

Commission Internationale de Microflore du Paléozoique NEWSLETTER 43 December 1992

CIMP President:

Geoffrey Clayton Dept. of Geology Trinity College Dublin 2 Ireland

tel.: 353 (0)1 7021235 fax.: 353 (0)1 773072

CIMP Secretary-General:

(change of address!)
Jacques Verniers
Lab. Paleontologie
Universiteit Gent
Krijgslaan 281 S8
B-9000 Gent, Belgium
tel.: 32 (0)91 64 46 14

fax.: 32 (0)91 64 49 97 E-mail (BITNET/EARN):

VERNIERS@PALEONTO.RUG.AC.BE

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*First announcement of the Symposium on Palynology, Palaeoenvironments and Stratigraphy, 6-10 september 1994, Sheffield, U.K.

*Second Circular of the Early Carboniferous Stratigraphy Meeting Liège 1993, Belgium 6-10 june 1993. 3-6

*Review of the Palaeozoic-Triassic papers at the **8 th International Palynological Congress**, Aix-en-Provence, Sept. 6-12, 1992. 7-8

*CIMP annual subscription 1993.

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*Directory of Members (separately)

Note of the Secretary

This newsletter contains two parts, the reports and announcements and the Directory of the CIMP members 1992.

From the CIMP Subcommissions and the Working groups, recently active (see second page of the Directory), I hear encouraging news of much growing activities. Also there have been several offers for organizing CIMP meetings. We have scheduled them in the following order. The next meeting is planned in june 1993 in Liège, Belgium, the following year in september 1994 in Sheffield, U.K. and an interesting offer was received from Algeria, probably for 1995. The next IFPS International Palynological Congress will be held in 1996 in the U.S.A.

The directory of members was started by the previous secretary-general W. Brugman by putting all members in a database. It was adjusted in accordance to the questionnaire that was send out early 1990 and this year the list was corrected once more with the help of respondents of countries or areas (E. Asselin, R. Brocke, G. Clayton, P. Dufka, O. Fatka, P. Hill, I. Lakova, S. Loboziak, B. Owens, F. Paris, G. Playford, M. Tongiorgi, R. Turner, I. Van Waveren, K. Zonneveld). The directory contains the list of 519 persons from 48 countries, studying Palaeozoic and early Mesozoic Palynomorphs who either wrote to become a member, filled in the form in 1990, attended recently a C.I.M.P. meeting, or were reported by local respondents to show interest in the CIMP. Some institutions have also written to be a CIMP member and to receive the Newsletter.

The Newsletter is open for all members for announcements for symposia or conferences, abstracts of previous ones, news from the working groups and subcommissions, changes of address of members or other messages. These should reach the secretary by end of march and 15 of october each year. My new working place at the University of Ghent will allow now a more regular distribution of the Newsletter twice a year.



Commission Internationale de Microflore du Paleozoique:

Symposium on

Palynology, Palaeoenvironments and Stratigraphy

6 - 10 September 1994

Centre for Palynological Studies University of Sheffield, England

Organising Committee

Geoff Clayton Ken J. Dorning David W. Jolicy Bernard Owens Edwin Spinner

Local secretary
Dr D W Jolley
Centre for Palynological Studies
The University of Sheffoeld
Mappin Street, Sheffield S1 3JD
England.

Fax: (0742) 739826

CIMP Symposium September 1994

Centre for Palynological Studies, University of Sheffield

Stratigraphical and Environmental Palynology

Symposium sessions

Stratigraphical palynology in regional correlation

Application of palynology in event correlation and high resolution stratigraphy

Organic palynofacies and palynomorph preservation

Palaeoenvironmental reconstruction

Taxonomic studies

Open session

Space will be available for poster presentations.

Palaeozoic and Mesozoic field excursions will be available.

Cost estimates at 1994 prices:

Registation fee: £50.00 Includes cost of Abstract volume, tea and coffee and conference dinner.

Accomodation costs: £36.00 per day for Bed, breakfast, lunch and evening meal. (4 days)

Both the Acritarch Subcommission and the Chitinozoa Subcommission intend to hold separate workshops in connection with the Sheffield Meeting. The next Newsletters of both Subcommissions that will be distributed early 1993 will contain further details.

