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COMMISSION INTERNATIONALE
DE MICROFLORE DU PALEOZOIQUE

NEWSLETTER 30

June 1983

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Editorial

This Newsletter marks the end of my term of office as CIMP Secretary. Geoff Clayton (Dublin) will be taking over this role at the Carboniferous Congress in Madrid. I wish him a successful term of office.

The last six years have seen a number of significant changes in CIMP. Our membership has grown significantly with our Newsletter now going to a wider audience in the USSR and Eastern Europe in addition to our many new members in the People's Republic of China. This period has seen the generation of a number of successful newsletters from our Subcommission on Chitinozoa and Scolecodonts and this Newsletter sees the first of what I hope will be a successful series of Acritarch Newsletters. I'm most grateful to Sven Laufeld, Florentin Paris, Yves Grahn, Anton van Erve and Ken Dorning for their efforts in producing these worthwhile contributions. These new ventures reflect the resurgence of interest in Lower Palaeozoic palynology which is particularly gratifying.

The activities of the last six years have continued to show the vitality of CIMP and its membership with successful meetings being held in Leon, Cambridge, Urbana and

Dublin. Plans are in hand to continue this series in the future.

The principal responsibility of the Secretary of CIMP in addition to handling the day to day administration of the organisation, is, of course, the production of our Newsletters. This of course depends on the help and cooperation of a number of people whose cooperation I would like to acknowledge formally. I have received valuable support from Serge Jardine and Maurice Streel during their respective terms of office as President of CIMP. Stan Loboziak, Paul Hill, Michel Vanguestaine, Henk Visscher and particularly Jan Jansonius have provided me with considerable support in their roles as Regional Treasurers. Finally I must express our thanks to many friends and colleagues in IGS for incalculable help in producing the Newsletter. Mrs Margaret Metcalfe has done the bulk of the typing and Mrs Janet Marshall has taken over the addressing all the envelopes. To all these people my sincere thanks.

Bernard Owens

A. FORTHCOMING MEETINGS

I. 10TH INTERNATIONAL CONGRESS OF CARBONIFEROUS STRATIGRAPHY AND GEOLOGY
Madrid, Spain. 12th-17th September 1983

CIMP has organised an informal two-day workshop on the two days before the formal congress begins (September 10th-11th). This workshop will allow those attending to establish contacts with our Spanish palynological colleagues as well as having the opportunity to spend some time working at the microscope.

The precise programme for these two days will depend on the number of people attending and their specific interests. This meeting will be held concurrently with a two-day session being organised by the Subcommission on Carboniferous Stratigraphy.

If you intend to be present in Madrid for this informal CIMP workshop please let me know as soon as possible so that a programme can be prepared and arrangements made for enough microscopes to be available.

The Congress will be organised on similar lines to the 9th Congress in Urbana in 1979 and the following special symposia will be presented.

1. Worldwide subdivisions of the Lower Carboniferous.
2. Cinerites and Tonsteins.
3. Carboniferous of East Asia.
4. Correlations in the Carboniferous of Gondwanaland.
5. Sea level changes in the Carboniferous.
6. Devonian-lower Carboniferous (Miss.) boundary.
7. Global geography of the Carboniferous period.
8. Continental plate reassemblies for the Carboniferous.

The following detailed programme has been received from Maurice Streel who is the Chairman for Symposium 6 - Devonian-Lower Carboniferous Boundary.

Introduction

BRAUCKMAN, C. and HAHN, G.
Trilobites as index fossils at the Devonian/Carboniferous boundary.

HOUSE, M.R. and PRICE, J.D.
Ammonoids near the Devonian/Carboniferous boundary.

BLESS, M.J.M. and GROOS-UFFENORDE, H.
The Ostracodes at the Devonian/Carboniferous boundary.

HIGGS, K. and STREEL, M.
Spore stratigraphy in the uppermost Devonian of the "Reinisches Schiefergebirge".

SANDBERG, C.A., ZIEGLER, W. and EBNER, F.
Possible Devonian-Carboniferous boundary stratotypes in Central USA, West Germany and Austria.

break.

REITLINGER, E.A., BOGOSLOVSKY, B.I., CHIZHOVA, V.A., GAGIEV, M. Kh., KONOVA, L.I., KOCHETKOVA, N.M., PAZUKHIN, V.N. and SIMAKOV, K.V.
On subdivisions of Devonian and Carboniferous deposits over the USSR territory (data of the Working Group).

MAMET, B.
On the presence of Quasiendothyridae in Arctic Alaska.

CHIZHOVA, V.A.
Stratigraphic hiatuses in Devonian-Carboniferous boundary deposits.

GRECHIZHNIKOVA, I.A., ARISTOV, V.A., REITLINGER, E.A. and CHIZHOVA, V.A.
Biostratigraphy of Transcaucasian Devonian-Carboniferous boundary deposits.

SIMAKOV, K.V.
Methods for determination of chronostratigraphic boundaries as exemplified by the Devonian/Carboniferous boundary.

The Organising Committee for the Congress have recently supplied CIMP with a selection of the Palynological and Palaeobotanical Abstracts for papers to be presented in Madrid. These are included here for your information although a full report will be included in Newsletter No. 31 at the end of the year.

Abstracts of papers to be presented

1. BIO- AND ECOSTRATIGRAPHY OF COAL-BEARING DEPOSITS
M.V. Oshurkova

Biostratigraphy based on the principle of continuous and irreversible evolution of the organic world, works on three main tasks: subdivision of sections on the basis of fossil distribution; correlation of sections by fossil assemblages; dating of deposits on paleontological data. Extinct species studied on fossils, are the major subject of biostratigraphy.

Ecostratigraphy amplifies biostratigraphy, using the features that reflect paleoecological succession. Ecostratigraphy solves two main tasks: detailed subdivision of sections and their correlation. The major subject of ecostratigraphy are old ecosystems studied on oryctocoenosis.

The paper shows possibilities of bio- and ecostratigraphy on the data of paleophytological study of the deposits of coal-bearing Carboniferous in Kazakhstan.

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2. CARBONIFEROUS PALYNOSTRATIGRAPHY OF THE LUBLIN COAL BASIN (POLAND)
Halina Kmiecik

The palynostratigraphic division of the Carboniferous in the Lublin coal basin presented in the paper is based on miospore examinations of 45 boreholes.

The sequence examined covers the Dinantian (late and possibly middle Visean) and the Silesian (from Namurian A to Westphalian C).

Seven spore zones and four subzones have been separated and their miospore characteristics compared with lithostratigraphic and chronostratigraphic divisions.

