



SCCS

IUGS Subcommittee on Carboniferous Stratigraphy

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Newsletter on Carboniferous Stratigraphy

Number 1 (June 1980)

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The IUGS Subcommittee on Carboniferous Stratigraphy:
its past, present and future

Bouroz, A., C.F. Winkler Prins & W.B. Saunders

History

The IUGS Subcommittee on Carboniferous Stratigraphy (S.C.C.S.) became firmly established at the IV Congrès pour l'avancement des études de Stratigraphie et de Géologie du Carbonifère (Heerlen 1958) when the 'Commission on the Subdivision of the Carboniferous' (established at the XIX Session of the International Geological Congress, Algiers 1954) decided to merge with the 'Subcommission on Carboniferous Stratigraphy' of the Commission on Stratigraphy of the International Geological Congress (see van Leckwijck, 1960; Thiadens, 1963; Bouroz, 1975). The Commission on Stratigraphy - and with it the S.C.C.S. - became part of the International Union of Geological Sciences (IUGS), when that union was established in 1963.

Although there was a formal membership from the beginning, with representatives from most countries with important Carboniferous deposits, voting has been quite informal up to 1973: everybody who was present at a meeting was allowed to vote. At the S.C.C.S. Field and General Meeting in Czechoslovakia, 1973 (see Wagner, 1977) the structure of the S.C.C.S. was formalized in accordance with the draft statutes of the IUGS Commission on Stratigraphy, limiting the voting rights to the titular members - viz. the officers of the bureau, past chairman, and the chairmen of the working groups. The bureau, consisting of a chairman and a secretary/vice-chairman (see Table 1), was enlarged at the Czech Meeting with an associate secretary, a matter that had become urgent because the secretary had to act also as chairman. At the Czech Meeting the problem of the unbalanced representation within the S.C.C.S. was also discussed. Because the meetings had been held in Western Europe so far, with mainly a West-European attendance (despite the original balanced membership), the discussions in the S.C.C.S. had centered on the West-European stratigraphic scheme for the Carboniferous and all working groups but one dealt with Western Europe. The S.C.C.S. had thus become an almost exclusively West-European group. This was, of course, considered an unsatisfactory situation and the present chairman was therefore empowered to create new working groups to study specific intervals of the Carboniferous in specific areas, on a palaeogeographic rather than a political basis. These efforts resulted in a highly enlarged official membership at the VIII Congrès International de Stratigraphie et de Géologie Carbonifère (Moskva 1975), essentially the same as we have nowadays: with representatives from North and South America, North Africa, West Europe, the U.S.S.R., Asia, and Australia (see Table 3). Apart from these, five working groups are being set up in the People's Republic of China for different parts of the Chinese Carboniferous, the chairmen of which will also become titular members.

Because the S.C.C.S. was a well established organization when the statutes of the Commission on Stratigraphy were adopted, we were allowed to deviate in some ways from their rules. One of the major points is that our Subcommittee does not hold its meetings at the sessions of the International Geological Congress, but in conjunction with the International Congress on Carboniferous Stratigraphy and Geology (for obvious reasons) with its own fieldmeetings in between (see Table 2).

Aims

The S.C.C.S. is engaged in a programme of stratigraphic research with the ultimate aim of selecting stratotypes for one set of agreed chronostratigraphic units covering the whole Carboniferous (compare Bouroz et al., 1977-1979). In order to achieve this goal, the stratotypes and fossil content of regional chronostratigraphic units should be described as fully as possible, including details of the geological setting of the stratotypes, and detailed correlations of the different regional schemes - especially those of Western Europe, the U.S.S.R., China, and North America - should be attempted. The basic unit is the stage and these stages should be grouped into series. It is considered that the first aim of the working groups should be to help in defining the lower boundaries of these series. For the moment it has been accepted by the S.C.C.S. to divide the Carboniferous into three parts - lower, middle and upper Carboniferous, respectively. It has been suggested that the approximate boundary between the lower and middle Carboniferous lies within the Namurian and practically coincides with the Mississippian/Pennsylvanian boundary which approximates to the one between the Serpukhovian and the Bashkirian, and that the boundary between the middle and upper Carboniferous lies near the base of the Stephanian, thus approximating to the Desmoinesian/Missourian and the Moscovian/Kasimovian boundaries. The Mississippian and Pennsylvanian can be considered subsystems, the former roughly corresponding to the lower Carboniferous, the latter to the combined middle and upper Carboniferous. Subsystems are, however, not recognized as official stratigraphic units, although its use is permitted in exceptional circumstances such as these (Hedberg, 1976, p.73-74).

The exact definition of the lower boundary of the Carboniferous and also of the upper boundary is of prime interest to the S.C.C.S., but will be discussed in separate bodies, viz. the Working Group on the Devonian-Carboniferous Boundary (Dr E. Paproth, chairwoman) and the Working Group on the Carboniferous-Permian Boundary (Dr Ch.A. Ross, convenor).

Procedures

The activities are channeled through the working groups. Their chairmen constitute together with the bureau the official membership of the S.C.C.S. The other active members of a working group are corresponding members of the Subcommittee. The study of a specific stratigraphic unit by a working group is planned by its chairman and he should preferably report at each biennial meeting of the S.C.C.S., but at least every four years, on the progress made by that working group. For each series (lower, middle and upper Carboniferous) a coordinator has been appointed to unite the efforts of the working groups dealing with parts of the series for which he is responsible (see Bouroz, Wagner & Winkler Prins, 1979, p.31).

When a working group reaches agreement on a specific stage (or stages) and its stratotype(s), it can make proposals for official adoption by the S.C.C.S. of that stage (c.q. those stages). Before a vote (by mail among the titular members and organized by the secretary of S.C.C.S.) can take place, detailed descriptions of the proposed stratotype (and other reference sections) with its fossil content and a discussion of the regional geological setting should be available, as well as a correlation scheme of this unit with other stratigraphic schemes, and these results should be discussed at a S.C.C.S. Meeting. The proposal will be published in the Newsletter on Carboniferous Stratigraphy well in advance of the vote and also the result of the vote will be published afterwards, stating how each member has voted. The information on the proposed stage(s) should be distributed among

all titular members by the chairman of the working group (address labels can be obtained from the secretary), and he should send it upon request to other members as well. The information should be given in English (the official language of the S.C.C.S.), be it only as a summary including all essential information in sections and fossil lists.

Because the S.C.C.S. forms part of the IUGS Commission on Stratigraphy, it has to report to this commission annually on its activities, and has to inform them of all major decisions.

