SILURIAN TIMES

No. 7 1999

A NEWSLETTER OF THE SILURIAN SUBCOMMISSION

SUBCOMMISSION ON SILURIAN STRATIGAPHY

INTERNATIONAL COMMISSION ON STRATIGAPHY

INTERNATIONAL UNION OF GEOLOGICAL SCIENCES

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NOTES TO CONTRIBUTORS

Contributions should be in English, typed single-spaced, preferably Times New Roman font 12, and sent by mail, fax, computer disk (Word for Windows 95, Wordperfect, ASCII: IBM type computer) OR, PREFERABLY, BY **E-MAIL** to:

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Requests for information from **Silurian Times #8** will be sent out in early November, 1999

ANNUAL REPORT OF THE SUBCOMMISSION ON SILURIAN STRATIGRAPHY (SSS) OF THE INTERNATIONAL COMMISSION ON STRATIGRAPHY FOR 1998

1. Title of constituent body

Subcommission on Silurian Stratigraphy (SSS)

2. Summary table of Silurian subdivisions Source: Holland, C.H. and Bassett, M.G. (1989). A Global Standard for the Silurian System, National Museum of Wales, Geological Series No. 9, p. 24.

System		Series	Stages
	Upper	Pridoli	(no subdivisions)
		Ludlow	Ludfordian
Silurian			Gorstian
	Lower	Wenlock	Homerian
			Sheinwoodian
		Llandovery	Telychian
			Aeronian
			Rhuddanian

Discussion: In June 1997, ICS Chairman Jurgen Remane initiated a discussion with the titular membership of the SSS (through SSS Chairman M.E. Johnson) regarding the status of the above Silurian series and stages. In order to better approximate the practice of other subcommissions, it was recommended that the present Silurian series (Llandovery to Pridoli) be reassigned as stages and the present Silurian stages (Rhuddanian to Ludfordian) be reassigned as substages. This would enable a more standard division of two series designated only as the Upper Silurian (embracing the Ludlow and Pridoli) and the Lower Silurian (embracing the Llandovery and Wenlock). Current practice does, in fact, specify such a subdivision (see above), but at a nomenclatural position above the series level. A non-binding poll of the voting membership was conducted last year, followed by a full airing of the question in the January 1998 newsletter of the subcommission. This airing was intended to precede the next formal business meeting of the SSS, which took place during the SW Iberia Field Meeting in June 1998. That meeting was conducted on June 16, 1998 at La Cartuja in the Cazalla de la Sierra area of Spain and the question was open for discussion. In a non-binding poll of all attending the meeting (including six titular members and twenty

correspoding members and other interested participants), 12 voted in favor of the status quo and 6 voted to revise the present series and stages. A binding poll of the subcommision's 15 titular members was undertaken in October 1998. The result of this vote was 13 in favor of retaining the status quo, but two members failed to return their ballots in time for this report. This vote officially closed the issue until such time new officers of the subcommission may take the decision to reopen this or any other nominclatural questions after October 2000.

3. Overall objectives

a) Elaboration and improvement of the standard global stratigraphical (SGS) scale for the Silurian System, including definition of boundaries and the selection of Global Stratotype Sections and Points (GSSP) under IUGS guidelines.

b) Refinement of international correlation within the Silurian System, with particular emphasis on development of a generalized scheme of zonal fossils (left-hand column) for global applications.

c) Stimulation of research and international cooperation, with particular emphasis on the coordination of working groups focused on various zonal fossils such as graptolites, conodonts, chitinozoans, etc.

d) Evaluation and integration of new approaches to the correlation of Silurian strata on a global scale.

4. Organization

The SSS is a subcommission of the International Commission on Stratigraphy, consisting of 15 Voting and 52 Corresponding members. Voting members are selected to achieve regional representation and a balanced stratigraphic expertise. Corresponding membership is open to all individuals demonstrating a commitment to scholarship in Silurian stratigraphy.

Officers:

Chairman: M.E. Johnson (Dept. of Geosciences, Williams College, Williamstown, Massachusetts, 01267 USA).

Vice-chairman: J.-y. Rong (Nanjing Institute of Geology and Palaeontology, Academia Sinica, Nanjing 210008, People's Republic of China).

Secretary: A.C. Lenz (Dept. of Earth Sciences, University of Western Ontario, London, Ontario N6A 5B7, Canada).