The paper contains also the comparison of local palynostratigraphic schemes of the Lublin coal basin Carboniferous and the Carboniferous in other parts of Poland with the unified zonal scheme of the Carboniferous deposits of Western Europe.

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3. LA ESTRATIGRAFIA DEL CARBONIFERO MEDIO EN EL AREA LOS TORNOS-VILLORIA-COLLADONA (SECTOR ORIENTAL DE CUENCA CENTRAL)

F. Leyva, L.F. Granados, M.N. Solovieva, J.P. Laveine, M. Lys, S. Loboziak, C. Martinez-Diaz, C. Brousmiche, A.M. Candelier, A. Garcia.

Se estudia, desde el punto de vista micropaleontologica, las asociaciones faunisticas de las calizas aflorantes, con especial interes en su contenido en fusulinidos.

Se has realizado una recogida exhaustiva de la escasa macroflora y tomado numerosas muestras para el estudia de palinomorfos con resultado diverso.

El conjunto de datos paleontologicos, pone en evidencia problemas crono-estratigraficos en el limite Bashkiriense-Moscoviense.

Del mismo modo, se han realizado estudios de petrografia sedimentaria - sobre calizas y areniscas, lo que unido a una columna de detaile, permite establecer la evolucion en el tiempo de los ambientes sedimentarios en es te area.

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4. LA ESTRATIGRAFIA DEL CARBONIFERO MEDIO EN EL SECTOR CENTRAL DE LA UNIDAD ESTRUCTURAL DE LA SOBIA-BODON (CUENCAS DE QUIROS-TEVERGA)

F. Leyva, L.F. Granados, M.N. Solovieva, K.A. Reitlinger, C. Martinez-Diaz, J.L. Laveine, S. Loboziak, C. Brousmiche, A.M. Caldelier.

Se han realizado varios cortes estratigraficos en los sectores del Gamoniteiro-Quiros y en las proximidades de la Plaza de Teverga.

Los estudios paleontologicos esencialmente sobre fusulinidos, palinomorfos y macroflora, asi como la correlacion de las distintas columnas, evidencia los problemas cronoestratigraficos del limite Bashkiriense-Moscoviense.

Los estudios de petrografia sedimentaria, el analisis de esturcturas etc., asi como otros datos de zonas proximas, han permitido elaborar un intento de interpretacion sobre la evolucion sedimentaria on este area.

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5. MIDDLE CARBONIFEROUS FLORAL ZONES OF THE DONETS BASIN

O.P. Fissunenko

According to the palaeobotanical data the Middle Carboniferous, embracing the Bashkirian and Moscovian Stages, is accepted in the Donets Basin as ranging from limestone D_6 (suite $C^4/_1$) to coal seam n_1 (suite $C^1/_3$). The Middle Carboniferous has subdivided into nine concurrent-range zones and assemblage zones. Fives zones were distinguished in the Bashkirian Stage: D_6 - E_8 (= Namurian B), E_8 - G_1 (= Namurian C), G_1 - h_3, h_3 - $i^4/_1$ (= Westphalian A), $i^4/_1$ - k_3 (= Westphalian B). The Moscovian Stage is subdivided into four zones: k_3 - l_8, l_8 - m_3 (= Westphalian C), m_3 - m_9, m_9 - n_1 (= Westphalian D and lower part of Cantabrian). A detailed stratigraphic scheme of zonal subdivision of the Middle Carboniferous based upon flora has allowed detailed correlations of wide lateral extent.

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6. PALYNOLOGICAL RESEARCH OF THE PALEOZOIC IN EPIZONAL METAMORPHOSED SEDIMENTS OF THE WEST CARPATHIANS

Eva Planderova

Most Paleozoic sediments in the West Carpathians Mts. in Slovakia are epizonal - metamorphosed.

a. In the Early Paleozoic a complex of higher-metamorphosed sediments also includes low-metamorphosed sediments containing well preserved palynomorphs. They proved the Silurian-upper Devonian age of the complexes of metasediments, formerly referred to as Protoerozoic (Maska-Zoubek 1961).

b. The Late Paleozoic in the West Carpathian has geosynclinal origin, and so the fossils (macroflora and macrofauna) found there could only partly indicate the age of the sediments. The results of palynological research proved.

1. the Visean age of the North-Gemeric Carboniferous;

2. Westphalian D-Stephanian A to Upper Permian age of the Choc facies of the Late Paleozoic. Microflora, particularly the Upper Permian is well and partly correlatable with the German Zechstein microflora.

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7. UPPER CARBONIFEROUS FLORAL ASSEMBLAGES AND THEIR STRATIGRAPHIC SIGNIFICANCE IN KOREA

Hee-Young Chun

An investigation of the plant compression and impression fossils of the Carbo-Permian coalfields, Gangweondo, Korea, has been carried out. Its aim has been to report, describe and illustrate the plant fossils of this part of the Cathaysian Province; to establish their relationship with species described from elsewhere in that province, and particularly China and to use the plant fossils to effect correlation with comparable plant-bearing strata in north Korea and China.

Four floral assemblages (C_2-C_3^1, P_1^2, P_1^2, P_2^1) are described, characterising the major plant-bearing formations of the coalfield, and these form a basis for correlation with adjacent areas.

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8. NAMURIAN MEGAFLORAL SUCCESSION OF SILESIA, CENTRAL EUROPE

Havlene, Vaclav

In the Namurian molasse of Lower and Upper Silesia the following floral species are typical of the West Europe ammonoid zones and subzones:

E_1: Dipl. adiantoides, Eleuth. mirabile, Lyg. bermudensiformis, Sph. tenerrimum, Stigm. stellata.

E_2: Dipl. adiantoides, Mesocalam. cistiiformis, M. roemeri, Lyg. stangeri, Sph. tenerrimum, Stigm. stellata.

Gothan's Floral Break, short gap

H : Lyg. baeumleri, Mar. acuta, Neural. schlehanii, Mesocalam. cistiiformis, M. roemeri, Pec. plumosa, Sigillaria sp. div.

R : All. essinghii, All. similis, Ast. grandis, Lyg. baeumleri, Mar. muricata, Neural. schlehanii, Paript. gigantea, Sigillaria sp. div.

