter.

We also need to know the names of those who should be added to our mailing list. We need to get as many people as possible involved in our activities - you can help.

I look forward to greeting as many of you as can come to our meeting in August (there is still room - it's not too late to come even now).

11 June 1981.

Working Group on the Carboniferous-Permian Boundary

Martinsson, A.

Since, in spite of most considerable efforts, the Commission on Stratigraphy was not able during the last four-year term to recover any information on the progress and membership of the Working Group on the Carboniferous-Permian Boundary and no chairman or members were proposed for 1980-1984, the Commission has placed the Working-Group under reconstruction. The Commission asked the new Chairman of the Subcommittee on Permian Stratigraphy, Dr Brian F. Glenister, to initiate the reconstruction of the Working-Group in cooperation with the Subcommittee on Carboniferous Stratigraphy and the Subcommittee on Gondwana Stratigraphy.

Letter, 29 August 1980.

Working Group on the Devonian-Carboniferous Boundary

Paproth, E., E.A. Reitlinger & M. Streel

We shall take the opportunity of the next SCCS activities in Northern England to hold an open business meeting of our Working Group on the evening of August 31st, 1981 at Leeds (Parkway Hotel). The aim of that open business meeting should be to allow specialists which did not attend last year meeting at Paris (with the Subcommittee on Devonian Stratigraphy) to be better informed on the recent Working Group resolutions.

Following the decisions of the last Paris meeting to focus researches on the Rhenish Slate Mountains and some specific regions of USSR, we have to report:

- 1) Several German localities were revisited during field trips in 1980 by E. Paproth, Ch. Sandberg and M. Streel. The fossil distribution is currently being reinvestigated. K. Higgs (Dublin) has worked further in the attempt to better correlate the Irish and German spore succession (with Streel's collaboration). Important new data are: samples 138 and 101 immediately preceding the first entry of *Protognathodus kuehni* in the trench I of Stockum (see Alberti et al., 1974) have proved to carry respectively the LN and VI Spore Zone. Consequently, the conodont-spore correlation has to be improved. Only a more precise correlation between the *P. kuehni* bio-facies and the *Siphonodella* zonation is now outstanding. The reopening (possibly permanent) of this Stockum trench is considered.
- 2) A two-weeks visit (October 1980) of K. Simakov in Belgium has settled the organisation of a restudy of the Russian sections displaying a joint occurrence of *Quasiendothyra* and *Siphonodella*. Thanks to a Soviet-Belgian academy agreement, R. Conil (Forams, Conodonts, Algae) and E. Poty (Corals) are intending to collect samples with Russian colleagues the northeastern USSR, this summer.

The project 'The Carboniferous of the World'

Wagner, R.H. & C.F. Winkler Prins

The Subcommittee on Carboniferous Stratigraphy has been invited to prepare contributions to a book entitled 'The Carboniferous of the World' to be published by the Spanish Committee on Stratigraphy on the occasion of the X International Congress on Carboniferous Stratigraphy and Geology, to be held at Madrid in 1983. The book aims to summarise the present knowledge of the Carboniferous stratigraphy in different parts of the world. The editors of the volume will be Carlos Martínez Díaz, Robert H. Wagner and Cor F. Winkler Prins, and the volume will be published on a non-profit basis. Although the chapters will be authored by only a few of the most important contributors, all contributors will be acknowledged by name and institution.

In order to achieve this goal in the best and most efficient way, the chairmen of the S.C.C.S. working groups have been invited to participate in this project with the help of their corresponding members and of other persons who in their opinion could make a worthwhile contribution. All members are asked to co-operate and to support the chairman of his (her) working group(s) by providing the basic information upon his request. Since 'The Carboniferous of the World' should be ready for printing by mid 1982 and before that time a lot of editorial work has to be done, for example in making the chapters compatible, the members are requested not to wait too long to prepare their contributions.