The chairman of the S.C.C.S. can create new working groups, which have to be approved - as well as their chairmen - by the membership by postal ballot. The membership at large can also propose a new working group, which proposal also has to be voted upon. The newly elected chairmen of working groups have to be approved as titular members of S.C.C.S. by the Commission on Stratigraphy.

When the chairman of a working group is inactive and fails to report without proper cause for a period of more than four years, the bureau can propose to replace him (and actually is obliged to do so). There will, of course, be a postal ballot over this proposal and the new chairman of that working group, if elected, should be approved by the Commission on Stratigraphy before becoming an official titular member. The results of the elections will be published in the next Newsletter on Carboniferous Stratigraphy. With votes on persons it will, however, not be indicated how each titular member has voted.

The chairmen of the working groups should inform the secretary of changes in the membership of their working group, and of changes in address of the members. At least once every four years a revised list should be handed to the secretary well before the Carboniferous Congresses.

The S.C.C.S. bureau changes every four years at the session of the IUGS Commission on Stratigraphy during the International Geological Congress in conformity with the statutes of that commission. This has the advantage that the current affairs of the Carboniferous Congress held the year before can be settled by the old bureau and the new bureau can start with a clean slate. The chairman may be reelected, but the secretary is as a rule automatically replaced by the associate secretary and a new associate secretary is elected. Candidates for the chair and for the post of associate secretary are invited and a postal ballot is organized by the secretary, and the results of the election are announced in advance of the International Geological Congress.

Membership

A complete membership list, arranged by working groups, is given in Table 3. With 24 titular members representing 20 working groups active on all continents except Antarctica, the S.C.C.S. is a rather large, truly international subcommission. At the moment, the only major region of great importance for Carboniferous stratigraphy not officially represented is China. We have, however, two Chinese contact persons as corresponding members and it has been agreed during the IX International Carboniferous Congress (Urbana 1979) that several working groups will be established in the People's Republic of China in the immediate future. Candidates for the chair of five working groups have already been proposed by Chinese authorities.

To increase cooperation among the membership this Newsletter on Carboniferous Stratigraphy has been launched. The problem of communication had become urgent with the increased, global membership, which makes it impossible for the members to attend all meetings. Even at S.C.C.S. meetings in conjunction with the Inter-

national Carboniferous Congress, it often proves difficult to get all members together.

Future

The major issue for the immediate future is the establishment of a generally accepted chronostratigraphic subdivision for the Carboniferous, starting at the subsystem, and then at the series, level (see Bouroz et al., 1977-1979). To carry out this task properly an effective means of communication is necessary, to allow every member of the subcommission to express ideas, make proposals, and debate those of others. This will improve stratigraphic correlation and help to establish a consensus, or at least a majority opinion, on the major units within the Carboniferous. Up to now, the debates on the important problems concerning definition, content, and limits of Carboniferous chronostratigraphic units could only take place every four years during the International Carboniferous Congress, or, with a more restricted audience, during S.C.C.S. meetings held between the congresses. The resultant restriction of debates and expression of new ideas to these meetings has caused delays in the exchange of ideas and in reaching a solution of problems, that have been even further prolonged by the time necessary for publication of the comptes rendus.

Therefore, we are implementing the suggestion made by S.C.C.S. members in Urbana (1979) to create a Newsletter on Carboniferous Stratigraphy with the goal of facilitating progress of our work and to improve communication between our members. The immediate, fundamental problem of defining a chronostratigraphic classification for the Carboniferous of the palaeoequatorial belt can be more quickly solved through exchanges of views in our Newsletter by all interested parties. The more numerous the contributions, the better and quicker the matter can be resolved.

To some, there is a preconception that there is no possibility, at present, of a practical alternative to the existing official Heerlen classification, the Russian and American ones having their own regional value. The detailed description of regional stratotypes is not regarded as the best solution to this problem, because it is thought that the facies variations all over the world on the one hand, and the minute detail of local stratotypes on the other, will make the establishment of precise correlations all the more difficult.

We consider it more advisable to go from the general to the more detailed and to apply within the Carboniferous the methods we are compelled to use for boundaries between two different systems: the definition of boundary stratotypes (compare Hedberg, 1976). This means the definition of boundary stratotypes between the major subdivisions of this system. The value of this method is illustrated by the numerous working groups on systemic boundaries, e.g. on the Devonian/Carboniferous and Carboniferous/Permian boundaries.

The lower/middle Carboniferous boundary. There is no doubt whatever that the Serpukhovian/Bashkirian boundary (which has been defined in the southern Urals and can be recognized in the Donbass) can be approximately correlated with the Alportian/Kinderscoutian (Namurian A/B) boundary in Western Europe, and that in North America it closely matches the boundary of two subsystems officially adopted by the Heerlen classification, the Mississippian and Pennsylvanian. Exact correlations are not yet firmly established, however, and the Serpukhovian/Bashkirian boundary may lie within the Alportian, or perhaps even Chokierian (see Ramsbottom, 1977). The Mississippian/Pennsylvanian boundary appears to lie even lower, probably at the

base of the Chokierian (Brenckle et al., 1977). Despite these problems such a boundary within the *Homoceras* Zone, or at its base or top, is preferred by many Carboniferous stratigraphers to the Dinantian/Silesian boundary advocated by some Northwest-European workers. The problem of the lower/middle Carboniferous is typical of those encountered at many levels in the Phanerozoic; it can be solved by the activity of working groups focussed on particular parts of the succession in different parts of the world, both stratigraphically and palaeontologically. Eventually a suitable palaeontological definition of this boundary, based on marine macro- and microfauna and palynology, will firstly be suggested, as has been done for example by Paproth et al. (this Newsletter) for the Devonian/Carboniferous boundary, and subsequently a boundary stratotype will be selected. Discussions at the S.C.C.S. Meeting in conjunction with IX I.C.C. (Washington 1979) revealed that the base of the *Homoceratoides prereticulatus* (H_{2c}) Subzone might be a suitable level.

The middle/upper Carboniferous boundary presents similar problems. This boundary corresponds in the U.S.S.R. with the Myachkovian/Kasimovian boundary, which correlates with the middle part of the Cantabrian, the lowest stage of the Stephanian in Western Europe. Contrary to this the Middle/Upper Pennsylvanian (Desmoinesian/Missourian) boundary in North America may lie somewhat above the Myachkovian/Kasimovian boundary, but its correlation still poses many problems. Again, careful research on the relevant sections (i.e. the Desmoinesian/Missourian, Westphalian/Stephanian, and Myachkovian/Kasimovian boundary deposits) by the appropriate working groups in different parts of the world will make a palaeontological definition and the subsequent choice of a stratotype feasible.

Solving the correlation problems in the Carboniferous of the palaeoequatorial belt through the efforts of the working groups is, we think, the best method to arrive at an international understanding. The only alternative would be to maintain the status quo.