G : Al. lonchitica, Ast. grandis, Lyg. baeumleri, Mar. muricata, Neural. schlehanii, Paript. gigantea, Sigillaria div. sp., Sph. cuneifolium

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9. A WESTPHALIAN D AGE FOR THE MABOU SECTION, NOVA SCOTIA, CANADA

Erwin L. Zodrow and Gary M. Vasey

A coastal section of less than 600 metres of coal-bearing rocks at Mabou Mines, Cape Breton, N.S., represents a major land-based part of a presumably large submarine Mabou Coalfield with a coal potential second only to that of Sydney, Nova Scotia. The Mabou section contains abundant, but not highly diversified fossil flora and fauna, the latter occurring in five identified horizons. Plant forms recognized to-date included the Neuropteris semireticulata - Linopteris münsteri complex, frequently found cutinized, N. rarinervis, and probably N. flexuosa. Neuropteris scheuchzeri is a subordinated species. The presence of sphenopterids is deduced from structures resembling Renaultia sp. Sphenophyllum emarginatum is noted. In the lower part of the section, Alethopteris serlii and other alethopterids make their entries together with pecopterids, one of which is referable to Pecopteris arborescens. Lycopod sporophylls are also present. The identified fauna included Anthraconauta phillipsii, A. tenuis (problematical), and a large array of Carbonita spp. Many authors consider Carbonita unreliable stratigraphically owing to the environmental control on the genus. The rare Gutschickia bretonensis has been found. In conclusion, of phytostratigraphic importance is the fact that the neuropterids are ubiquitous predominating in abundnace all other forms; pecopterids are rare. The placement of the Mabou section in the higher parts of the Pictou/Morien Group is suggested, which on floral grounds implies an equivalence to the Linopteris obliqua Zone (Zodrow and McCandlish) or the Ormond-Emery

seam interval, Westphalian D. The faunal age is lower, upper C, owing to the unreliable presence of A. tenuis. A correlation with British chronozones would place the section provisionally in the phillipsii Zone. The faunal assemblage is reminiscent of fresh-water, lacustrine facies. The age correlation, however, must be cautiosly approached, as the section is probably incomplete.

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10. A STEPHANIAN AGE FOR THE POINT ACONI SUCCESSION, SYDNEY COALFIELD, NOVA SCOTIA, CANADA: AN APPRAISAL
Erwin L. Zodrow

Selected phytostratigraphically important macrofossils from the Sydney Coalfield are described and diversity and stratigraphic range noted. Included are plants from three newly opened coal mines at Point Aconi, and Bell's and Dawson's (Brown's) collections are considered as well. The combined stratigraphical information points to paleobotanical events highlighted as follows. A) Pecopteris hemitelioides, P. unita, P. arborescens, P. oreopteridia, a variety of P. feminaeformis, Odontopteris schlotheimii and O. reichiana are recorded from the lower successions. However, taxonomic diversity of the pecopterids recognized to-date, coupled with abundance, is observed only in the higher succession at the Lloyd Cove seam horizon and remains to be observed at the higher Point Aconi horizon. Of the odontopterids, only O. schlotheimii becomes modestly abundant by Lloyd Cove time. B) Callipteridium cf. gigas makes its first recorded entrance in the Hub seam horizon and is also known from the Upper Bonar seam. C) Sigillaria brardii, S. cf. ichthyolepsis, S. elegans, S. mamillaris, S. rugosa, and Lepidodendron obovatum are recorded from the Phalen to the Hub seam horizons. It is concurrently noted that Linopteris münsteri and certain other neuropterids have either disappeared from the record or have noticeably declined in diversity and abundance by Lloyd Cove time (which emphasizes pecopterid hegemony). New collections of sphenophulls, sphenopterids, and alethopterids from the new sites are still evaluated. As an overall observation, the paleobotanical events point to coexisting Westphalian D - Stephanian forms and it appears that in the higher successions the Stephanian aspect becomes comparatively more pronounced. In conclusion, the working hypothesis of a Westphalian D/ Stephanian boundary is adopted with arbitrary placement of such in the Hub seam horizon. It is recognized that the phytostratigraphy of the Sydney Coalfield is at variance with Carboniferous sections of Europe and of the Eastern United States.

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11. FOSSIL PLANTS IN THE NAMURIAN STRATA OF THE RUHR COAL-BASIN
K.-H. Josten

Many fossil plants collected from the uppermost layers of Namurian A and, predominantly, Namurian B and C of the Ruhr Coal-Basin were examined morphologically. Beside previous findings from the Ruhr Coal-District, particularly Namurian floras from South Limburg/Netherlands and Belgium, but also from Northern France, Great Britain and the Upper Silesian basin have been used for stratigraphical comparisons.

Several fossil plants were found in the Ruhr Coal-Basin for the first time; several species were found in strata in which they had not been recorded previously; for several species the knowledge of plant structure and variation of leaf morphology has been increased and four new species have been described.

Some Namurian B plants closely resemble the flora of Namurian A and even older strata, while others show a transition to the younger flora of the Westphalian. A continuous development to the Westphalian-Flora can distinctly be recognized from Namurian B at the latest.

Using characteristic plant species and assemblages the sequence from upper Namurian A to the top of Namurian C can be divided into six sections.

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12. A NEW BOUNDARY STRATOTYPE SECTION FOR WESTPHALIAN B/C IN NORTHERN ENGLAND
N.J. Riley, M.J. Razzo, B Owens

As a result of industrial developments at the previous proposed boundary stratotype section at Stairfoot, Barnsley, Yorkshire, an alternative section is proposed in the River Doe Lea at Bolsover, Derbyshire. This new section has yielded a rich fauna

including the ammonoids Donetzoceras aegiranum and Gastrioceras depressum together with coiled and orthocone nautiloids, brachiopods and Dunbarella macgregorii. The litho-stratigraphic succession together with details of the distribution of faunal and palynomorph components are described and compared with comparable sections elsewhere in Great Britain, Western Europe and the United States.

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13. LE STEPHANIEN EN FRANCE
J. Doubinger et P. Vetter

Les depots atephaniens sont representes dans tous les massifs hercyniens ou a leur proximite immediate. Ce sont toujours des formations continentales, soit de basse altitude (Lorraine), soit intra-montagneuses (Massif Central). La sedimentation est detritique et generalement grossiere avec des couches de charbon souvent tres epaisses, des sur-accumulations et des amas tectono-sedimentaires. Le volcanisme stephanien a ete actif.

Plusieurs bassins sont sommairement decrits: Lorraine, Alpes, Blanzy, Saint-Etienne, Cevennes, Carmaux, Decazeville.

Le contenu paleontologique est riche tant en ce qui concerne la macroflore que la microflore. Certains bassins ont une faune abondante. La division en trois sous-etages est bien etablie sur des donnees paleobotaniques, mais les zones superieures et les zones de passage avec l'Autunien restent encore imparfaitement definies.