EARLY CARBONIFEROUS STRATIGRAPHY - LIEGE 1993

SECOND CIRCULAR, NOVEMBER 1992:



On the occasion of the 175th anniversary of the foundation of the University of Liège, Belgium, the laboratories of Plant Paleontology (Director: Professor M. Streel) invite:

• The IUGS Subcommission on Carboniferous Stratigraphy (SCCS) to hold its Field and General Meeting.

• The IFPS Commission internationale de la microflore du Paléozoïque (CIMP) to hold meetings in the Liège area in early June 1993.

The meeting will be organised in cooperation with:

• The Belgian Geological Survey (Professor J. Bouckaert, Chairman of the Société géologique de Belgique).

• The University of Louvain paleontological laboratories (Professors M. Coen and E. Groessens).

• The Belgian Committee for Dinantian Stratigraphy (Chairman Professor E. Poty, Animal Paleontology, University of Liège).

The conference organisation will be supported by:

• The National Funds for Scientific Research of Belgium.

• The Ministry of Economic Affairs of Belgium.

The Société géologique de Belgique.

MEETING PROGRAM 6-10 JUNE 1993

Theme: Any papers related to the aims of the Subcommission including the final report of the former Working Group on the Devonian-Carboniferous Boundary. All SCCS and CIMP sessions are open to all participans.

	Carboniferous Boundary. All SCCS and CIMP sessi						
DATE	SCCS PROGRAM	CIMP PROGRAM					
SUNDAY 6 JUNE: 14:00 - 20:00	Registration in Liège Accommodation (1 night), Hotel IBIS, Liège (own arrangements).						
MONDAY 7 JUNE:	Field trip in the Upper Devonian / Lower Carboniferous of the Ourthe (Dinant Syncline) and Me (Namur Syncline) valleys.						
Morning: 8:30 - Lunch (Packed Lunch)	Mostly siliciclastic facies: Middle (Fa2a) and upper (Fa2c) Famennian at Esneux; latest Fame (Fa2d-Tn1a*) at Chanxhe; and Tournaisian (Tn1b*-Tn2a*-Tn2b*) at Rivage-gare. * Lithological units.						
Afternoon: Lunch - 18:00	Mostly limestone facies: Tn3a*-V1a* at Chanxhe; Tn3b*-Tn3c* at La Préalhe; and Famennian, Tn1bγ*-Tn2b*, Tn dolomit, V1a*-V3a*, Namurian (E2) at Engihoul (Namur Syncline). Bus travel to Centre Vacances Ovifat.	Bus travel to Centre Vacances Ovifat. Late registration (14:00 - 18:00). CIMP meeting in Centre (15:00 - 18:00).					
TUESDAY 8 JUNE: 9:00 - 12:00; 14:00 - 18:00	SCCS meeting sessions in Centre Vacances Ovifat.	CIMP guided visit to the Nature Reserve or working group meetings in the Scientific Station, Liège University at Mont-Rigi.					
WEDNESDAY 9 JUNE: Morning 9:00 - 12:00	SCCS session in Centre Vacances Ovifat	CIMP working group meetings in the Scientific Station, Liège University at Mont-Rigi.					
Afternoon 14:00 - 18:00	Field trip to reefal Famennian of the Vesdre valley (Vesdre Syncline); "Strunian" biostomes at Dison; middle Famennian reefs at Baelen.	CIMP meeting in Centre Vacances Ovifat.					
THURSDAY 10 JUNE: Morning	SCCS / CIMP joint session in Centre Vacances Ovifat.						
Afternoon	End of Meeting. Travel to Aachen (for train connection) or Hohenlimburg-Reh (for Excursion 1).						