Contact with Subcommission on Geochronology: L.R.M. Cocks (British Museum of Natural History, London, United Kingdom).

The SSS Treasury is maintained as a separate organizational account at Williams College.

5. Extent of national/regional/global support of projects

Membership in the SSS is represented by specialists from 29 countries and from all continents except Antarctica. Most of the major regions of the world with extensive exposures of Silurian strata are covered, especially Eurasia, North America, South America, Australia, and Africa.

The next biennial field meeting sponsored by the SSS will take place in New South Wales and Queensland, Australia in July 2000.

The 2nd International Symposium on the Silurian System (convened in Rochester, N.Y. in August 1996 under primary sponsorship of the SSS) enjoyed significant financial support from educational institutions, private science foundations, and corporate sponsors.

Ongoing grant support has underwriten publications from this symposium through the cooperation of the New York State Museum.
Substantial national-based support was contributed for other SSS field meetings in Spain and Portugal (1998) Austria (1994), the Czech Republic (1992), Estonia (1990), Australia (1986), the Ukraine (1983), Norway (1982), Canada (1981), and the United Kingdom (1979, 1989).

6. Interface with other international projects

Due to the significant occurrence of thelodonts in Silurian strata, some members of the SSS participate in IGCP Project No. 406 (Circum-Arctic Lower-Middle Palaeozoic Vertebrate Palaeontology and Biostratigraphy) -which is scheduled to run through 2000. SSS member, Tiiu Marss (Estonia) is a co-leader of the project. Other SSS members are very active in the IPA international research groups on graptolites and conodonts. The SSS field conference held this year in Spain and Portugal was arranged to coincide with the Sixth International Graptolite Conference.

7. Accomplishments and products generated in 1998

Three publications were brought out in 1998:

a) The first volume of research papers resulting from the James Hall Meeting (2nd International Symposium on the Silurian System) held in August 1996 in Rochester, New York was published through the State Museum of New York. Consisting of 21 reports, this publication represents the first comprehensive review of global and regional controls on Silurian sea level, climatic cycles, and biotic patterns. Data from six Silurian continents are covered. The reference is as follows:
Landing, E. and Johnson, M. (eds.). 1998. Silurian Cycles: Linkages of Dynamic Stratigraphy with Atmospheric, Oceanic, and Tectonic Changes (James Hall Centennial Volume). New York State Museum Bulletin 491, 327 p.

b) The proceedings from the 1998 field meeting of the SSS in Spain and Portugal and the Sixth International Graptolite Conference were published through the joint cooperation of the Instituto Techologico Geominero (Spain), the Instiuto Geologico e Mineiro (Portugal), and the Consejo Superior de Investigaciones Cientificas (Spain). The reference is as follows:
Gutiérrez-Marco, J.C. and Rábano, I. (eds.). 1998. Proceedings of the Sixth International Graptolite Conference of the GWG (IPA) and the SW Iberia Field Meeting 1998 of the International Subcommission on Silurian Stratigraphy (CCS-IUGS). Madrid, 1998, 337 p.

c) The sixth issue of Silurian Times -the official newsletter of the Silurian Subcommission (edited by Secretary Alfred Lenz) -was circulated in January 1998 to all subcommission members as well as a broad constituency of Silurian researchers around the world. This year, we began experimentation with circulation via electronic mail. About 150 copies were distributed electronically and only 50 hard copies were circulated through the normal postal system. By this means, the SSS realized a considerable savings in postal costs.

8. Chief problems encountered in 1998

A sustained effort has been made to collect and edit manuscripts based on posters and keynote talks presented at the James Hall Meeting (or 2nd International Symposium on the Silurian System) convened in Rochester, N.Y. in August 1996 under primary sponsorship of the SSS. The publication of two volumes through the auspices of the New

York State Museum was the original goal and now the first of those volumes is finally available (see above). The chief problem encountered in 1998 continues to be the slowness of the editorial process, including slippage of author's deadlines, reviewer's deadlines, and the schedule for volume design and production. Due to the greater length of manuscripts from the keynote lectures as compared to the shorter papers from the poster sessions on Silurian cycles, the decision was made to divide the remaining material into two separate volumes. One part will consist of reports on the Silurian of North America and the other will consist of reports from the rest of the Silurian world. We are now focused on the Silurian world exclusive of North America. All but two of the manuscripts based on keynote lectures covering Alavonia, Baltica, southern and eastern Europe, Kazakhstan, Siberia, China, Australia, India, North Africa, and South America have been delivered. Most of these papers are undergoing revision following technical and peer reviews. Publication of this volume is anticipated in 1999 under the tentative title: Silurian Lands to Shelf Margins: Silurian world exclusive of North America.