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14. LA ESTRATIGRAFIA DEL CARBONIFERA MEDIO EN LA ZONA DE CAMPO DE CASO-TANES (SECTOR CENTRAL DE LA REGION DE MANTOS)
F. Leyva, L.F. Granados, M.N. Solovieva, J.P. Laveine, M. Lys, S. Loboziak, C. martinez-Diaz, C. Brousmiche, A.M. Candelier, A. Garcia

Se has realizado una columna detallada del carbonifero aflorante en esta region con recogida de numerosas muestras.

Las calizas se esudian esencialmente desde el punto de vista micropaleontologico con especial referencia a su contenido en fusulinidos.

Se efectuan estudios comparativos de los contenidos faunisticos de la "Caliza de Escalada", en este corte, y la "Caliza Masiva o de Pena Redonda" en Cuenca Central (Area de Villoria-Los Tornos) que confirman su discronismo.

II. GEO-TECHNIQUES '83
Dept of Geology, Portsmouth Polytechnic. 6th-8th September 1983

The aim of this Symposium is to provide an opportunity for an exchange of ideas and to critically review the present position of technology in the Earth Sciences by lectures, demonstrations and discussions.

The following topics have been proposed.

1. General topics including Diamond tools, rock sample preparation, Microfossil extraction, Conservation of timber and metal work on the Mary Rose including a visit to the Museum labs.
2. Computer Applications to the Earth Sciences.
3. Mineral Optics - Diagnostic techniques, video systems and thin section demonstration.
4. Electron Microscopy - Sample preparation, photography etc.
5. Physical rock testing techniques.
6. Exchange and availability of technical information. Technical register. Training, Courses, Qualifications and future career prospects.

In addition, local visits will be arranged according to demand, including possibly a field visit to the Isle of Wight and Sandown Museum on Friday 9 Sept. 1983.

TRADE EXHIBITION The latest equipment will be on display in laboratories adjacent to the Symposium lecture theatre by firms with particular association with Geological Laboratory work.

CONTRIBUTIONS The success of this Symposium will depend on response to our call for speakers - up to 40 minute lectures or short talks - down to 10 minutes. Facilities are available for slides, films, video and demonstrations. If you have a colleague who would be interested, please pas the word around or send us their names and addresses.

FURTHER DETAILS FROM: Mr J F Vigay, Geo-Techniques 83 Secretary, Department of Geology, Portsmouth Polytechnic, Burnaby Road, Portsmouth, Hampshire PO1 3QL.
Tel. Portsmouth 827681 Ext 57.

III. PALAEONTOLOGICAL ASSOCIATION FIELD MEETING ON THE JURASSIC OF NORTH YORKSHIRE
9-11 September 1983

Leaders: Dr C R Hill and Dr P D Taylor, Dept of Palaeontology, British Museum (Natural History), Cromwell Road, London SW7 5BD.

Objectives
To examine some of the varied marine vs. non-marine facies of the Yorkshire Middle and Upper Jurassic and to collect representatives of the rich faunas and floras.

Accommodation
The party will be accommodated in the Delmont Hotel, 18/20 Blenheim Terrace, Scarborough YO12 7HE (tel. 0723 64500). The single room price for bed, breakfast and evening meal is £12.50 per day. Because fieldwork will go on until late Sunday afternoon, some participants may wish to book an extra night's accommodation on Sunday September 11th.

To secure accommodation a non-returnable deposit of £10 should besent to P.D. Taylor not later than July 1st. This money will be deducted from the final hotel bill. The number of participants will be limited to 25.

Transport
For those not wishing to drive, Scarborough is served by regular train services from York and Hull with connections to other part of the country. Participants should arrive in time for dinner on Friday September 9th.

Transport during fieldwork will be by private car with petrol costs shared.

If you wish to attend you must inform organisers before July 1st and send deposit of £10.

IV. IV REUNIAO DE PALEOBOTANICOS E PALINOLOGOS
Sao Paula, Brazil December 1983

De 7 a 10 de dezembro de 1983 sere realizada a IV REUNIAO DE PALEOBOTANICOS E PALINOLOGOS nas dependencias do Instituto de Geosciencias de Universidade de Sao Paulo, promovida pelo Departamento de Paleontologie e Estratigrafia do IG-USP, com o apoio da Associacao Latino-Americana de Paleobotanica e Palinologia (ALPP).

Como nas reunioes anteriores, a IV RPP tera como objetivo a promocae do intercambio cientifico entre especialistes ligadoes as areas de Paleobotanica e Palinologia. Constara de sessoes tecnicas com apresentacao de trabalhos ineditos, palestras, mesas redondes, alem de uma excursao para uma localidade fossilifera do Subgrupo Itarare.

Ate a dia 31.07.83, a taxa de inscricao sera de Cr$ 5.000.00 (ou US$ 15.00) para participantes e de Cr$ 3.000,00 (ou US $ 10.00) para acompanhantes, devendo o pagamento ser realizado atravss de cheque nominal dirigido ao Sr. Fernando Cilento Fittipaldi. O valor pago dare direito ao participante de receber os volumes de Resumas e Anais, alem de um jantar de confraternizacao. Apos a referida data havera um radjuste de taxa. As despesas referentes e excursao serao cobrades a parte.

Os participantes que desejarem apresentar trabalhos deverao enviar os resumos datilografados em espaco duplo, nao superando 25 linhas, ate o dia 15.10.83. So serao

aceitos para publicacao, num volume a ser fornecido na ocasiao de IV RPP, os resumos dos participantes que tiverem pago a taxa de inscricoa ate esta data. Os manuscritos dos trabalhos efetivamente apresentados na sessao tecnice deverao ser entregues a Comissao Organizadore ate o dia 09.12.83 a serao submetidos a uma avaliacao quanto a sua forma e seu conteudo cientifico antes de serem publicados nos anais. As normas para a preparacao dos trabalhos serao comunicadas na Circular No 2.

Details from Prof. Thomas R. Fairchild, Comissao Organizadora da IV RPP, Instituto de Geosciencias, Universidade de Sao Paulo, Caixa Postal 20.899, Sao Paulo, SP (Brasil) CEP 01498.

V. 2ND INTERNATIONAL PALEOBOTANICAL CONFERENCE
Edmonton, Alberta, Canada August 18-24, 1984

The University of Alberta, Edmonton, Alberta, Canada will be the site of the 2nd International Paleobotanical Conference that is tentatively scheduled for August 18-24 1984. These meetings, which were s successful in Reading, England in 1980, will be conducted under the auspices of the International Organization of Paleobotany, and will take place immediately before the Sixth International Palynological Conference that is being planned for August 24-30, 1984 in Calgary, Canada. It is hoped that the scheduling of both meetings together will provide the opportunity for paleobotanists and palynologists to attend both conferences.