POST MEETING EXCURSIONS:

EXCURSION 1: leader:	The Upper Famennian - Lower Carboniferous of the Rheinisches Schiefergebirge. Dr. Eva Paproth, Krefeld.		
THURSDAY 10 JUNE:	Hasselbachtal section near Hohenlimburg-Reh.		
FRIDAY 11 JUNE:	Ocse, Oberrödinghausen, Drewer (+Trachtenberg if time permits).		
SATURDAY 12 JUNE:	Riescheid Excursion ends in Köln.		
EXCURSION 2: leader:	The Upper Famennian-Carboniferous of the Pyrénées. Dr. M-F Perret, Laboratory of Structural Geology and Tectonophysics, University of Toulouse, France		
MON. 14 JUNE (afternoon):	Upper Famennian - Lower Carboniferous in the Central Pyrénées (Milles Section).		
TUESDAY 15 JUNE:	Upper Famennian - Lower Carboniferous and Culm with exotic limestone blocks (Saubette and Castets sections).		
WEDNESDAY 16 JUNE:	Upper Visean to Middle Namurian: nodular limestones, laminated limestones - Culm; late Mississippian - early Pennsylvanian (Gavarnie-Col des Tantes sections). Excursion ends at Toulouse.		

PUBLICATIONS:

A special volume of the Annales de la Société géologique de Belgique on the final report of the International Working Group on the Devonian / Carboniferous Boundary, to be published in early 1993, will be distributed to all participants (SCCS and CIMP).

Another special volume might be devoted to the proceedings of the SCCS and CIMP meetings and published in 1993/94, if appropriate.

ACCOMMODATIONS: .

The following accomodation has been planned:

Hotel IBIS, Liège, Belgium - In June 6 / Out June 7 (own arrangements).

- Centre Vacances Ovifat (50 Km southeast of Liège, Belgium) In June 7 / Out June 10. The Centre Vacances Ovifat has large bedrooms (1 to 3 persons) with 1 shower/bath for each six rooms, a conference room, bar, dining room, and swimming pool. PLEASE NOTE that towels are NOT provided. It is situated in the high country of Belgium (below 700 m!) very near the Hautes-Fagnes Nature Reserve with impressive landscapes, peat-bogs and forests.
- Hotel REHER HOF, Hohenlimburg-Reh, Germany In June 10 / Out June 12.
- Own arrangements in transit In June 12 / Out June 14.
- In vicinity of Toulouse, France In June 14 / Out June 16.

TRAVEL:

The bus transporting the field trip participants on MONDAY JUNE 7 will commence early morning in Liège and travel direct to the Centre Vacances Ovifat after lunch for CIMP participants and again for SCCS participants at the end of the day. It will NOT be possible to attend this field trip by private car. Only those participants NOT attending the excursion may drive their cars directly to the Centre Vacances Ovifat on the afternoon of Monday 7 June, making sure to arrive before dinner. Alternative transport from Liège to the Centre Vacances Ovifat can be arranged on special request to the organisers.

The last registration desk will be open from 14:00 to 18:00 in the Centre Vacances Ovifat. A location map of the Centre is available on request.

POST-MEETING EXCURSION 1 will commence from the Centre Vacances Ovifat on the afternoon of Thursday 10 June and finish on Saturday 12 June at Köln (Cologne) Railway Station and Airport.

POST-MEETING EXCURSION 2 will commence at St Girons (Ariège), 70 Km south of Toulouse at 12:00 on Monday 14 June and finish on the afternoon of Wednesday 16 June in Toulouse. Transport from Toulouse to St Girons can be arranged on special request to the organisers.

CHARGES:

Both Post-Meeting excursions will travel by bus unless there are sufficient cars available.

Payment is required in advance before 31 March 1993 in Belgian francs (BFR) ONLY for those items specified on your registration form. Additional fees for transport during the post-meeting excursion 1 can be paid at the registration desk. All fees connected with the Pyrénées excursion in France are to be paid at Toulouse.

Accommodation at the Hotel IBIS in Liège must be paid direct at the hotel. Please ensure that you make your own reservations direct to:

Hotel IBIS Liège Opéra Place de la République française 41 B-4000 LIEGE, BELGIUM

Phone: 32 41 23 60 85; Fax: 32 41 23 04 81; Telex 42369;

RESINTER (0)78 110 127 free call!