Once an international chronostratigraphic scale has been established for the Carboniferous, the task of the S.C.C.S. has by no means been completed. Apart from the fact that it will remain important to discuss detailed correlations with this standard subdivision, especially when new methods are developed, there are several areas, not belonging to the palaeotropics in the Carboniferous, that create special problems. Establishing regional standard subdivisions for these areas, Gondwanaland and Angaraland in particular, and correlating them with the global standard scale is a next goal, that is of course already worked on.

Another matter of importance to the S.C.C.S. is the stimulation of research and the improvement of contact with areas that are not represented in the S.C.C.S. as yet, e.g. southern Asia, South Africa, and Antarctica.

The S.C.C.S. is naturally very much interested in the official definition of the Devonian/Carboniferous and Carboniferous/Permian boundaries. These boundaries are, however, the concern of the Working Group on the Devonian/Carboniferous Boundary (Dr E. Paproth, chairwoman; see her contribution in this Newsletter) and the Working Group on the Carboniferous/Permian Boundary (Dr Ch.A. Ross, convenor), respectively.

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Table 1. Officers of the Subcommission on Carboniferous Stratigraphy.

Chairmen

- Professor Willem J. Jongmans: 1954-1957 (Commission on Subdivision of Carboniferous).
- Professor William P. van Leckwijck: 1957-1965.
- Professor T. Neville George: 1965-1974.
- Dr Alexis Bouroz: 1974 up to the present.

Secretaries

- Dr Robert H. Wagner: 1963-1976.
- Dr Cornelis F. Winkler Prins: 1973-1976 (associate secretary); 1976 up to the present.
- Dr W. Bruce Saunders: 1976 up to the present (associate secretary).

Table 2. Meetings of the IUGS Subcommission on Carboniferous Stratigraphy.

- 1954 Meeting (of the Commission on the Subdivision of the Carboniferous) at the XIX Int. Geol. Congress, Algiers (Jongmans, 1956).
- 1958 Meeting at IV Congrès Strat. Géol. Carbonifère, Heerlen (van Leckwijck, 1960).
- 1960 Meeting at XXI Int. Geol. Congress, Norden (van Leckwijck, 1964a).
- 1963 Meeting in conjunction with V Congrès Int. Strat. Géol. Carbonifère, Paris (van Leckwijck, 1964b).
- 1964 Meeting at XXII Int. Geol. Congress, India (van Leckwijck, 1972).
- 1965 Meeting together with C.I.M.P.*), Sheffield (Wagner, 1967).
- 1967 Meeting in conjunction with V Congrès Int. Strat. Géol. Carbonifère, Sheffield (George & Wagner, 1969).
- 1969 Meeting together with C.I.M.P.*), Liège (George & Wagner, 1970).
- 1970 Field Meeting, Cordillera Cantábrica (Wagner, 1971).
- 1971 Meeting in conjunction with VII Congrès Int. Strat. Géol. Carbonifère, Krefeld (George & Wagner, 1972).
- 1973 Field and General Meeting, Czechoslovakia (Holub & Winkler Prins, 1977; Wagner, 1977).

*) Commission Internationale de Microflore du Paléozoïque.

- 1975 Meeting at VIII Congrès Int. Strat. Géol. Carbonifère, Moscow (Bouroz, Wagner & Winkler Prins, 1979).
- 1978 Field and General Meeting, Turkey (Demirtaşlı & Winkler Prins, in press).
- 1979 Meeting in conjunction with IX Int. Congress Carboniferous Strat. Geol., Washington-Urbana (Bouroz, Winkler Prins & Saunders, in press; see also this Newsletter).

Table 3. Membership list, according to working groups (for addresses see alphabetical list in this Newsletter).

Bureau

A. Bouroz (chairman), T.N. George (past chairman), W.B. Saunders (associate secretary), C.F. Winkler Prins (secretary and vice-chairman).

East Europe and Siberia

Working group on the Carboniferous of Angaraland

S.V. Meyen (chairman), B.A. Abramov, O.A. Betekhtina, G.E. Chernyak, M.V. Durante, V.G. Canelin, S.G. Gorelova, M.I. Graiser, V.A. Muromtseva, M.V. Oshurkova, M.I. Radchenko, O. Tomurtogoo, O.V. Yuferev.

Working group on the Kasimovian and Gzhelian

A.D. Grigorjeva (chairwoman), B.S. Abramov, I.A. Alekseeva, I.S. Barskov, F.R. Bensh, O.A. Betekhtina, V.A. Chermnykh, N.P. Ilyukhina, N.V. Kalashnikov, M.A. Kalmykova, M.V. Konovalova, R.I. Kozitskaya, S.S. Lazarev, M.Kh. Makhlina, Z.P. Mikhailova, Ye.V. Movshovich, I.S. Muravyev, D.M. Rauser-Chernousova, A.K. Shchegolev, M.V. Shcherbakova, K.A. Urbajtis, N.G. Verbitskaya, G.P. Zolotukhina.

Working group on the Moscovian

M.N. Solovieva (chairwoman), I.S. Barskov, I.I. Dalmatskaya, O.L. Einor, O.P. Fissunencko, V.S. Gubareva, E.A. Ivanova, R.I. Kozitskaya, T.A. Kozyreva, A.V. Popov, Z.S. Rumyantseva, M.T. Sergeeva, O.A. Shcherbakov, P.L. Shulga, V.K. Teteryuk, N.P. Vassilyuk, N.G. Verbitskaya.

Working group on the Serpukhovian and Bashkirian

O.L. Einor (chairman), D.E. Aisenverg, T.V. Astakhova, O.I. Berchenko, N.E. Brezhnikova, V.A. Chermnykh, T.A. Dedok, D.D. Degtyarev, A.V. Durkina, O.P. Fissunencko, E.V. Fomina, R.S. Furdy, A.Y. Galitskaya, I.M. Garan, E.A. Ivanova, R.M. Ivanova, N.V. Kalashnikov, N.M. Kotchetkova, N.V. Litvinovitch, Ya.L. Lutfullin, M.M. Marfenkova, T.I. Nemirovskaya, A.A. Plusnina, V.I. Poletaev, M.V. Postoyalko, E.A. Reitlinger, Z.S. Rumyantseva, V.D. Saltovskaya, M.F. Schestakova, M.T. Sergeeva, Z.A. Sinitzyna, M.F. Solovieva, M.N. Solovieva, G.E. (T)Chernyak, V.K. Teteryuk, Z.A. Tjuljandina, N.P. Vassilyuk.