S.C.C.S. News

Report of the IUGS Subcommittee on Carboniferous Stratigraphy for the year 1980

As you know, the elections caused quite some problems, ending up in a tie as they did. We have now a new Bureau, consisting of Dr W.H.C. Ramsbottom - Chairman, Dr R.H. Wagner - Vice-Chairman, Dr C.F. Winkler Prins - Secretary, and Dr W.B. Saunders - Associate Secretary, which will act until mid July 1982. It is intended that the Chairman and Vice-Chairman then change places, Dr Saunders will become Secretary, and a new Associate Secretary will be chosen (Dr C.F. Winkler Prins will then retire).

The most important event for the Subcommittee this year was the launching of the Newsletter on Carboniferous Stratigraphy, the first issue of which appeared in June and was well received.

There has been an unfortunate delay in the publication of the Proceedings of the S.C.C.S. Field Meeting in Turkey (IUGS Publication No. 4). As already explained last year, it is difficult for Mr Demirtaşlı to find the time for finishing the manuscripts (he had to translate all Turkish contributions into English), due to an internal re-organization in M.T.A., which has minimized the amount of time he can spend on this project. The manuscripts ought to be finished by now, but I have received no answers to my letters for quite some time now, and I don't expect to have the volume published before the end of the year.

Publication of the reports for the S.C.S. Meeting in conjunction with the IX International Carboniferous Congress (Washington, May 1979) is still a bit of a mystery. Although the Secretary General of the congress had originally written that the S.C.C.S. reports would have a high priority for publication, he informed me just before the

Congress that the reports presented in Washington would not be published. In a conversation during the congress, he asked me to write to him about it after he returned from holidays and he would see whether they could be included in the Compte Rendu. In answer to my letter he wrote (in November) that he was not responsible for the Compte Rendu and that I should write to the Chairman of the Congress. So far, the Chairman has not answered my letters, so I still don't know what to do (we would obviously prefer to have the reports published in the Compte Rendu of IX I.C.C.). Our new chairman, Dr W.H.C. Ramsbottom, will visit the U.S.A. in the beginning of November and hopes to solve this problem through personal contact.

To avoid problems at the next International Carboniferous Congress (Madrid, 1983), the Organizing Committee has been contacted making some suggestions and inquiries.

The 1981 Field Meeting is now definitely scheduled to take place in the United Kingdom and Ireland at the end of August and the beginning of September, since it proved impossible to organize such a meeting in 1981 in Algeria, the Bechar-Kenadza region being a restricted military zone. Excursions will take place in Wales, northern England, and Ireland, while the discussion meetings will be held in Leeds.

Professor Wang Zejiu, Secretary General of the Geological Society of China, has proposed five candidates for official membership of S.C.C.S. Unfortunately, we have so far been unable to obtain information on the working groups they represent and could therefore not yet vote on their membership.

S.C.C.S. accounts for the year 1980

Accounts for 1980

Balance of 1979	\$ 356.60	
Grant received for 1980	\$ 200.00	
Revenues Newsletter	\$ 10.00+	
Total revenues	\$ 566.60	
Secretarial expenses f408.00 ¹⁾		\$ 204.00
Expenses Newsletter f622.00 ¹⁾		\$ 311.00+

Budget for 1981

Expenses Newsletter	\$ 500.00
Secretarial expenses	\$ 150.00+
Total expenditure	\$ 650.00

Balance of 1980	\$ 51.60
Expected revenues Newsletter	\$100.00
Grant requested for 1981	\$500.00+
Total	\$650.00

¹⁾ The trip to Algeria did not take place because the 1981 Field Meeting will definitely not take place in Algeria. There were no costs for the organization of the Meeting in the U.K. The money intended for the trip to Algeria was used to launch the Newsletter on Carboniferous Stratigraphy. It is hoped that in the future it will be possible to finance the Newsletter largely from the revenues of the subscriptions, but this obviously takes some time.