FUNCTION	INCLUDES	COST 2100 BFR for single room; 1200 BFR/1 person in double room			
Sunday 6 june Hotel IBIS, Liège	Make your own reservations trough any IBIS Hotel or via RESINTER. Breakfast is included; dinner at your own expense.				
REGISTRATION FEE	Abstract volume, D/C boundary volume.	1000 BFR			
FIELD TRIP - Monday 7	Bus fare, packed lunch, guidebook.	1000 BFR			
CENTRE VACANCES OVIFAT- from Mon. 7 (dinner) to Thurs. 10 (lunch)	3 nights single accommodation, 3 breakfasts, 3 lunches, 3 dinners. Excludes coffee breaks and other drinks.	5000 BFR			
FIELD TRIP - Wednesday 9	Bus fare and guidebook	500 BFR			
EXCURSION I	2 nights accommmodation, 2 breakfasts, 2 packed lunches, 2 dinners.	5500 BFR (275 DM) for single room 4500 BFR (225 DM)/1 person in double room			
Thursday 10 - Saturday 12 (from Thurs. dinner	Guidebook	400 BFR (20 DM) (Deusch Mark)			
to Sat. lunch)	Bus fare*. Cost depends on number of participants.	100 - 160 DM			
EXCURSION 2 Monday 14 - Wednesday 16 (from Mon, lunch to	2 nights accommodation, 2 breakfasts, 3 packed lunches, 2 dinners and guidebook.	700 FF (Franc français)			
Wed. lunch)	Transport*.	200 FF			

^{*} if necessary

CORRESPONDENCE:

Please complete the registration form on the reverse of this page and forward it to the organisers **BEFORE 15 FEBRUARY 1993.**

Payment of the appropriate amount of Belgian francs should be forwarded to the bank **BEFORE 31 MARCH 1993.**

PROFESSOR M. STREEL Services Associés de Paléontologie Université de Liège, Bât. A1 7, Pl. du Vingt-Août B-4000 LIEGE, BELGIUM

Phone (automatic recorder): 32 41 66 54 98 Fax: 32 41 66 57 00, mention **Streel**.

Telex: 41397 univ lg b

REGISTRATION FORM:

•	Please complete and return this registration form to M. Streel by 15 Feb. 1993 NAME:
	ADDRESS:
	NAME OF ACCOMPANYING SPOUSE (if attending):

	I wish to present a paper entitled:							
	l am interested in this paper being published in the proceedings							
	I do not expect to attend the June 1993 meeting but would purchase:							
	The Devonian-Carboniferous Boundary publication. The proceedings of papers presented at the June meeting.							
	The excursion guidebooks produced for the June meeting.							
	I will be present and attending as indicated below:							
	field trip (both facies), Mon. 7 full day.							
	field trip (silicicl. facies), Mon. 7 morning.							
		CIMP meeting, Mon. 7 afternoon.						
	I wil	i attend the	mee	etings on T	ues.	8		
		SCCS		CIMP		Nat. Res. visit		

I will attend the meetings on Wed. 9 morning								
SC	SCCS CIMP							
field	d trip (reefal F	amen.)	Wed.	9 aftern	on.			
or C	or CIMP meeting, Wed. 9 afternoon.							
I will attend the SCCS/CIMP joint session, Thurs. 10 morning								1g
l will arriv	ve at the centre	Vaca	nces O	vifat wit	h my	car		
l wish to r	eceive a road	map to	the Ce	ntre Va	cances	s O	vifat	
I need trai	sport to Aach	en (tra	in conn	ection),	Thurs	s. 1	0 afte	rnoon
I need trai	nsport during l	Excurs	ion 1,7	hurs. 10) to Sa	ıt.	12	
l can offer transport during Excursion 1, Thurs. 10 to Sat. 12							2	
nun	number of seats available							
I/We need accommod. in Hotel REHER HOF, Thurs. 10 to Sat. 12							Sat. 12	
sin	single room double room							
I/We need transport during Excursion 2, Mon. 14 to Wed. 16								
I can offer	r transport dur	ing Ex	cursion	2, Mon	. 14 to	W	ed. 16	5
number of seats from Toulouse from St Giron								
I/We need accommodation in the Pyrénées, Mon. 14 to Wed. 16								
			Taulan	150 1	2/13	1	3/14	16/17
I/We need	l hotel reserva	ion in	Lonior	"" I		1		
	hotel reserva			to Tou	louse	\Box	to St	Girons

PAYMENTS TO:

Please forward the appropriate payment in BFR (Belgian Francs) for credit to the named account **BEFORE 31 MARCH 1993:**• Haute-Ardenne, rue belle jardinière 314, 4031 LIEGE, Belgium 240-0776303-16 Société générale de Banque mention: LIEGE 93 ... for the items listed below.