Plans at this stage call for approximately four days of field excursions that will depart from Calgary and then return to Edmonton for two days of contributed papers and poster sessions. An evening workshop on cladistics in paleobotany is tentatively being planned. The field excursion will include collecting at an Upper Cretaceous site, a visit to the Dinosaur National Park, collecting at a Paleocene locality famous for not only plant remains, but insects, fish and tetrapods as well, visit to the Columbia Ice Fields and the Jasper National Park and an additional Paleocene locality before returning to Edmonton.

The scientific program will include contributed papers and concurrent poster sessions It is anticipated that travel will be provided for the participants to Calgary for the Palynological Conference. Accommodations will include both hotel and University of Alberta dormitory facilities.

The purpose of this circular is to bring to the attention of CIMP members the meeting dates for this conference, and to establish a list of potential participants for these meetings. Further details may be obtained from Dr Ruth A Stockley, Department of Botany, The University of Alberta, Edmonton, Alberta, Canada T6G 2E9. A second circular will be mailed to all respondents early in 1983.

VI. SIXTH INTERNATIONAL PALYNOLOGICAL CONFERENCE
Calgary, Alberta, Canada August 26 - September 1 1984

The second circular has been distributed and contains information regarding the scientific program and general field trip itineraries. It is accompanied by a pre-registration form and an abstract form. Any person who has not received this circular should contact:

Lois Kokoski, Sixth International Palynological Conference, Faculty of Continuing Education, The University of Calgary, Calgary, Alberta, Canada, T2N 1N4.

The third circular will be sent only to those persons who complete and return Form 2A of the second circular.

Deadline for abstracts is December 31, 1983 and copies must be sent to the above address prior to that date. Please note that the dates for the conference were incorrectly cited in the first circular.

B. ABSTRACTS OF PAPERS PRESENTED AT MEETING OF SOCIETE BELGE DE GEOLOGIE/BELGISCHE VERENIGING VOOR GEOLOGIE Louvain la Neuve, 3rd May 1983

1. ACRITARCHES DU CAMBRIEN MOYEN DE LA VALLEE DE TACHEDDIRT (HAUT-ATLAS, MAROC)
M. Vanguestaine, J Van Looy

Les calcaires et siltstones qui affleurent dans la vallee du Tacheddirt (Haut-Atlas, Maroc) ont fourni 13 gites a Acritarches parmi lesquels sont idenitifiees 16 especes dont 2 sont nouvelles. L'inhomogeneite de distribution stratigraphique des especes indique l'existence de deux associations. La plus ancienne est diversifiee et se caracterise par la presence constante de Cristallinium cambriense (Slavikova) Vanguestaine, 1978, Eliasum llaniscum Fombella, 1978 et Timofeevia lancarae Cramer & Diez) Vanguestaine, 1978. La plus recente est peu diversifiee, composee seulement de Sphaeromorphes et de Micrhystridium spp. Le premiere est lacalement datee par Trilobites dont la decouverte est rapportee ici pour la premiere fois. Elle appartient, en partie du moins, soit a l'"etage" a Paradoxides belandicus soit a la partie inferieur de l'"etage" a Paradoxides paradomissimus du Cambrien Moyen. La seconde est localement datee aussi par Trilobites qui indiquent le Cambrien Moyen.

Un schema biostratigraphique, en 7 zones ou superzones d'Acritarches, synthetise, pour la premiere fois, les donnees disponibles pour l'ensemble du Cambrien. Il permet de situer correctement, dans leur contexte biostratigraphique, les unites lithologiques analysees a Tacheddirt. Les implications des precisions chronostratigraphiques decoulant de ce travail sont consignees dans les conclusions.

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2. LES PLANTES EMSIENNES DE MARCHIN (VALLEE DU HOYOUX, BELGIQUE)
Ph. Gerrienne

L'application de techniques paleobotaniques appropriees a permis de mettre en evidence dans l'Emsien de la vallee du Hoyoux, une quinzaine d'especes vegetales.

Dans les deux gites etudies, les "Psilopsides" sont les plus nombreuses. Cinq especes de Psilophyton, dont une nouvelle, ont ete reconnues. Les Zosterophyllum sont bien representes egalement. Alors qu'un unique specimen avait ete recolte a ce jour en Belgique, trois especes sont decrites; l'une d'entre elles est nouvelle.

Plusieurs genres jusqu'ici inconnus en Belgique (Sawdonia - Gosslingia - Renalia - Krithodeophyton) ont ete identifies.

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3. MIOSPORES ET ACRITARCHES DE LA FORMATION D'HYDREQUENT, BOULONNAIS, FRANCE
S. Loboziak, M. Streel & M. Vanguestaine

La partie superieure des Schistes d'Hydrequent, comprise entre le dernier banc dolomitique et les Gres de Ste Godeleine, est constituee d'au moins 20 metres de sediments schisteux, a fines passees plus greseuses. Dans les 44 echantillons etudies, un grand nombre d'especes de spores et des acritarchs ont ete identifies. Ils permettent l'elaboration d'une tres fine zonation palynologique presqu'entierement situee dans le Frasnien superieur. Les echantillons les plus superieurs, 0 m 50 sous la base des Gres de Ste Godeleine, peuvent etre correles avec certitude avec le Famennien inferieur de la coupe-type en Belgique; la limite Frasnien/Famennien se place les Schistes d'Hydrequent entre 0 m 50 et 2 m 50 sous la base des Gres de Ste Godeleine.

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4. CORRELATION PAR ACRITARCHES ENTRE LE CAMBRO-TREMADOCIEN DE RANDOM ISLAND (CANADA) ET LA CAMBRO-TREMADOCIEN DE BELGIQUE ET DE L'ARDENNE FRANCAISE

Cet article a pour but de montrer quelles sont les incidences, pour la stratigraphique du Paleozoique le plus inferieur de Belgique, de la parution de travail de Martin & Dean, 1981. Ces deux auteurs decrivent de maniere tres precise la morphologie et l'extension stratigraphique de 46 especes d'Acritarches isolees de sediments qui s'etagent du Cambrien moyen a l'Ordovicien inferieur (Tremadocien inferieur). La succession est prise dans l'ile de Random, ile de Terra Neuve orientale, qui appartient, d'un point de vue structural, a la Plateforme d'Avalon dont on connait les affinites geotectoniques avec le domaine Atlantique. La plateforme d'Avalon faisait partie du continent europeen avant l'ouverture au Paleozoique inferieur de l'Ocean proto-Atlantique. Il en resulte par consequent que les niveaux investigues par Martin & Dean, 1981 sont

tres bien correles par leurs faunes a trilobites aux faunes scandinaves et anglo-galloises. Par ailleurs, des similtidues certaines s'etablissant entre les associations d'Acritarches decrites par Martin & Dean, 1981 et celles du Cambro-Tremadocien de Belgique.