Meeting in the British Isles, August-September 1981

Registration - It is still possible to register for the Meeting. The second circular with booking form may be obtained from:

W.B. Saunders
Associate Secretary S.C.C.S.
Department of Geology
Bryn Mawr College
Bryn Mawr PA 19010
U. S. A.

or: J. Pattison
Institute of Geological Sciences
Ring Road Halton
Leeds LS15 8TQ
England (UK)

Programme - The meeting is arranged in three parts; each can be attended independently.

A. Field excursion in northern England, to visit 14 proposed boundary stratotypes.

25 Aug. Assemble at the Cumbria Grand Hotel, Grange-over-Sands for dinner. Grange-over-Sands can be reached by train from London or Manchester, changing trains at Lancaster. The excursion bus will be going that afternoon from the Institute of Geological Sciences, Leeds, via Manchester Airport to Grange-over-Sands and participants will be able to travel on it.

26 Aug. Visits to the Asbian, Brigantian and Holkerian stratotypes and return to Grange-over-Sands. If time allows a visit will be made to a basal Arnsbergian section.

27 Aug. Visits to the Kinderscoutian, Chadrian, Pendleian, and Chokierian stratotypes en route to Leeds (Parkway Hotel).

28 Aug. Visits to the Alportian, Yeadonian and Marsdenian stratotypes and return to Leeds.

29 Aug. Visits to the Westphalian A, B and C stratotypes and return to Leeds.

B. Indoor meeting at the Parkway Hotel, Leeds. Tentative programme:

29 Aug. Assemble for dinner at hotel; meeting of titular members to discuss S.C.C.S. goals.

30 Aug. Consideration of proposed West European stratotypes; symposium on the Lower/Middle Carboniferous (Mississippian/Pennsylvanian) boundary.

31 Aug. Reports on the status of North American chronostratigraphic subdivision; Chinese chronostratigraphic subdivision; presentation of other working group reports. The meeting will end approximately at 5 p.m.

C. Field excursion to visit the three Carboniferous stratotypes in the British Isles not visited on Excursion A. Travel by (mini)bus on land and by ship from Pembroke to Cork.

31 Aug. Diner at the Parkway Hotel, Leeds.

1 Sept. Departure from Leeds at 8 a.m. for South Wales and the Arundian stratotype. Continue to Pembroke for overnight ferry to Cork.

2 Sept. Visit Courceyan stratotype and travel to night accommodation at location yet to be decided.

3 Sept. Visit Arnsbergian stratotype and travel to Dublin for dispersal at about 3 p.m.

Costs - Registration fee of £ 15 payable by all participants.

A. Pre-meeting excursion: £ 107 per person to include bus travel, accommodation and all meals from dinner on 25th to lunch on 29th inclusive.

B. Meeting: £ 40 per person to include accommodation and all meals from dinner on 29th to lunch on 31st inclusive. For those not attending the post-meeting excursion accommodation is available on 31st at the Parkway Hotel for £ 20 (dinner, bed and breakfast).

C. Post-meeting excursion: £ 107 per person, to include bus travel, a berth on the ferry, and accommodation and all meals from dinner on 31 Aug. to lunch on 3 Sept. inclusive.

Indoor meeting - The main topic of the indoor meeting at Leeds is the symposium on the lower/middle Carboniferous (Mississippian/Pennsylvanian) boundary. It is hoped to achieve a consensus view on the level at which the base of the 'Pennsylvanian' in its international sense (boundary between the Mississippian and Pennsylvanian subsystems) should be drawn. This boundary will automatically coincide with the Lower/Middle Carboniferous boundary when the subdivision in three series (Lower, Middle and Upper) will be accepted. If a consensus, similar to the recommendation for the Devonian/Carboniferous boundary (see Paproth, Reitlinger & Streel, 1980: News1. Carb. Strat., 1: 15), is achieved, the proposal will be put to a vote to the official (titular) membership by postal ballot. Afterwards it still has to be decided at which locality this boundary should be defined (the 'golden spike').