Please complete and return this copy of the payment details with your registration details:

	COST	REGISTRANT	SPOUSE
Registration fees:	1000BFR		
Monday 7 field trip:	1000BFR		
Wednesday 9 field trip:	500BFR		
Centre vacances accommodation:	5000BFR		
Excursion & guidebook	400BFR		
Excursion 1 accommodation:	5500BFR / 4500BFR		
TOTAL PAYMENT			

Review of the Palaeozoic-Triassic papers at the 8 th International Palynological Congress, Aix-en-Provence, Sept. 6-12, 1992.

There was a successful pre-congress excursion, in the Palaeozoic rocks of Western Brittany, on the Crozon Peninsula, led by F. Paris (Rennes, France) and A. Le Hérissé (Brest, France). Their excellent excursion guide is published in the Congress-Field guide. "Palaeozoic in Western Brittany (Outline of the Armorican geological history and geological itinary in the Crozon Peninsula) 8th International Palynological Congress, Aixen-Provence, 13-16 th sept. 1992 - Excursion A. Cahiers de Micropaléontologie, N.S., 1992, 7 (1/2), CNRS, France.

The congress was attended by more than 700 participants, a success for the organizers. Because many CIMP members participated we have not duplicated all the abstracts of the presentations on Palaeozoic or early Mesozoic palynomorphs. We list below only the titles of these communications. On request the abstracts can be obtained from the secretary.

There were mainly three Symposia and the General session C (Palynology and Stratigraphy), with 76 presentations/posters on Palaeozoic or early Mesozoic topics:

- C1: Palaeozoic palynomorphs of the Gondwana-Euramerican interface (Conveners: A. Le Hérissé, B. Owens, F. Paris):
- C3: Marine quantitative palynology: tectonic, climatic and eustatic control. (Conveners: J. Verniers & C. Poumot);
- C4: Palynofacies: modern analogues and ancient examples; reworked palynomorphs (Conveners: D.J. Batten, D. Mac Lean, M. Streel, M. Farley, G. Chmura).

In the General session C nine papers were presented with the results of the ongoing study **The Palaeozoic Palynostratigraphy Project Kingdom of Saudi Arabia**, a joint CIMP - Saudi Aramco Ltd project.

Publication of the presentations was possible in the Revue of Palaeobotany and Palynology or in the Bulletin de la Société Nationale Elf-aquitaine Production.

At the congress the Chitinozoa Subcommission and the Acritarch Subcommission have met. The reports of those meetings will be presented in the Newsletters of both subcommissions in early 1993.

The session where the talk/poster was presented is given in between brackets.

Achab, A. & Asselin, E. -Ordovician Chitinozoa from the Canadian arctic. (C)

Achab, A. & Van Grootel, G. -Lower Silurian chitinozoa biostratigraphy of Anticosti island. (C1)

Al-Hajri, S. -Biostratigraphy of the Ordovician and Silurian Chitinozoa of Arabia. (C)

Albani, R. -Middle Ordovician Chitinozoa from the Sueve Formation (Eastern Asturias, Spain). (C)

Alpern, B, Lemos de Sousa, M.J. Pinheiro H. & Zhu, X. - Un constituant organique optiquement détectable mais absent des classifications palynopétrographiques; le pétrole. (C)

Avchimovitch, V., Higgs, K., Loboziak, S., Stempien, M., Streel, M. -Famennian (Upper Devonian) miospore correlation between Bielorussia and Western Europe. (C1)

Banerjee, M. & D'Rozario, A. -Palynostratigraphy and identification of marine transgression in the Indian Lowergondwana. (C)

Banerjee, M. & Hait, A. -Palynostratigraphy in environment analysis of Saharjuri basin, early Permian, Indian Lowergondwana. (C)

Barron, H.E. & Molyneux, S.G. -Acritarchs from Ashgill series (Ordovician) of the U.K.. (C)