C. GLYCEROL JELLY PREPARATIONS GONE BAD

Roughly speaking, there are three ways in which glycerol jelly preparations perish:

1. Cushing (or crushing) effect. Grains flattened, but otherwise in fairly good shape. Reason: Too little watery jelly at preparation, ineffective protection against drying out. Cure: If the preparation is not too old, gentle heating, removal of cover-slip. After a period for recovery - usually possible - re-embed avoiding the faults indicated above. Very large grains may profit from some splinters of cover-slip incorporated in the preparation to keep roof up.

2. Bloating. Grains blow up, become progressively less distinct, diagnostic features degenerate. Reason: Chemical interaction between medium and exine, mechanism unknown; no explanation brought forward so far seems adequate. Cure: none.

3. Drying out. Glycerol jelly forms a dendritic pattern trapping the grains. Reason: Desiccation. Cure: If not too old and dry, such preparations can sometimes be saved. Pry off the cover-slip; if any part of the preparation is left on it, treat it like the slide. Attempts to soften the jelly with water may be successful. Should be done at room temperature and, at best, takes a long time, matter of weeks. If successful, treat like fresh jelly, adding some more. If unsuccessful, fresh jelly gently heated on and into the preparation may sometimes do the trick. Reseal and prevent another drying out by running wax under the cover-slip. Inspect the preparation after some time to check that the wax has not separated from the glass which easily happens if the latter is not absolutely clean (Finger-prints, glycerol!). Lacquer seals alone are unreliable, but an immersion-oil resistant lacquer may be used for additional protection.

Best cure for all cases: Make another preparation.

Knut Faegri (ex A.A.S.P. Newsletter).

D. CIMP NEWS FROM ARGENTINA

III Argentinian Congress on Palaeontology and Biostratigraphy

Held in Corrientes, September 6-10, 1982. A volume with selected papers is in press (write to Dr R Herbst, Lavalle 2675, 3400 Corrientes, Argentina). An Abstracts volume is also available. The papers were presented in symposia or in separate sections. Those of interest to us are: Azcuy, C.L., Gutierrez, P.R. and Barreda, V.D. Carboniferous palynomorphs in Sierra de Famatina, La Rioja Province; Azcuy, C.L. and Rodrigo, L.A. The Carboniferous Permian boundary in Subandean Bolivian sequences; Cesari, S. Pollen grains in Tupe Formation (Sierra de Mez) La Rioja Province; Salas, A. Termopalynology of the well Puesto El Tigre (Salta). Other palynological and palaeobotanical papers are also included.

Palaeobotanical and Palynological Bibliography in Argentina (1970-1980)

Compiled by A Rimski-Korsakov (CIRGEO, Velasco 847, 1414 Buenos Aires, Argentina). A single volume in two parts: 1) references by authors and 2) significant key words (pp. 1-18 and 1-16, respectively). Processed in the computer system of Buenos Aires University. There are 250 references that cover all literature referred to Argentina during the period 1970-1980. It is the most complete and useful source to obtain data from paper devoted to argentinian plant fossils.

Asociacion Latinoamericana de Paleobotanica y Palinologia

Bulletin n 8 has been recently published (1982), including 5 papers; of interest are: Rimski-Korsakov, A., The use of computer for the Argentine Paleobotanical and Palynological Bibliography; Gamerro, J.C., Archangelsky, S. and R. Weber, Palaeobotanical and Palynological Bibliography in Latin America (1979-1980). Basides, there are 3 palaeobotanical papers.

Write to the Editor, Dr V Valkheimer, Museo Argentino de Ciencias Naturales "B. Rivadavia", Av Angel Gallardo 470, (1405) Buenos Aires, Argentina.

S. ARCHANGELSKY

E. GEOLOGICAL SURVEY OF CANADA TRANSLATION SERIES

[This item appeared in one of the recent editions of the A.A.S.P. Newsletter and is reproduced here because of its relevance to C.I.M.P. Members]

For many years, the Geological Survey of Canada has translater articles on palynology, mainly from Russian but also from other languages, and has made these translations available to the public. Following is the latest list of translations, provided by Colin McGregor. Copies of these translations may be obtained by writing to the Librarian, Geological Survey of Canada, 601 Booth Street, Ottawa, Canada, K1A OE8. You will receive an invoice for prepayment of your order. The cost, 20 cents per translation page, plus handling and postal charges if applicable, is subject to change.

ANGLSHEVA, F.P. and SHESHEGOVA, L.I., 1974. On methods of extraction of microfossils from rocks using acid treatment. In: VOZZHENNIKOVA, T.F., TIMOFEEV, B.V. and SHESHGOVA, L.I. (eds.), Microfossils of the USSR, "Nauka", Siberian Branch, Novosibirsk: 94-97. Translation #2399.

ARKHANGELSKAYA, A.D., 1972. Palynological characteristics of lower horizons of the Middle Devonian in the eastern part of the Russian Platform. Trudy VNIGNI No. 83, Paleontological Collection 4: 124-133, 202. Translation #885.

ARKHANGELSKAYA, A.D., 1980. On the establishment of the Retusotriletes clandestinus Zone in the lower part of the Devonian of the south-eastern districts of the Orenburg Oblast. In: BYSHEVA, T.V. (ed.), Palynological research in the Proterozoic and Phanerozoic of oil and gas bearing regions of the USSR. Ministry of Geology of USSR, Trudy VNIGNI, No. 217, Moscow: 47-52. Translation #2476.

ARKHANGELSKAYA, A.D., 1980. Plant spores from some Lower Devonian sections of the western regions of the Russian Plate. In: BYSHEVA, T.V. (ed.), Palynological research in the Proterozoic and Phanerozoic of oil and gas bearing regions of the USSR. Ministry of Geology of USSR, Trudy VNIGNI, No. 217, Moscow: 26-47. Translation #2488.

BUROVA, M.I., 1978. Lower Devonian microphytofossil assemblages of the Lvov Paleozoic sag. Paleontologicheskiy Sbornik, 1978(15): 62-72. Translation #2495.