9. Work plan for 1999

a) The Australian organizing committee has now settled on July, 2000 as the date for the next SSS field conference. Plans may now go forward for a technical session and field trips in New South Wales and Queensland.

b) Volume design and printing of about half the manuscripts based on keynote presentations at the 1996 James Hall Meeting regarding "Silurian Lands to Shelf Margins" should be complete by mid-year 1999. This work continues through the sponsorship of the New York State Museum in Albany, N.Y. At the end of October 1998, all but two of the manuscripts based on the keynote lectures representing the Silurian world exclusive of North America were received and were under review or revision. Manuscripts on the Silurian of North America are on hold until this phase of the project is in press.

c) Production of the seventh issue of Silurian Times.

d) Continued work by the task force on "High-resolution Silurian Graptolite Zonation" led by titular member Tatyana Koren.

Anticipated work plans for future years:

2000: Final preparations for the biennial meeting of the SSS in Australia; Likely publication of the remaining manuscripts on the Silurian of North America (from the 1996 James Hall Meeting); Continued work by the task force on "High-resolution Silurian Graptolite Zonation" led by Tatyana Koren; Annual production of Silurian Times.

10. Potential funding sources outside IUGS

A publication fund, based on revenues raised for the James Hall Meeting and ongoing grant contributions is established. These funds are being released to the New York Geological Survey in order to cover initial editing costs of symposium volumes. Other potential funds through the New York State Museum may facilitate publication based on anticipated reimbursement from sales of symposium volumes.

11. Financial statement for 1998

a) Income (U.S. dollars)

1. Carryover from 1997	$ 0.00
2. 1998 ICS subvention	600.00
Total operating funds	600.00

b) Expenditures

1. News letter, print & postage 355.34
2. Review copies Silurian Cycles 150.00

Total expenditures 505.34

Net balance at the end of 1998 $ 94.66

12. Budget for 1999
    1. Production & mailing of newsletter $ 350.00
    2. Review copies of next research volume 150.00

ALLOTMENT REQUESTED FROM ICS FOR 1998 - $ 400.00

Chairperson: Markes E. Johnson
Date: October 31, 1998

REMARKS FROM THE "CONSOLIDATED ANNUAL REPORT FOR 1998"
from **ICS** Chairman Jurgen Remaine and Secretary-General Olaf Michelsen:
"The magnificent volume on Silurian Cycles, edited by E. Landing and M. Johnson, perfectly illustrates the importance of continued activity of this subcommission even after the completion of its primary task, the definition of stage boundaries. It is difficult to conceive which kind of organism other than a subcommission of the ICS could have obtained these results."

CHAIRMAN'S CORNER

The year 1998 was one of considerable satisfaction for our organization. First and foremost, the planning and execution of our biennial field conference was carried out with care, professional skill, and great style. Much hard preparation was done by Juan Carlos Gutiérrez-Marco and José Manuel PiÁarra in order to provide us with a memorable conference, field trips to SW Spain and adjacent Portugal, and some extraordinary cultural events. Memories of our festive night at La Cartuja in the Cazalla de la Sierra of Spain and of our welcome to the Barrancos region of Portugal remain vivid in my mind. The field meeting was a great success and our sincere thanks go to the organizers.

When I took on the responsibilities of SSS chairman in 1992, it was with the expressed desire to work within the framework of the series and stages formalized through the earlier efforts of our commission members and leaders. My goal was to see if we could go beyond the formal definitions and begin to apply correlations to practical matters such as the identification of cyclic stratigraphic patterns and paleogeographic mapping. The first fruits of this campaign are now being realized with publication of research volumes from the 1996 James Hall Meeting through the Bulletins of the New York State Museum. Bulletin 491 on "Silurian Cycles" was finally published in 1998 and the first of 20 keynote articles on Silurian paleogeography are being readied for publication in 1999.