Baudu, V. -Relations paléoplancton-paléoenvironnement: exemples de formations dévoniennes d'Aquitaine et du Massif Armoricain. (C3)

Bek, J. & Isaacson, P.E. -Miospore evidence on the Devonian/Carboniferous boundary at the lake Titikaka, Northwestern Bolivia. (C1)

Brocke, R. -First results of palynological investigations of the Lower Arenig from the Yangtze platform, China. (C Poster)

Catot, E. & Vanguestaine, M. -Biostratigraphie par Acritarches du Trémadocien du Massif de Stavelot. (C Poster)

Cirilli, S., Bucefalo, P.R., & Pontini, M.R. - Palynological characterization of the Late Triassic R. contorta facies in the Northern Apennines (Italy). (C Poster)

Clayton, G. -Lower Carboniferous miospore assemblages from the Kingdom of Saudi Arabia. (C)

Dorning, K.J. -Acritarch, chitinozoan and spore quantitative analysis in high resolution sequence stratigraphy. (C3)

Dufka, P. -Chitinozoans of the Sheinwoodian/Homerian boundary interval (Silurian) in the Prague basin. (C1)

Dufka, P. & Kriz, J. -Upper Wenlock spores of volcanic island and origin in the Prague Basin (Bohemia). (C1)

Dufka, P. -Chitinozoans of the Sheinwoodian/Homerian interval (Silurian) in the Prague Basin. (C Poster)

Elliott, R. -Integrated microfossil biostratigraphy of the Lower Ludfordian, Silurian, Welsh Basin. (C)

Fang, X., Steemans, P. & Streel, M. -The <u>Retispora lepidophyta</u> morphon and its stratigraphic significance. (C Poster)

Fielding, A. -Acritarch microfloral changes across the Ordovician-Silurian boundary. (C1)

Fombella-Blanco, M.A., Valencia-Barrera, R.M., Fernandez-Gonzalez, D. & Herrero-Villacorta, B. -The palynological variability of the Oville Formation in the Cantabrian mountains (Spain). (C Poster)

Fowell, S.J., Comet, B. & Olsen, P.E. -Palynomorph assemblages from cyclic sedimentary sequences of Late Triassic age. (C3)

Ghavidel-Syooki, M. -First palynological record from Devonian strata in Eastern Alborz range. (C1)

Ghavidel-Syooki, M. -First Ordovician palynological record from the Alborz-mountain range; Northern Iran. (C1)

Grahn, Y. -Silurian biostratigraphy and paleogeography of Brazil. (C1)

Grahn, Y. & Paris, F. -The Silurian-Devonian boundary in Podolia. (C)

Guy-Ohlson, D.-Late Palaeozoic palynomorphs reworked in Mesozoic sediments in Sweden. (C4)

Lakova, I. -Silurian and Lower Devonian palynomorphs of Bulgaria-Biostratigraphy and palaeobiogeography. (C1)

Le Hérissé, A. -Stratigraphic and paleogeographic significance of Silurian acritarchs from Saudi Arabia. (C)

Le Hérissé, A. & Gourvennec, G. -Paleobiogeography of Silurian-Early Devonian acritarchs. (C1)

Lindström, S. & Guy-Ohlson, D. -Early Permian palaeoenvironments from Dronning Maud Land, Antarctica. (C Poster)

Lindström, S.-Permian palynology of Vestfjella, Dronning Maud Land, Antarctica. (C1)

Loboziak, S. & Streel, M. -Late Lower and Middle Devonian miospores from Saudi Arabia. (C)

Loboziak, S. & Streel, M. -West Gondwanian aspects of the Middle and Upper Devonian miospore zonation in North Africa and Brazil. (C1)

MacLean, D. -Provenance of reworked palynomorphs from the Greenmoor Rock (Langsettian, Late Carboniferous), Sheffield, England. (C4)

MacLean, D. & Ellin, S.J. -A new hydrofluoric and digestion technique for palynological preparations. (C)

Mangerud, G. -Palynostratigraphy of the Permian succession on Svalbard, arctic Norway. (C Poster)

Marshall, J.E.A. -Palynostratigraphy of the Middle Devonian Stromness Group Orkney, Scotland. (C)

Marshall, J.E.A. -Palaeozoic palynofacies hydrocarbon source rocks and burial history of Saudi Arabia. (C)

Milton, J.A. -The application of quantitative spore colour measurement to thermal maturity studies (A).