Publication - Since the excursions will take the participants to 15 boundary stratotypes in the British Isles (from basal Viséan to Westphalian C) of regional stages used in Western Europe, it seemed appropriate to publish in connection with this meeting a book on 'The Carboniferous Stratotypes of Western Europe'. It is scheduled for the end of the year. Our Chairman, Dr W.H.C. Ramsbottom, will be the editor and it will be published by the Yorkshire Geological Society.

X I.C.C.

The first circular for the X International Congress on Carboniferous Stratigraphy and Geology, to be held in Madrid, 1983, has appeared and a copy is included with this issue of the Newsletter.

S.C.C.S. working groups

Working group on the Upper Pennsylvanian

R.M. Kosanke (chairman), M.S. Barss, R.C. Douglass, P.A. Hacquebard, Th.W. Henry, G. Merrill, C. Stevens.

Working group on the Middle Pennsylvanian

W.W. Nassichuk (chairman), E.W. Bamber, M.S. Barss, W.R. Danner, B.L. Mamet, W.L. Manger, J.W. Monger, P.K. Sutherland, J. Utting, R.R. West.

Working group on the Chesterian and Lower Pennsylvanian

M. Gordon Jr (chairman), J.T. Dutro Jr, A.S. Horowitz, R.M. Kosanke, B.L. Mamet, P.K. Sutherland, R.R. West, G.L. Wilde.

Working group on the pre-Chesterian Mississippian of the USA

Ch. Collinson (chairman), A.K. Armstrong, J.W. Baxter, P. Brenckle, J.L. Carter, J.T. Dutro Jr, F.R. Effensohn, R.C. Gutschick, A.S. Horowitz, J.R. Jennings, H.R. Lane, W.L. Manger, C.B. Rexroad, W.J. Sando, B. Skipp, Th.L. Thompson, W. Ziegler.

Working group on the Mississippian of Canada

B.L. Mamet (chairman), E.W. Bamber, L. Jansa, R.W. MacQueen, A. Roux.

Additional members:

Working group on the Tournaisian and Viséan in the USSR

T.N. Belskaja, T.V. Byvsheva, V.A. Chigova, L.I. Kononova, K.V. Simakov.

Working group on the Namurian

V. Havlena, B. Owens.

Publications

Last year the Proceedings of the Meeting of the Subcommittee on Carboniferous Stratigraphy, held in Sheffield, 9th and 10th September, 1965 (R.H. Wagner, ed., 1967) have been re-issued by the University of Sheffield. Copies may be obtained at a price of £ 4, including postage and packing, from: Dr A.C. Higgins, Department

of Geology, The University of Sheffield, Mappin Street, Sheffield S1 3JD, England (UK). The contents of this volume are:

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Slightly condensed versions of the reports prepared for the S.C.C.S. Meeting in conjunction with IX I.C.C., Washington 1979, have been handed in with the Organizing Committee of the Congress, after Dr W.H.C. Ramsbottom had discussed the matter - of publication of these reports by IX I.C.C. with Dr W. Gordon Jr, the Chairman of the Congress.

Publications on Carboniferous stratigraphy

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Open forum

All Carboniferous stratigraphers, members of S.C.C.S. and non-members alike, are invited to send letters, giving their personal view on matters concerning S.C.C.S. or Carboniferous stratigraphy in general, to the Secretary for publication in this column (please mark these letters with 'Open forum'). The letters will be edited, if necessary, without however changing their contents.

Correlation chart

The table on p. 11 gives a possible correlation of the three main classifications presently used in the U.S.A., Western Europe and the U.S.S.R., respectively, based on the modern literature on the subject. The readers are invited to comment on these correlations, giving the facts to support their view. The facts can be given to some extent in the form of references to publications.

Two questions for discussion.

Ramsbottom, W.H.C.