Working group on the Tournaisian and Viséan in the USSR

E.A. Reitlinger (chairwoman), D.E. Aisenverg, O.I. Bogush, N.E. Brazhnikova, O.A. Lipina, M.M. Marfenkova, M.M. Michno, B.V. Poyarkov, V.D. Saltovskaya, V.P. Skvortsov, M.V. Vdovenko, O.V. Yuferev.

West and Central Europe

Working group on the upper Stephanian

J. Doubinger (chairwoman), A. Bouroz; no list of members available.

Working group on the lower Stephanian

R.H. Wagner (chairman), A. Bouroz, J. Doubinger, J. Knight, L.C. Sánchez de Posada, J. Šetlík, P. Vetter, C.F. Winkler Prins.

Working group on the Westphalian D

J.P. Laveine (chairman), C. Bitoianu, C. Broumiche, J.J. Chateauneuf, R. Coquel, O.P. Fissunencko, F. Francavilla, A. Garcia-Loygorri, W.H. Gillespie, A.C. van Ginkel, C. Greber, K.H. Josten, G. Lachkar, S. Loboziak, H.W. Pfefferkorn, P. Pierart, A.K. Shchegolev, M.N. Solovieva, T.N. Taylor, Y. Tenchov, R.H. Wagner, C.F. Winkler Prins.

Working group on the Westphalian A-C

M.A. Calver (chairman), M.J.M. Bless, K. Bojkowski, R. Crookal, A. Delmer, R.M.C. Eagar, H.E.R. Fiebig, A. García-Loygorri, H. Grebe, V. Havlena, V. Holub, A. Jachowicz, J.P. Laveine, A. Rabitz, D. Stoppel, R.H. Wagner, J. Weir, G. Weiss, C.F. Winkler Prins.

Working group on the Namurian

W.H.C. Ramsbottom (chairman), A.C. Higgins, F. Hodson, R. Neves.

Working group on the Dinantian

E. Paproth (chairwoman), K. Balogh, E.W. Bamber, J.W. Baxter, R.G. Browne, I. Chlupáč, R. Conil, N. Dîl, J. Dvořák, F. Ebner, I. Filipovič, E. Groessens, T.B.H. Jenkins, P.J. Jones, T. Koike, M. Lys, B.L. Mamet, M. Minato, M. Mitchell, J.T. Oliveira, J. Pais, C. Pareyn, A. Ramovš, W.H.C. Ramsbottom, J. Roberts, T.G. Roberts, A.C. Rocha-Campos, L.C. Sánchez de Posada, W.J. Sando, K. Schmidt, G.D. Sevastopulo, C. Teixeira, J. Truyols, H. Żakowa.

Africa

Working group on the Carboniferous of North Africa

M. Lys (chairman), M. Legrand-Blain, Y. Lemosquet, C. Pareyn, M. Weyant.

North America

Working group on the Upper Pennsylvanian

R.M. Kosanke (chairman); no detailed list available (see below).

Working group on the Middle Pennsylvanian

W.W. Nassichuk (chairman); no detailed list available (see below).

Working group on the Chesterian and Lower Pennsylvanian

M. Gordon Jr (chairman); no detailed list available (see below).

Working group on the pre-Chesterian Mississippian of the USA

Ch. Collinson (chairman), J.W. Baxter, P. Brenckle, H.R. Lane, J. Lineback, C.B. Rexroad, Th. L. Thompson.

Working group on the Mississippian of Canada

B.L. Mamet (chairman); no detailed list available (see below).

North American corresponding members:

A.K. Armstrong, H. Arndt, E.W. Bamber, M.S. Barss, P.H. von Bitter, A.R. Cameron, J.C. Carter, A.T. Cross, W.C. Darrah, R.C. Douglass, J.T. Dutro Jr, K.J. Englund, W.H. Gillespie, B.F. Glenister, R.C. Gutschick, P.A. Hacquebard, Th.W. Henry, A.S. Horowitz, R.L. Langenheim, R. Lund, A. McGugan, R.W. MacQueen, W.L. Manger, R.D. Narby, S. Nelson, H.W. Pfefferkorn, Ch.A. Ross, C.A. Sandberg, W.J. Sando, W.B. Saunders, P.K. Sutherland, J. Utting, G.L. Wilde.

Gondwanaland

Working group on the terrestrial Carboniferous of South America

S. Archangelsky (chairman), C. Azcuy, O. Rösler, M. Marques Toigo, R.H. Wagner.

Working group on the marine Carboniferous of South America

A.C. Rocha Campos (chairman), A.J. Amos, G. Benedetto, A. Castanos, R. Charrier, J. Corvalán, A. Forero, C.R. Gonzalez, L.A. Rodrigo.

Working group on the Carboniferous of Australia

J. Roberts (chairman), K.S.W. Campbell, B.A. Engel, T.B.H. Jenkins, P.J. Jones, R. Nazer, G. Playford, G.A. Thomas, J.B. Waterhouse.

Far East

Working group on the Carboniferous of Japan

M. Minato (chairman), D.R. Choi, M. Ehiro, Y. Fujiwara, T. Haikawa, T. Hamada, A. Hase, Y. Hasegawa, M. Hunahashi, Hisaharu Igo, Hisayoshi Igo, K. Ishida, K. Ishii, K. Ishizaki, R. Isomi, T. Kamei, K. Kanmera, N. Kashima, M. Kato, Sh. Kawada, M. Kawamura, M. Kawano, F. Kobayashi, T. Koike, K. Konishi, M. Minoura, K. Mori, M. Murata, M. Musashino, K. Nakamura, T. Nakamura, K. Nakazawa, I. Niikawa,

T. Nishida, Y. Nogami, Y. Okimura, M. Okubo, Y. Onuki, M. Ota, T. Ozawa, K. Sada, Y. Saito, S. Sakagami, T. Sato, K. Shibata, A. Sugimura, T. Sugiyama, K. Suyari, K. Tachibana, H. Takeda, J. Tazawa, R. Toriyama, J. Watanabe, K. Yamada, Y. Yamada, N. Yamagiwa, J. Yanagida, T. Yoshida.

Attending the formal installation of working groups on different parts of the Chinese Carboniferous and election of their chairmen as titular members, we have the following nominees:

Gao Lianda, Li Xingxue, Yang Shifu, Yang Xihu, Yu Jianchang.

Business meetings of Commission on Stratigraphy

Bassett, M.G.

Following my circular letter last year it is now clear that a majority of voting members of the Commission on Stratigraphy plan to attend the International Geological Congress in Paris. Accordingly I have made arrangements to hold two business meetings, both of which will be held in the main Congress building at the times given below:

1. July 9th from 1830-2030 hours in room 35.
2. July 16th from 1830-2030 hours in room 35.

Full details of the Agenda for these meetings will be circulated later, but well in advance of the Congress itself. Any voting members wishing to raise items of business for discussion on the Agenda should do so in writing to me as soon as possible, and in any case no later than one month before the date of the first business meeting.