It was, therefore, of some importance that our present nomenclatural organization of series and stages was discussed in the pages of the 1998 "Silurian Times", debated during the Spain-Portugal field meeting, and subsequently reconfirmed by our titular members. Fourteen of fifteen titular members eventually responded to a binding vote on the question of whether or not to modify the current system. Although some advantages

to conformity with the practice of other subcommissions were clearly understood, all respondents voted in favor of stability.

Also during the Spain-Portugal field meeting, a nominating committee chaired by former SSS chairman Dimitri Kaljo put forward their recommendations for the future leadership of the SSS. Our present vice-chairman, Rong Jia-yu (Nanjing Institute of Geology and Palaeontology) was asked to succeed me as chairman and Tatjana Koren (All-Russian Geological Research Institute, St. Petersburg) was asked to take over the post of vice chairman on the occasion of the next biennial field meeting in Australia in the year 2000. Both agreed to stand for these offices and I am pleased to report that the titular membership subsequently voted in overwhelming agreement to accept their nominations. The nominations must now go before our parent International Commission on Stratigraphy for ratification. Kaljo's committee also expressed concern that the titular membership of the SSS attain some degree of turnover in order to bring new and younger members into the leadership of our organization. We plan to reach three accommodations in this area during 1999, so as to go into effect under our new SSS officers in 2000.
M.E. Johnson

PUBLICATION OF "SILURIAN CYCLES" VOLUME

The first volume of proceedings from the 1996 James Hall Meeting in Rochester, N.Y. on Silurian Cycles was published in June 1998 as volume 491 of the New York State Museum Bulletin. The cost of this 327-page reference volume is USD $40, plus $4 for shipping and handling. To order, send your check for USD $44 to:
New York state Museum
Publications Sales
Cultural Educaton Center
Albany, NY 12230
USA
or.... send credit card information by FAX: (518) 463-0450 or 486-5657.

MINUTES OF THE MEETING OF THE SSS, "LA CARTUJA", CAZALLA DE LA SIERRA AREA, ANDALUCIA, SPAIN, JUNE 16, 1998

In chair: Markes Johnson, chairman of SSS; recording secretary: Alfred Lenz, secretary of SSS

Chairman Johnson called the meeting to order at 1640 hours
Present at the meeting: Titular Members Rong Jia-yu (China), Markes Johnson (USA), Robin Cocks (UK), Dimitri Kaljo (Estonia), Tatjana Koren (Russia), and Alfred Lenz (Canada), and 20 Corresponding Members and non-members.

1. Vice-chairman: ICS has reminded SSS of the need for a vice-chair. It was pointed out that other subcommissions have vice-chairs. Rong Jia-yu was previously nominated as vice-chair, and was unanimously accepted for that position, effective immediately. Terms of office for current officials Johnson, Lenz and Rong will end in year 2000. Chairman Markes Johnson struck a committee consisting of Titular Members Kaljo (appointed as chair), Cocks, Storch and Lenz,, which was given the task of nominating the Chair and Vice-chair, to begin terms in the year 2000 at the SSS meeting in Australia. The candidates will be announced in Silurian Times #7, and ballots will be sent out to all Titular Members for a formal vote. The new officers will take up their offices following the year 2000 meeting in Australia and continue to 2004.

2. Membership makeup: The makeup of the voting membership has not changed in 8 years, and it has become necessary to take a serious look at those members who have attended few, or no, meetings in recent years. According to ICS rules, subcommissions should have a regular one-third turnover of titular members. It is proposed that several current members will be asked to step down so as to make room for younger workers. The task of selecting those to be asked to step down was delegated to the Kaljo committee.

3. James Hall Symposium volumes: James Hall volume #1, "Silurian Cycles" is published, and available for $44.00 US from the New York State Museum, Albany, New York. The "Keynote lectures" issue of non-North American papers is in advanced state of preparation and is expected to be published in 1999; and the North American papers volume is expected in the year 2000.