CORNA, O., 1969. Bemerkungen zur Verbreitung palynologischer Mikrofossilien vom Praekambrium bis zum Unterkarbon. Geol. Sbor., Geologica Carpathica, 20(2); 399-416. Translation #2480.

DIBNER, A.F., 1977. Palynostratigraphic concepts, their classification, and methods of establishing palynozones with examples from the Carboniferous and Permian of middle Siberia. In: BODAREV, V.I. and LAZARENKO, N.P. (eds.), Precambrian and Paleozoic stratigraphy and paleontology of Northern Siberia. USSR Ministry of Geology, Scientific Research Inst. of Arctic Geology, Leningrad: 33-50. Translation #2467.

GOLUBTSOV, V.K. (editor), 1978. Plant microfossils. In: Stratigraphical and paleontological research in Byelorussia. Byelorussian Sci. Res. Geol. Exploration Institute, Minsk, "Nauka i Tekhnika": 3-4, 85-111, 128-133, 246-247. Translation #2459.

KAISER, H. & ASHRAF, R., 1974. Gewinnung und Praeparation fossiler Sporen und Pollen sowie anderer Palynomorphae unter besonderer Betonung der Siebmethode. Geol. Jahrbuch 25:85-114. Translation #889.

KEDO, G.I. & AVKHIMOVICH, V.I., 1969. Some data on the palynological characteristics of deposits of the Frasnian Stage of the Upper Devonian in the Rechitsa Platform. In: Geol. & Oil-Bearing Territory of Byelorussia & Adjacent Regions: Minsk: 212-240. Translation #2333.

LOMAYEVA, Ye. T., 1976. Microphytofossil assemblages of the Early Evonian from a core of the Kamensko-Bugskaya No. 4 borehole. In: Acad. Sci. Ukr. SSR, Inst. Geol. Sci., Palynol. Research Sedim. Depos. Ukrain. and Adjacent Regions: 27-33. Translation #2127.

LU LICHANG, 1980. On the occurrence of Archaeoperisaccus in E. Yunna. Acta Palaeontologica Sinica, 19(6): 500-502. Translation #2482.

LU LICHANG, 1980. Devonian miospores from the Longhuashan section in Zhanyi of Yunnan and their stratigraphic significance. Memoirs of Nanjing Institute of Geology and Palaeontology, Academia Sinica, No. 14: 1-62. Translation #2487.

MEDIANIK, S.I., 1980. Spores of the genera Archaeoperisaccus Naumova and Archaeomonoletes gen. n. and their stratigraphic meaning in the Timan-Pechora provinces. Vestnik Moskovskogo Universiteta, Geology, 1980(5): 93-96. Translation #2461.

MEDIANIK, S.I., 1981. Spores from sporangia of Late Devonian Archaeopteris from southern Timan. Doklady of Academy of Sciences of USSR, 258(5): 1209-1211. Translation #2504.

MEDIANIK, S.I., and YATSKEVICH, B.A., 1981. The boundary between the Kynovsky and the Sargayevo Beds within the sections of south and central Timan according to palynological data. In: Izvestiya Academy of Sciences of USSR, Geological Series, No. 8: 132-136. Translation #2503.

NADLER, Yu. S., 1975. Application of manual punch-cards for study of Devonian miospores. Yakut. State Univ., Use of Diagnostic Information - Searching Systems for Studying Paleoz. Miospores, Yakut: 81-89. Translation #1015.

NADLER, Yu. S. and KUZNETSOVA, V.G., 1980. Palynological characteristics of Famennian deposits of Sayan-Altai mountain region. In: SACHS, V.N., VOLKOVA, V.S. and CHLONOVA, A.F. (eds.) Paleopalynology of Siberia; Papers of the Soviet Palynologists to the 5th International Conference on Palynology (Cambridge, England, 1980), "Nauka" Moscow: 12-17, 133-135. Translation #2493.

OZOLIN'A, V.R., 1961. Spore-pollen spectrum of deposits of the Frasnian Stage in the Alanda well. Transactions of the Institute of Geology, Academy of Sciences of Latvian SSR, 7: 127-139. Translation #1080.

PANSHINA, L.N., 1971. New species of spores from the lower part of the Frasnian Stage in the Volga-Ural Oblast. In: Palynology and Stratigraphy of Paleozoic, Mesozoic and Paleogene deposits of the European Part of the USSR and Central Asia, Trudy VNIGNI NO. 106: 90-96. Translation #1081.

PARTYKA, I.I., 1971. Vegetative microfossils of the Tiverian stage of the south-western margin of the Russian Platform. Paleontologicheskii Sbornik, 7(2); 52-55. Translation #2201.

PAVLOV, V.V., 1959. Some questions on the dependence of spore-pollen assemblages on lithological composition. In: Collected papers of Paleontology and Biostratigraphy, USSR Scientific Research Institute of Arctic Geology, 16: 94-105. Translation #904.

PYKHOVA, N.G., 1960. Concerning the presence, in the section of the terrigenous productive Devonian of the Tuimazy Petroleum-bearing area, of beds characterised by the Mosolovskii and Morsovskii assemblages of spores. Trudy (Proceedings) of VNII (the All-Union Petroleum-and-Gas Scientific Research Institute), Issue 23: 31-36. Translation #2453.

PYCHOVA, N.G., 1960. Spore-pollen assemblages of the terrigenous part of the productive Devonian in the Tatar ASSR and their significance for stratigraphy. In: The Geology of Oil Deposits, Trudy VNII, No. 23: 37-48. Translation #2449.

PYCHOVA, N.G., 1965. On the possibility of the use of the method of palynological analysis for detailed correlation of the Pashia Formation of south-east Tataria with deposits of the same name in Western Bashkiria. "Oil-industry Geology", State Committee of the Oil Producing Industry at the State Plan of the USSR, VNII Trans. No. 43: 332-338. Translation #2450.

SERGEEVA, L.A. 1965. Establishment of the age of Paleozoic salts in the south-eastern part of the Dnepro-Donets Depression according to spore-pollen analysis. Geological Journal, 24 (6): 96-98. Translation #2197.

SERGEEVA, L.A., 1971. New species of spores from Upper Devonian deposits of the Dnepro-Donets Depression. In: Problems of Palynology, Academy of Sciences of USSR, "Nauk. Dumka", Kiev: 42-56. Translation #892.