I am sending notice of our business meetings to the Chairman and Secretary of all Subcommissions, Working Groups and Committees of the Commission, and will be grateful if each body can pass on the information to its own membership.

Identification of IUGS publications

Bassett, M.G. & W.W. Hutchinson

A considerable number of volumes of different sorts are published each year as a direct result of activities of IUGS bodies. However, in many cases the IUGS involvement is frequently masked because these publications carry no statement to the effect that they are the result of official work done under the auspices of the Union. At the recent meeting of the IUGS Executive it was agreed that we should now encourage all those concerned with the production of such volumes to identify them with an informal numbering system.

Under the auspices of the Union many bodies are producing special issues of journals, books, symposium volumes, etc. Anyone involved in the production of such a publication is now asked to identify it preferably both on the cover and the title page with the following statement:

IUGS Publication No. ...

Numbers will be issued by the Secretary General who will maintain a central register of the numbers. If you wish your publication to be identified in this way as part of the formal IUGS activities of your group, then will you please write to the Secretary General about eight weeks before your definite deadline for going to press.

If possible, we also ask if you can encourage the publishers to include the IUGS logotype on the cover or title page, or both.

The numbered series of IUGS publications will not apply to

single papers in the normal scientific periodicals. In these cases, however, we also hope that IUGS activity related to a paper can be identified by a statement in the introduction or some other appropriate place in the text. We will be most grateful if you can draw these various matters to the notice of your full membership.

Report of the IUGS Subcommittee on Carboniferous Stratigraphy Meeting in Washington and Urbana, 17-26 May 1979

Bouroz, A., C.F. Winkler Prins & W.B. Saunders

A General Assembly of the IUGS Subcommittee on Carboniferous Stratigraphy took place on the occasion of the IX International Congress of Carboniferous Stratigraphy and Geology in Washington on May 17 and 18, before the official opening of the Congress. Several reports were presented by chairmen of working groups of the Subcommittee, followed by informal discussions. No formal decisions on the stages or their boundaries were taken because a large number of Titular Members were absent, who were either on excursion before the Congress or unable to attend the Congress.

During the VIII International Congress on Carboniferous Stratigraphy and Geology at Moscow 1975, it was decided that the establishment of a single world wide scheme of chronostratigraphic units was the most important task for the Subcommittee in the following years. To arrive at this goal, a threefold subdivision in lower, middle and upper Carboniferous was accepted for administrative purposes. It did not constitute a recommendation to the IUGS Commission on Stratigraphy, nor does it imply that eventually a threefold subdivision should be accepted. The boundaries of these three major units of the Carboniferous have been discussed during the Meeting in Washington, but it appeared premature to make any proposal for a specific boundary as yet. In any case, as was said in Moscow, the four regional chronostratigraphic subdivisions will remain valid for their respective geographic areas of the palaeoequatorial belt, viz. North America, western and central Europe, the USSR, and China. At the present state of affairs, the most important matter is not to decide on the content and boundaries of the worldwide chronostratigraphic units, but to establish detailed correlations between the four major regional subdivisions mentioned above. Only after these correlations have been established, a final unified chronostratigraphic scheme for the Carboniferous can be proposed and agreed upon. For example, it has been discussed, for quite some time now, to place the boundary between the Lower and Middle Carboniferous at the base of the *Reticuloceras* Zone. Thus, the uppermost unit of the Lower Carboniferous would become the Serpukhovian of the Russian nomenclature, or the stages Pendleian and Arnsbergian, corresponding to the former Namurian A, of western Europe. Before taking a decision, it is essential to establish precisely the upper and lower boundaries of this time interval and to discuss whether this boundary is really the most appropriate one. Also the correlation of this time interval with the North American and Chinese zonations should be taken into account.

Before the Meeting in conjunction with the VII International Congress on Carboniferous Stratigraphy and Geology at Krefeld, 1971, the Subcommittee consisted mainly of West-European geologists, with one North-American representative. Since that meeting the number of Titular Members of the Subcommittee has increased considerably and during the Moscow Congress the S.C.C.S. became truly international

with representatives from North America, western and central Europe, the USSR, North Africa, South America, Australia, and Japan. An important gap in the representation of the different geographic areas remained however: the People's Republic of China.

A first contact with the Geological Society of China through the IUGS Commission on Stratigraphy had resulted in Chinese participation in the S.C.C.S. by two corresponding members in 1977: Dr Gao Lianda, of the Chinese Academy of Geological Sciences at Peking and Dr Yang Shifu, of the Wuhan College of Geology. The presence of an important Chinese delegation at this Congress has enabled us to solve this problem completely. At a meeting held in Urbana on May 23, of the Bureau of the S.C.C.S. and a Chinese delegation consisting of Professor Meng Jisheng, Vice-President of the Chinese Academy of Geological Sciences, and Drs Gao Lianda and Yang Shifu, with the help of the interpreter of the Geological Society of China, Mrs Cai Wenyan, the following decision was taken on the proposal of Prof. Meng Jisheng: to establish at least four, and perhaps five, working groups whose chairmen will become Titular Members of the S.C.C.S. Obviously it is impossible to give the names of the Chinese Titular Members now, but Prof. Meng Jisheng agreed to establish these working groups as soon as possible after his return and the names of the Chinese Titular Members will be given well in advance of the next International Geological Congress at Paris in 1980. In addition, Prof. Meng agreed to announce this decision officially. We are very pleased to get formal participation from the People's Republic of China in our Subcommittee's work, thus enabling us to become representative at a truly worldwide scale.

To conclude, it is a pleasure for us to thank the Organizing Committee of the IX International Congress of Carboniferous Stratigraphy and Geology, and especially Drs Mackenzie Gordon Jr and Ellis L. Yochelson, for their hospitality at Washington and Urbana and for making the necessary arrangement for our meetings.

(Report presented by our Chairman, Dr A. Bouroz, at the closing session of the IX International Congress of Carboniferous Stratigraphy and Geology, Urbana, 26 May 1979.)

Reports for the IUGS Subcommittee on Carboniferous Stratigraphy Meeting in conjunction with IX I.C.C., Washington, 17-18 May 1979 (unfortunately most Russian contributions arrived too late, after the meeting was concluded, due to the late arrival of the Soviet delegation):

Wagner, R.H.: The Westphalian/Stephanian boundary in Western Europe (introduction to the symposium on the middle/upper Carboniferous boundary).