4. Silurian Series vs Stages: In the preparation of an International Stratigraphic Chart by the ICS, it was noted that the equivalents to what are presently regarded as Series for the Silurian (e.g., Llandovery Series), are considered Stages in other Systems .The question was therefore raised whether the Silurian Subcommission would consider altering its scheme to bring it in line with other subcommissions. An earlier mail poll showed a majority of members favour retention of the current Silurian divisions. The subject was raised for formal discussion at the Spain meeting.. Cocks, relayed comments from Holland, who felt the status quo be maintained. Sherwin, New South Wales Survey advocated present scheme. Fordham, Queensland Survey, suggested the need of formal Lower, Middle and Upper, or of Lower and Upper, Subsystems(?). Some felt that Lower and Upper were officially formalized, whereas others were unsure if the divisions had ever been formalized. Were they formalized? No one seemed to know. Schönlaub, Fordham and Sherwin said there is confusion as of now. Kaljo suggested the need for a column on the left side with the Lower and Upper divisions; i.e., status quo with the a Subsystem(?) column. It was pointed out that to change the present scheme would necessitate repeating the entire process again. Fordham pointed out that the Queensland Survey doesn't currently consider Llandovery, etc., as Series, but is taking time to adjust. Finney suggested that the use of Lower, Middle and Upper is more important in Ordovician because of much greater biogeographic problems in the Ordovician. Storch noted that while the Czech institutions still treat Lower and Upper as Series, and refuse to treat Llandovery, etc., as Series, this presents no real problem, since adjustment is easy. Following lengthy discussion, a vote was taken of ALL those attending. In favour of retention of present scheme: 12; In favour of change to making Llandovery, etc., into Stages: 6. There will be a formal mail vote of Titular and Corresponding Members in the

near future. A final comment from Storch was that other subcommissions are moving toward making formal Subsystems.

5. Australia 2000 Silurian meeting: Following complaints from those in the northern hemisphere about the original proposed time for the meeting in Australia, three dates were proposed by the Australian organizers. The three dates proposed are: October 16-20, 2000; August 27-August 1; and September 21-October 4. Some Northern Hemisphere people have problems with option 1; whereas early September would be problematic because of Olympic Games in September, 2000 in Sydney. Orange, New south Wales, was suggested as one possibility as a suitable meeting place. Voting of all Titular and Corresponding members was as follows: Oct. 16-20: 10 in favour; Aug. 27-Sept. 1: 3 in favour; Sept. 21-Oct. 4: 3 in favour. A. Lenz will inform John Talent of the preferred date (Oct. 16-20) for the Silurian meeting. (*****HOWEVER, SEE REVISED TIMES IN THE FIRST CIRCULAR FOR AUSTRALIA 2000, BELOW)

6. Yolkin announcement of field trips in Altai and Tuva, July and August, 1999: Sennikov relayed the information from Zhenya Yolkin, that extensive field trips to look at Silurian and Devonian rocks of Altai and Tuva are planned. These trips would be primarily for the Subcommission on Devonian Stratigraphy, but would be also suitable for SSS participation. It was suggested that there could be two groups at two different times to look separately at rocks of each System with a small amount of overlap, with up to 25 participants in each. It was agreed that SSS would officially endorse the field trips, but that the trips would not serve as an official SSS field meeting.

*** UPDATE AUGUST 12, 1998**: Following discussions of the Subcommission on Devonian Stratigraphy in July, 1998, the proposed central Asia field trips will not place. Instead, a SDS field trip will take place in Morocco. This excursion would also be of interest to SSS members. SEE ANNOUNCEMENT BELOW.

7. Nomination and election of Corresponding Members: Kaljo nominated Silvio Peralta, Argentina: passed. Rong nominated Wang Nian Zhong and Zhang Yuan-dong, China: passed. Koren nominated Kolya Sennikov, Russia: passed.

8. Next SSS meeting in Australia, 2000.

9. Meeting concluded at 2050 hours.

SW IBERIA FIELD MEETING, SPAIN AND PORTUGAL, 1998.

by Alf Lenz

The combined field meetings of the **Graptolite Working Group** and the **Subcommission on Silurian Stratigraphy** were hosted in Spain and Portugal, June 15-24, 1998. The prime organizers of the two field meetings were Juan Carlos Gutiérrez-Marco and José-Manuel Piçarra, very ably assisted by Isabel Rábano. The first day of the meeting was held in the handsome setting of the School of Mines, Universidad Politecnica de Madrid, and began with a formal opening and welcome to all participants, followed by a full day of talks and posters devoted to Silurian topics, beginning with a detailed and well-presented talk on Silurian stratigraphy and paleogeography of the Iberian Peninsula, given by Michel Robardet. That same evening, the participants were hurried to the train station, and put on board the high-speed train (AVE) for a serenely comfortable ride to Seville, followed by a late-evening bus trip to 'La Cartuja', a former monastery, not far from the village of Cazalla de la Sierra, and set in the middle of the Sierra Norte National Park. The next morning, all woke up to this beautiful, peaceful

setting, and were delighted to breakfast on a patio overlooking a quiet, green valley. Participants were further delighted by a fine dinner that evening with copious quantities of wine, followed by a long evening of watching and participating in flamenco dancing. Field trips to the El Pintado reservoir followed from La Cartuja, and on the second evening, a meeting of the Silurian Subcommission was held in a room of the partly restored church.