SERGEEVA, L.A., 1973. Microphytofossils of the Devonian salt deposits in the Dnieper-Donets Basin. Acad. Sci. Ukrain. RSR, Inst. Geol. Sci., Fossil fauna and flora of the Ukraine, No. 1, pp. 57-62, Kiev. Translation #901.

SERGEEVA, L.A., 1974. Micropaleophytological characterization of Devonian deposits of the Dnepro-Donets Basin. In: Stratigraphy of Ukranian SSR, 4 (Part 2, Devonian), "Naukova Dumka", Kiev: 162-174. Translation #900.

VOLOCHAEV, F. Ya., KUD'YAROV, I.S. and PETRENKO, V.I., 1979. Age of the volcanogenic-sedimentary terrane of eluvial bauxites" roof in Middle Timan. Proceedings of the USSR Academy of Sciences, Geological Series, 1979 (5): 151-154. Translation #2326.

YALISHEVA, A.A., 1980. The age of bauxite deposits of Timan on palynological data. In: PANOVA, LA. (ed.) Paleomicrophytological research for purposes of stratigraphy. Ministry of geology of USSR, VSEGEI, Transactions, N.S., Leningrad, 305, 42-53. Translation #2502.

YEGOROV, A.I., 1971. Some principles that lessen the precision of palynological stratigification. In: Palynol. of the lower Don and northern Caucasus, for the 3rd Internat. Palynol. Conference (Novosibirsk, U.S.S.R., 1971). Publ. Rostov Univ., 1971: 3-15. Translation #2282.

F. POSITIONS VACANT

ALFRED EISENACK
13th May 1891 - 19th April 1982

With the death of Alfred Eisenack in Reutlingen on 19th April 1982, German Micropalaeontology lost one of its greatest pioneers. Sure of his aim, he seized upon and developed the technique of dissolving rock with acid, which previously had been only rarely applied. The result was an abundance of new finds of microfossils from inorganic and, especially, from organic skeletal substances which he systematically studied and described.

Eisenack was a lifelong 'amateur' who used his free time to follow the scientific work which was his real interest. A high school teacher by profession, he worked extensively in the natural sciences in Königsberg, East Prussia, and, after the partition of Germany as a result of the Second World War, in Reutlingen, Württemberg. The universities in Königsberg and Tübingen gave him an opportunity to expand his micropalaeontological knowledge in teaching and to build up a small group of pupils. His special love was directed to work at the microscope. In his workroom at home, as well as once or twice a week in the Tübingen Institute he spent each hour of his extremely limited free time in preparations, photography or writing. Later, after retiring from teaching, he was able to devote himself to the work where his real interests lay.

Alfred Eisenack, the son of a book keeper, was born on 13th May 1891 in Altfelde, West Prussia, and grew up in the shadow of the old castle at Marienburg. He attended the Elbing Technical School which he left with the school leaving certificate in 1911 to study Natural Sciences at the University of Jena, Thüringen. In 1913, under the direction of Prof. Tornquist in Königsburg, he commenced a geological and stratigraphical study of the Upper Tithonian at Gardasee (Mte. Baldo) which he was not able to complete before the outbreak of the First World War. He joined the army and was taken prisoner in Russia in November 1914. He was not released until 1920. Although he tried to take up his studies in Königsberg again, he did not have the means to do so and therefore decided to go into school teaching and took the examinations for this, specialising in chemistry, biology, mineralogy, geology, mathematics and physics. He qualified as a teacher in 1925. At this time he also began to spend more and more tim

studying calcareous deposits of his East Prussian homeland, particularly the Samland Coast. Inspired by Paul Kraft's ontogenetic studies on diplo- and monograptolites, he dissolved limestone and, later, siliceous rocks in acid and discovered a large number of microfossils: chitinozoa, melanosclerites, acritarchs ('hystrichospheres'), graptolites, scolecodonts, conodonts, foraminifera and many others. He isolated them with fine glass pipettes, mounted them in Canada balsam and studied them systematically. On the basis of his work he wrote his doctoral thesis (1931) and the dissertation (1942) which resulted in his promotion to lecturer. In between, the Second World War broke out. Eisenack served as a major and unit chemist and at the end of the war was once more a prisoner in Russia. When he was released in 1949, East Prussia was no longer part of Germany. He came to Baden-Württemberg where he had to make a new start amid great difficulties. Former pupils and colleagues helped him and he was able to establish himself in Reutlingen where he obtained a post in the Economics Highschool and made a successful career as an economics teacher. In 1951, Tübingen University made him a honorary professor. In 1957 he retired and was then free to devote himself to his scientific interests.

Eisenack devoted himself completely to the Palaeozoic limestones of the Baltic Shield and Baltic area, with their rich content of chitinozoa, acritarchs and other microfossils, right up until the last weeks of his life. Gradually he identified other stratigraphical, petrographical and regional features as a result of his research. He devoted more and more time to the study of dinoflagellates and made major contributions to this field. For many years he collaborated closely with Isabel Cookson on the Mesozoic and Tertiary from Australian boreholes and surface samples. He finally summarised his life's work in the many volumes of the "Catalogue of dinoflagellates, hystrichospheres and related microfossils" together with several other authors. He also published 140 papers and monographs. Apart from his micropalaeontological work, he also published articles on mineralogy and petrology. For decades he reported literature relevant to the subject in the German language. Eisenack was an honorary member of the Paläontologische Gesellschaft, the Society of Economic Paleontologists and Mineralogists and the American Association of Stratigraphic Palynologists, Inc.

Alfred Eisenack, who was at heart a cheerful and good natured man, had a hard life. The ten years as a prisoner of war in Russia marked him deeply as did the loss of his country, East Prussia. The difficulties of putting down roots in new surroundings were increased for him by the complete destitution which he experienced following his exile and the permanent injury which impaired his mobility. His closest friends knew that this thoughts were often "at home" in East Prussia. This may explain his tendency to improvise, to make do with the simplest things, even in the apparatus and material he used for his work. The final blow of the loss of his wife (1975) was one from which he was hardly able to recover. He buried himself in his work until a few weeks before his death when illness finally forced him to lay down his pen and pipette.

(Thanks to Ian Wilkinson and Geoff Warrington who translated the original supplied by Hans Gocht.)

H. NEW MEMBERS AND CHANGES OF ADDRESS

New Members

BRAHAM, W
Gearhart Geodata
Stratigraphic Services
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Dyce
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Scotland

FOSTER, Clinton
Western Mining Corporation Ltd
Exploration Division - Petroleum
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168 Greenhill Road
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South Australia

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Division Hydrocarbures
Laboratoire Central des Hydrocarbures
BOUMERDES
Algeria

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