Archangelsky, S., C.L. Azcuy, D. Pinto, C.R. Gonzalez, M. Marques Toigo, O. Rösler & R.H. Wagner: The Carboniferous and Early Permian of the South American Gondwana area: a summary of biostratigraphic information (summary of a report presented by Dr R.H. Wagner at the S.C.C.S. Field and General Meeting in Turkey, 1978).

Mamet, B.L.: The lower/middle Carboniferous boundary (introduction to the symposium on the lower/middle Carboniferous boundary).

Nassichuk, W.W.: Report on the Middle Pennsylvanian.

Fissunenkeno, O.P. & J.P. Laveine: Comparaison entre la distribution des principales espèces-guides végétales du Carbonifère moyen dans la bassin du Donetz (U.R.S.S.) et les bassins du Nord-Pas-de-Calais et de Lorraine (France).

Wagner, R.H.: Remarks on the Bashkirian/Moscovian boundary.

Grigorieva, A.D.: Report of the Upper Carboniferous Working Group.

- Solovieva, M.N. Moscovian Stage, report of the Working Group chairwoman.
- Einor, O.L., O.P. Fissunenکو, T.I. Nemirovskaya, M.T. Sergeeva, M.F. Solovieva, V.K. Teteryuk & N.P. Vassilyuk: On the Bashkirian-Moscovian boundary.
- Teteryuk, V.K.: Spore-pollen assemblages from the deposits at the Bashkirian/Moscovian boundary on the East-European platform.
- Vassilyuk, N.P.: Evolution of corals near the Bashkirian/Moscovian boundary.
- Einor, O.L., D.D. Degtyarev, O.P. Fissunenکو, R.M. Ivanova, N.M. Kotchetkova, Y.L. Lutfulin, M.M. Marfenkova, M.V. Postoyalko, Z.S. Rumyantseva, M.F. Solovieva & V.K. Teteryuk: Report of the Working group on the Bashkirian Stage in the USSR.
- Fissunenکو, O.P.: Paleobotanical characteristics of the Bashkirian Stage.
- Sergeeva, M.T.: Bivalve molluscs of the Bashkirian Stage of the Middle Carboniferous of the Donets Basin.
- Solovieva, M.F.: The Lower Bashkirian in the Soviet Arctic, on the basis of foraminifers.
- Einor, O.L., O.I. Berchenکو, A.J. Galitskaya, I.M. Garan, T.I. Nemirovskaya, M.V. Postoyalko, Z.S. Rumyantseva, V.D. Saltovskaya, Z.A. Tjuljandina & N.P. Vassilyuk: The Lower-Middle Carboniferous boundary in the USSR: new biostratigraphical data.
- Reitlinger, E.A.: The Lower/Middle Carboniferous boundary.
- Aizenverg, D.E., T.A. Dedok, A.V. Durkina, O.L. Einor, R.M. Ivanova, N.V. Litvinovich, M.M. Marfenkova, A.A. Plusnina & G.E. Tchernyak: Report of the Working Group on the Serpukhovian Stage in the USSR.
- Reitlinger, E.A.: Stratigraphie zonale du Carbonifère inférieur.

The 'Correlation of coal-bearing formations' project

Meyen, S.V.

International Geological Correlation Programme Project No. 166: "Global correlation of geological processes of accumulation and transformation of coal-bearing formations and recent peat accumulation in the Earth's crust continental blocks and their oceanic margins (1979-1988)" (short title: "Correlation of coal-bearing formations", or the CCF Project).

The present state of the world energy resources necessitates the coal-geologists to join their efforts for global investigations aimed at the profound study and correlation of peat deposits and coal-bearing formations, maintaining the principal world reserves of solid fuel and metallurgic raw material. Of primary importance is the fact that due to decrease of oil and gas output and exhaustion of their reserves the share of coal will increase in the fuel-energy balance of most countries.

The coal-bearing formations are most variable in their stratigraphy, structural-tectonic location, thickness, facial composition, rank of coal, etc. Our knowledge of coal-bearing formations, especially of their detailed stratigraphical subdivision, genesis and distribution as well as their modern counterparts are insufficient.

To meet these needs and to improve our knowledge the CCF project sponsored by UNESCO was organized within the International Geological Correlation Programme. The project covers the following topics:

1. Stratigraphy of coal-bearing formations.
2. Sedimentogenesis and classification of processes of accumulation of oil-shale-, coal-, and peat-bearing formations.

3. Tectonic evolution of coal-bearing formations.
4. Processes of transformation of organic matter.
5. Processes of transformation of embedding rocks.
6. Criteria of prospecting for solid fuel, its global distribution and resources.
7. Geochemical characteristics of coal-bearing formations.
8. Geophysical characteristics of coal-bearing formations.

The main aim of the stratigraphical part of the project is to establish zonal subdivisions of major coal basins according to different organic groups, integration of the subdivisions with that on palaeoclimatic, palaeomagnetic or other grounds, and correlation between zonal schemes of different basins. The work should result in detailed unified schemes of zonal subdivision for major palaeogeographic areas such as Angaraland, Equatorial Belt and Gondwanaland of the Upper Palaeozoic. A good example of such a subdivision for a certain region has been provided by the "Report of Commission Internationale de Microflore du Paléozoïque Working Group on Carboniferous stratigraphical palynology" (G. Clayton et al., 1977. Carboniferous miospores of Western Europe: illustration and zonation. Meded. Rijks Geol. Dienst, 29). Comparable work can be done in other areas and for other groups of fossils.

The work on the project proceeds in national working groups. As an example an activity of Soviet stratigraphers participating in CCF is briefly outlined below.

Within the Soviet Working Group of CCF, regional stratigraphic subgroups have been organized. Every subgroup is responsible for a certain coal basin and unites specialists of different organizations working in the basin. The subgroups follow a standard programme which may be modified depending on local conditions. The programme stipulates selection and detailed study of several key sections in every basin. Key sections should be measured according certain standards with all possible kinds of sampling. Additional sections, when necessary, can also be measured. All the materials collected will be analyzed, identified, described, or otherwise treated by a team of competent specialists working in different organizations. To achieve agreement between specialists all the results (including lists of fossils coming from key sections) are to be approved at special annual colloquia of competent specialists. Divergences in opinions are carefully recorded and recommendations on necessary further studies are accordingly given.

At the next step correlation charts between key sections are prepared. The charts will be discussed on a permanent basis at annual 'regional stratigraphical colloquia'. The colloquia recommend direction of further studies. Interbasinal correlation charts and their relating zonal schemes will be discussed at 'interregional stratigraphic colloquia'. The final stage of the work is the correlation between zonal units of every basin and international chronostratigraphical units. Besides colloquia, regular field excursions to more important sections are planned. Without such excursions no formal decisions on units and boundaries should be made.