1. To what extent should time be a factor in deciding major stratigraphical divisions?

Geochronological work reported in full by Woodland & Francis (1964), supplemented by Lambert (1971), suggests that the Dinantian Subsystem of the West European scale occupies about half of all Carboniferous time. It follows, then, that any major bipartite division with a boundary at a higher level will divide the Carboniferous unequally so far as time is concerned. The very thick Silesian sequences, in

U. S. A.	W. Europe	U. S. S. R.
U.P. Wolfcampian	U.P. Autunian	U.P. Asselian
U.P. Virgilian	U.P. C	U.P. Noginsky
Wabaunsee		Klazminsky
Shawnee		Dorogomilovsky
Douglas		Khamovnichesky
Lansing	B	Krevyakinsky
Kansas City	A	
Pleasanton	Cantabrian	
Marmaton		Myachkovsky
Cherokee	D	Podolsky
	C	Kashirsky
	B	Vereisky
	A	Melekessky
Winslow	Yeadonian	Cheremshansky
Bloyd	Marsdenian	Prikamsky
	Kinderscoutian	Severokeltmensky
Hale	Alportian	Krasnopolyansky
	Chokierian	
	Arnsbergian	Vosnesensky
	Pendleian	Zapaltyubinsky
	Brigantian	Protvinsky
	Asbian	Steshevsky
	Holkerian	Tarussky
	Arundian	Venevsky
	Chadian	Mikhailovsky
	Ivorian	Aleksinsky
	Hastarian	Tulsky
	Strunian	Ulychsky
		Pesterkovsky
		Kosvinsky
		Kizelovsky
		Cherepetsky
		Upinsky
		Malevsky
		Kalinovsky
		Zavolzhsy

many areas many times thicker than the Dinantian, have perhaps deluded us into thinking that they occupied an amount of time commensurate with their thickness. Should time be a factor in classification?

2. Where should boundaries be placed in cyclic deposits?

The Westphalian Series in West Europe, to take an example, is defined at the base of the marine band containing *Gastrioceras subcrenatum* - in other words at the earliest marine fossil in that fossil band. But this is not the base of the cycle in which the marine band occurs. It has been customary for a long time to consider the top of the coal as a suitable cycle boundary point, and in defining Namurian stage boundaries the bases of the stages were taken at the top of coals, where these are present. Where no coal is developed the base of the cycle was used in the Namurian, however this was determined, and not the earliest marine fossils. Current thinking, however, now suggests that a better cycle boundary is the top of the underlying seatearth or underclay and that coals themselves are transgressive deposits developed in response either to a rising sea level or a rising water table (or both) and should be included in the same cycle as any overlying marine band. What are members' views on this issue?

Address list

New and revised addresses:

- Dr Z. Bełka, Inst. Geol. Podstatowej, Univ. Warszawski, Al Zwirki i Wigury 93, PL 02-089 Warszawa, Poland.
- Ms C. Bitoleanu, Inst. Geol. Geof., 78344 Str. Caransebeș nr. 1, sector 1, 7000 București, Rumania.
- Dr M.J.M. Bless, Natuurhistorisch Museum, Bosquetplein 6-7, 6211 KJ Maastricht, The Netherlands.
- Dr B.I. Bogoslovsky, Paleont. Inst. AN SSSR, Profsoyuznaya ul. 113, 117321 Moskva, USSR.
- Prof. A. Brouwer, Geol. Inst., Rijksuniv. Leiden, Postbus 9518, 2300 RA Leiden, The Netherlands.
- Dr J.L. Carter, Carnegie Museum, 4400 Forbes Avenue, Pittsburgh PA 15213, USA.
- Dr C.J. Cleal, Conservation Review Unit, Nature Conservancy Council, Pearl House, Bartholomew Str., Newbury, Berkshire, RG14 5LS, England (UK).
- Dr W.R. Danner, Dept. Geol. Sci., Univ. British Columbia, 6339 Store Road, Vancouver B.C. V6T 1W5, Canada.
- Prof. F.R. Ettensohn, Dept. Geol., Univ. Kentucky, Lexington KY 405 USA.
- General Library, British Museum (Natural History), Cromwell Road, London SW7 5BD, England (UK).
- Dr H. Grebe, Geol. Landesamt Nordrhein-Westfalen, Postfach 1080, D 4150 Krefeld, Fed. Rep. of Germany.
- Dr G.E. de Groot, Rijksmuseum Geol. Miner., Hooglandse Kerkgracht 1 2312 HS Leiden, The Netherlands.
- Dr V.J. Gupta, Centre of Advanced Study in Geology, Panjab Univ., 160014 Chandigarh, India.
- Dr V. Holub, Ústřední ústav geol., Postovní Schranka 85, Praha 011 Mala Strana, PSC 118 21 Czechoslovakia.
- Ms C.A. Horsey, Geol. Survey Alabama, P.O. Drawer O, University AL 35486, USA.
- Dr L. Jansa, Atlantic Geosci. Center, Bedford Inst., P.O. Box 1006, Dartmouth, Nova Scotia, B2Y 4A2, Canada.
- Prof. J.R. Jennings, Dept. Geol., Eastern Kentucky Univ., Richmond KY 40475, USA.