Moy, C. -Organic-walled microphytoplankton from the Middle Ordovician of Pennsylvania. (C)

Nielsen, M.V. -Upper Triassic palynology from the Gassum 1 well, Jutland, Denmark. (C Poster)

O'Liathain, M. -Upper Devonian-Lower Carboniferous palynostratigraphy in the South Munster basin, Ireland. (C)

Olaru, L. -Palynology and sequential stratigraphy in the Devonian formations from North Dobrogea county (Romania). (C)

Oulebsir, L. -Biostratigraphie des Chitinozoaires dans l'Ordovicien du Sahara algérien. (C1)

Oulebsir, L., Paris, F., Bernard, D. -Assemblages de palynomorphes et fluctuations paléoenvironnementales dans les formations ordoviciennes du Sahara algérien.

Paris, F. & Verniers, J. -Paleogeographic affinities of Early Silurian chitinozoans from Saudi Arabia. (C)

Picarelli, A.T. & Quadros, L.P. -Calibration of Carboniferous and Permian palynomorph ages of Northern Brazilian basins on Fusulinids. (C)

Pittau, P. & Del Rio, M. -Palynology of the Lower Permian intracratonic basins in Sardinia (Italy). (C Poster)

Ribeccai, C. & Tongiorgi, M. -Arenigian acritarchs from Homs Udde (ōland, Sweden): a preliminary report. (C1)

Richardson, J.B. -Tempest/regression in a Silurian sequence from the Anglo-Welsh basin. (C3)

Roche, M. & Monteil, E. -Organic-walled microplancton in the Rhaetian (Upper Triassic) of the Paris Basin (France): systematics and palaeoecology. (D1)

Rubinstein, C.V. -Acritarchs from the Upper Silurian of Argentina. Gondwanic relations. (C1)

Servais, T. -A review of the Lower Palaeozoic acritarch genera <u>Coryphidium</u> VAVRDOVA, 1972 and <u>Vavrdovella</u> Loeblich & Tappan, 1976. (C)

Servais, T. & Brocke, R. -Ordovician acritarchs from boreholes of the island of Rügen, NE-Germany. (C Poster)

Steemans, P. -Silurian and Lower Emsian miospores from Saudi Arabia. (C)

Streel, M., Loboziak, S., Bless, M.J.M. & Caputo, M.V. -Palynological evidence on a time correlation between worldwide low sea levels and Southern America glaciation near the Devonian/Carboniferous boundary. (C3)

Strother, P.K. -Evolutionary relations among cryptospores (A).

Strother, P.K. & Beck, J. -Palynology of the W Arisaig Group (Silurian), Nova Scotia, Canada. (C)

Sutherland, S. -Chitinozoans of the Ludlow (Silurian) type area and adjacent regions. (C Poster)

Telnova, O. -Palynologic substantiation of the Middle-Upper Devonian boundary, South Timan. (C Poster)

Tiwari, R.S. & Tripathi, A. -Palynological reflection of paleoclimatic regions on the Indian subcontinent during Permian. (C Poster)

Tongiorgi, M., Yin L.-M. & Di Milia, A. -Arenigian acritarchs from the daping section (Yangtze gorges area, Hubei province, Southern China) and their paleogeographic significance. (C1)

Turner, N. & Owens, B. -Late Carboniferous palynostratigraphy of Saudi Arabia. (C)

Utting, J. -Palynostratigraphy of Permian (Ufimian - Kazanian) and Lowest Triassic rocks (Griesbachian), Svendrup basin, Canadian Arctic Archipelago. (C Poster)

Van der Zwaan, C.J. Van Der Laar, J.G.M. Pagnier, H.J.M. & Van Ameron, H.W.J. -Palynological, ecological and climatological synthesis of the Upper Carboniferous of the well De Lutte - 6 (East Netherlands). (C)

Venkatachala, B.S. & Vijaya -Diversification of spore-pollen "character states" in the Indian Permian. (C)

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