The results of the work are planned to be regularly issued as reports containing the description of key sections, illustrations and descriptions of guide fossils, correlation charts, etc. Comprehensive monographs on the stratigraphy of major basins are planned as final published results.

The stratigraphic work is performed jointly with commissions of the Interdepartmental Stratigraphic Committee of the USSR. Field work according to the aforesaid programme will begin in 1980. Some colloquia of specialists were held in 1979 and 1980, others

are currently organized. Stratigraphical investigations will be accompanied by monographical study of more important fossil taxa. To this aim a regular exchange of material between specialists will be stimulated.

The stratigraphical studies within the CCF project must not be a mere compilation of older data. The project should serve as a basis for a much more detailed study of coal-measure stratigraphy according to a unified approach and should result in much more reliable standard zonal stratigraphy than presently available. Readers of the present informations are invited to join the project. Details can be obtained from Dr S.V. Meyen, Geol. Inst. USSR Acad. Sci., Pyzhevsky per. 7, 109017 Moscow 17, USSR, or from Professor P.P. Timofeev (leader of the Project) and Dr B.V. Polyansky (secretary of the Project), both at the afore mentioned address.

Note concerning the definition of the Devonian-Carboniferous boundary

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

The international Working Group on the Devonian-Carboniferous Boundary hitherto had two field meetings; the first in north-western Europe (western Germany, Belgium, north-eastern France, south-western England, southern Ireland), in 1978, and the second in North America (Mississippi Valley), in 1979. During these meetings, problems were discussed in front of outcrops important by their fossil content and lithology, and by stratigraphical history.

As a result of the discussions a majority accepted a

RECOMMENDATION:

In an attempt at close conformity with the current definition of the Devonian-Carboniferous boundary at the base of the *Gattendorfia* Zone which was recommended by the 1935 Heerlen Congress, the Working Group on the Devonian-Carboniferous Boundary recommends a new operational definition of this boundary. This new definition is at the first appearance of the conodont *Siphonodella sulcata* within the evolutionary lineage from *Siphonodella praesulcata* to *Siphonodella sulcata* and immediately precedes the entry of *Gattendorfia* in the Hönnetal.

It is now important to begin the search for a boundary stratotype best displaying this evolutionary lineage, as well as exhibiting adequate representation among other zonally significant groups. The Working Group seeks information from all interested persons on the location of a boundary stratotype at this level.

As the Devonian-Carboniferous boundary is the base of the Carboniferous, the Members of the Subcommittee on Carboniferous Stratigraphy are particularly invited to cooperate. The next opportunity for oral communications will be at the International Geological Congress, in Paris, July 16th, 1980, at a Workshop organized together with the IUGS Subcommittee on Devonian Stratigraphy. Persons interested to participate should communicate to Professor M. Streel, University of Liège, Belgium.

The Namurian Working Group

Ramsbottom, W.H.C.

The Namurian Working Group was set up during the meeting of the Subcommittee in Sheffield in 1965 (see the report of the Sheffield

Meeting, pp. 150-151). At that time a decision was made that the stage stratotypes should be chosen in the Pennine region of England and in Ireland, and that the names then in current use for the Namurian stages should be retained, wherever the stratotypes should eventually be selected. This latter decision was prompted by the desire to reduce changes of names wherever this was possible. It was realised then, for example, that the base of the Namurian itself was not present near Namur in Belgium, and that the base of the Arnsbergian Stage was not present at Arnsberg. The Working Group submitted an interim report in 1967 during the S.C.C.S. Meeting in conjunction with the V International Carboniferous Congress (see C.R. V Congrès Int. Strat. Géol. Carbonifère, Sheffield 1967, 1 (1969): 71-78) and proposals were made for the selection of stratotype sections for each stage. A further report on the palaeontological characteristics of the Namurian in the stratotype area of Britain and Ireland was submitted during the Moscow Meeting of the Subcommittee in 1975 (see C.R. Congrès Int. Strat. Géol. Carbonifère, Moskva 1975, 3(1979): 85-99). Lastly, another report was presented to the Subcommittee Meeting in Ankara, Turkey, in April 1978, of which an abstract only is to appear in the reports of the Turkey Meeting.

The working group has concentrated its attention on selecting stratotype sections and determining their palaeontological characteristics in the type area. The extension of this work to other areas of Europe has always been a prime aim of the group and, to this end, in 1978 the membership was extended to include colleagues from Czechoslovakia, and Dr V. Havlena, Prague, and Dr F. Rehoř, Ostrava, became members of the Working Group. So far, however, it has not been possible to meet with these colleagues on a personal basis. The members of the Working Group now include, in addition to those mentioned above, Dr W.H.C. Ramsbottom (Chairman), Dr B. Owens, Prof. F. Hodson, and Dr A.C. Higgins.

The stratotypes which were selected in 1969 as candidates for approval have now been well explored and their characteristics are now well known, but a feature of Namurian deposition which has attracted attention in recent years is the mesothemic cyclicity described by Ramsbottom in 1977 (Proc. Yorkshire Geol. Soc., 41: 261-291). In general, this work has confirmed that the bases of the stratotypes have been placed at logical horizons in the succession, but in the case of the base of the Kinderscoutian ("R₁") it has been suggested in the report of the Turkish Meeting that a more logical horizon to take this level would be at the base of the H_{2c} goniatite zone, rather than at the base of the R_{1a}. This is because the major faunal change hereabouts is at this slightly lower level, where a complete renewal of goniatite faunas takes place and significant changes in the conodonts occur (fide A.C. Higgins).

For the future, it appears that the Namurian may well not be a recognised division of the Carboniferous on a world-wide stratigraphical scale, but the detailed work which has been done in North-west Europe has made it essential that, whatever level is chosen for a mid-Carboniferous (in a time sense) boundary, it should be at a horizon which can be recognised in the very detailed faunal succession of the area.

S.C.C.S. News

IUGS Subcommittee on Carboniferous Stratigraphy Field and General Meeting in Great Britain, 25th August - 1st September 1981

Unfortunately, it will be impossible to hold a field meeting in Algeria in 1981. Possibilities were therefore discussed by the chairmen elect and the secretaries, Drs W.H.C. Ramsbottom and W.B. Saunders in particular, and it was decided to organize a Field and General Meeting in Great Britain and possibly Ireland at the end of August and the beginning of September 1981. The excursions associated with this meeting will emphasize the stratotypes of the Northwest-European stages. The meeting is being arranged in three parts; each can be attended independently of the others.