- Koninklijke Bibliotheek, Postbus 74, 2501 AJ 's Gravenhage, The Netherlands.
- Dr R.I. Kozitskaya, Inst. Geol. Nauk AN USSR, ul. Chkalova 55b, 252054 Kiev, USSR.
- Dr H. Kozur, Hungarian Geol. Inst., Népstadion ut 14, H 1143 Budapest, Hungary.
- Library Geol. Museum, Københavns Univ., Øster Voldgade 5-7, DK 1350 København K, Denmark.
- Library National Coal Board, Coal House, P.O. Box No. 90, Doncaster, Yorks DN1 3HD, England (UK).
- Prof. G.K. Merrill, Dept. Geol., College of Charleston, Charleston SC 29401, USA.
- Dr G. Playford, Dept. Geol. Mineral., Univ. Queensland, St Lucia Qld 4067, Australia.
- Dr K. Rdzanek, Inst. Geol., Warsaw Univ., Al Zwirki i Wigury 93, PL 02-089 Warszawa, Poland.
- Prof. O. Rösler, Inst. Geociências, Univ. São Paulo, Caixa Postal 20899, 01000 São Paulo, Brazil.
- Dr A. Roux, Dept. Geol., Univ. Montréal, B.P. 6128, Montréal, Quebec H3C 3J7, Canada.
- Serials, University of Illinois Library, 1408 West Gregory Drive, Urbana IL 61801, USA.
- Dr A.K. Shchegolev, Inst. Geol. Nauk AN USSR, ul. Chkalova 55b, 252054 Kiev, USSR.
- Dr B. Skipp, U.S. Geol. Survey, Box 25046 Mail Stop 913, Denver Fed. Center, Denver CO 80225, USA.
- Dr C.H. Stevens, Dept. Geol., San Jose State Univ., San Jose CA 95192, USA.
- Dr D. Storch, Zentral Inst. f. Mikrobiologie u. experimentele Therapie, Akad. Wiss. DDR, Bentzenbergstr. 11, DDR 69 Jena, German Dem. Rep.
- Dr C.C. Weber, IUGS Secretary General, Maison de la Géologie, 77 rue Claude Bernard, F 75005 Paris, France.
- Prof. R.R. West, Dept. Geol., Thompson Hall, Kansas State Univ., Manhattan KA 66506, USA.
- Dr J. Yanagida: temporary address (from May to October 1981) Dept. Palaeont., British Museum (Nat. Hist.), Cromwell Road, London SW7 5BD, England (UK).
- Prof. W. Ziegler, Senckenbergisches Museum, Senckenberganlage 25, D 6000 Frankfurt/Main 1, Fed. Rep. of Germany.