- A. A four-day field excursion to examine fourteen stage boundary stratotypes in northern England (from low Viséan to Westphalian C) of regional stages used in northwest Europe.
- B. An indoor meeting (two days) for discussion, presentation of reports from working groups, invited lectures, etc. Theme for meeting: possible stratigraphical levels for a "Mississippian"/"Pennsylvanian" (i.e., lower - middle Carboniferous) boundary.
- C. Disperse on 1st September or attend an additional excursion to see stage boundary stratotypes in South Wales (1) and Ireland (2), which will be organized if there is sufficient demand (3 days).

Programme

- Aug. 25 - Assemble, evening (place to be arranged).
- Aug. 26 - Visit to Holkerian, Asbian, Brigantian stratotypes.
- Aug. 27 - Visit to Chadian, Pendleian, Chokierian-Kinderscoutian stratotypes.
- Aug. 28 - Visit to Yeadonian, Marsdenian stratotypes.
- Aug. 29 - Visit to Westphalian A, B, C stratotypes.
Travel to Leeds.
- Aug. 30) - Indoor meeting (in Leeds).
- Aug. 31)
- Sept. 1 - Disperse or go on extra excursion to S. Wales and Ireland (if sufficient demand).

Costs: Travel by bus about £ 20 per head (for Aug. 26-29).

Accommodation and meals will be contained in £ 15-20 per day, inclusive. Registration fee of £ 5 to cover field guidebook, postages, coffees, incidentals.

Attendance: All titular and corresponding members of S.C.C.S. are encouraged to attend the field excursions and general sessions. Attendance on the excursions and sessions by other interested individuals is welcome on a space-available basis. Please indicate your interests and intentions concerning the meetings on the enclosed form, and return it at your earliest convenience (before 1 September 1980) to:

W.B. Saunders	or: J. Pattison
Associate Secretary S.C.C.S.	Institute of Geological Sciences
Department of Geology	Ring Road Halton
Bryn Mawr College	Leeds LS15 8TQ
Bryn Mawr PA 19010	England (UK)
U.S.A.	

Results of election

The election of a new chairman caused some problems because both candidates, Drs W.H.C. Ramsbottom and R.H. Wagner, proved to have equal support among the titular members, resulting in a tied ballot, after a voting process that dragged out over four months.

A proposal by the chairman to consider the senior candidate elected proved not acceptable since both candidates are essentially of the same age. The proposal of the candidates to be alternately chairman - the first two years Dr W.H.C. Ramsbottom Chairman and Dr R.H. Wagner Vice-Chairman, the next two years the reverse, Dr Wagner Chairman and Dr Ramsbottom Vice-Chairman, was therefore accepted. The Secretary willingly renounced his vice-chairmanship to help solving the impasse. On request of our Chairman, Dr Bouroz, the letters of Prof. Martinsson and himself concerning the tied vote are reproduced below.

Uppsala, 12th May, 1980

Dear Dr. Bouroz,

Thank you for your letter of 4th May. It is most unfortunate that the election in the Subcommittee has resulted in a tie.

The only definite advice I can give you is that a system of alternating one-year chairmanships is not in agreement with the Statutes of the Commission. The normal way of getting out of the situation, *if this procedure has been agreed or announced beforehand*, is that the chairman uses his casting vote. A new ballot might change the situation, but time is very scarce.

A variation of the gentlemanly approach presented by the candidates would probably solve the problem most efficiently, e.g., an agreement that one of them takes on the chairmanship for this term and gives way and support for the other during the next term. It is evident from the results of the voting that there is good background to such an arrangement, leading to a next-to-guaranteed succession of outstanding chairmen.

I would not use seniority *alone* to distinguish between candidates, since we have stressed activity, particularly in correspondence, as the important qualification of our candidates (beside scientific standing) for the impending term.

I have no possibility according to the Statutes to use my authority as Chairman of the International Commission on Stratigraphy to solve this problem more actively than just by advice.

Yours sincerely,

Anders Martinsson

Cannes, le 30 Mai 1980

Cher Dr

En réponse à la lettre conjointe du 19 Mai 1980, signée par le Docteur W.H.C. Ramsbottom et le Docteur R.H. Wagner, je vous donne ici mon point de vue sur la solution du problème posé par ma succession.

Dans sa lettre en date du 12 Mai 1980, le Professeur Martinsson m'écrit: "The only definite advice, I can give is that a system of alternating one-year chairmanship is not in agreement with the Statutes of the Commission". Je pense qu'une Présidence alternée de deux ans ne serait pas plus conforme aux Statutes de la Commission, mais le Professeur Martinsson ne le dit pas; par contre, la solution qu'il semble préconiser (3ème paragraphe de sa lettre), consiste à confier la Présidence de la S.C.C.S. pour la prochaine période de quatre ans (1980-1984), à l'un des candidats, avec engagement de celui-ci et du bureau de la S.C.C.S., de favoriser l'élection à la Présidence pour la période 1984-1988, de l'autre candidat.

Cet engagement semble constituer le fait supplémentaire que postule la phrase du début du quatrième paragraphe de la lettre du Professeur Martinsson: "I would not use seniority *alone* to distinguish between candidates, ...". La solution conforme aux statuts consisterait donc à attribuer la Présidence de la période 1980-1984 au Docteur Ramsbottom (Senior) et celle de la période 1984-1988 au Docteur Wagner. Mais ce dernier serait en droit d'objecter que l'engagement du Docteur Ramsbottom et du bureau de la S.C.C.S. ne constitue pas une certitude pour l'élection de 1984 et que les électeurs seraient parfaitement en droit d'élire une autre personnalité comme Président.

En conséquence, et pour éviter des discussions interminables qui pourraient être dommageables pour la S.C.C.S., j'accepte, en tant que Président actuel, la proposition d'une présidence alternée: Docteur Ramsbottom, Président pour 1980-1982, et Docteur Wagner pour 1982-1984. Je demande simplement que ma lettre soit portée à la connaissance de tous les membres titulaires de la S.C.C.S., afin de ménager leur droit, de faire appel aux instances supérieures de l'I.U.G.S., pour non conformité aux Statuts, de la solution adoptée, et pour qu'éventuellement, l'I.U.G.S. établisse une doctrine pour le cas où un vote partagé interviendrait une nouvelle fois, à l'avenir.

Avec mes sentiments les meilleurs.

A. Bouroz

Publications on Carboniferous stratigraphy

Recent publications on Carboniferous stratigraphy of more than local interest that have come to my knowledge are listed (specialised palaeontological publications are generally not included). Information for this column are always welcomed. The list starts with an enumeration of all S.C.C.S. publications and for obvious reasons papers published in these publications or in the C.R. of the Carboniferous Congresses will not be included in this list. The Editor.

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