El Pintado reservoir and environs, are within the Valle syncline, and excellent Silurian outcrops, mostly in the graptolitic facies, but including many other fossil groups, occur on north and south sides of the reservoir. Participants were impressed by the fact that most of the Silurian is represented in the area and, particularly, by the very fine exposure of beds encompassing the lower-upper Homerian graptolite extinction event.

From El Pintado area, the group made its way westward into Portugal, stopping along the way to look at Ordovician graptolite sequences, arriving in Moura where, that evening, we were wined and dined again, and entertained by a local singing group. The next day was taken up by an examination of excellent graptolite sequences that included much of the Silurian, including a fully-exposed sequence encompassing the lower-upper Homerian extinction interval in the Barrancos area, made visible thanks to the trenching efforts of José Manuel and his group. While at Barrancos, a fine mid-day meal was kindly provided by the villagers of Barrancos. It was then back into Spain with a short stop at the Roman city of Merida (Roman name: Emerita), with its beautifully preserved theater, large arena and a fully-functional Roman bridge and, finally, a return to Madrid. This marked the end of the Silurian field conference. and the official beginning of the graptolite field conference. Papers and posters devoted entirely to graptolites were presented in the main building of the Spanish Research Council during the next two days. The third day was devoted to workshops held at Complutense University of Madrid, and several meetings, including that of the Graptolite Working Group was held in the impressive Geominero Museum, where revision of the Treatise was discussed, and at which Chuck Mitchell agreed to act as the coordinator for the graptolite Treatise revision. The evening was climaxed by an excellent dinner at the House of Rioja, again with much wine (Rioja, of course!), many short speeches and toasts, and the decision to hold the seventh graptolite meeting in Argentina (to be chaired by Gladys Ortega).

During the next two days, spectacular Silurian graptolite sequences were examined in the Castilla/Aragon of central Spain. Particularly impressive was the superb Llandovery sequence, near the village of Checa, that had been studied in detail by Petr Storch and Juan Carlos. The last night outside Madrid was spent in the ancient and beautiful village of Albarracin with its spectacular setting against a steep hillside.

The return to Madrid marked the end of the field conference. Most farewells were made at that time, with people scattering to the winds next day.

Both conferences and field trips were beautifully organized. Juan Carlos, José Manuel, and Isabel, and the many volunteers, are to be congratulated for the scientific content of the field trips, the well-run conferences, the splendid mixture of culture, beautiful scenery and historic sites, and the continuously fine “wineing and dining” throughout the trip. Wonderful memories include the many excellent Silurian and graptolite-rich sections in the Castilla and Ossa Morena (Spain and Portugal) regions, the peaceful setting of La Cartuja and the overall beauty of Andalusia, the evening of flamenco dancing (including the embarrassment of seeing oneself “dancing” on Juan Carlos’ video film!!), the lovely

villages of Barrancos and Albarracin, the beautiful scenery of Castilla (one could almost see Don Quixote riding over the hills, chasing windmills!), the serenading of Juan Carlos and "Pepe" on the bus and, last but not least, seeing long-time friends (there were reminiscences that some of us, including Tania Koren, Adam Urbanek, Otto Walliser, Robin Cocks, Bill Berry, Dim Kaljo, myself, first met almost exactly 30 years ago during Silurian-Devonian field conferences in Podolia and Siberia!), and making new ones. Finally, the production of a handsomely bound extended-abstract-volume including papers from both the Silurian and graptolite conferences, and edited by Juan Carlos and Isabel, was a very nice and innovative addition. A truly memorable trip and one that sets a new standard for future Silurian and graptolite field trips!

PALAEONTOLOGY DOWN-UNDER -- INTERLINKED MEETINGS FOR THE YEAR 2000 IN AUSTRALIA: FIRST CIRCULAR

Under the auspices of the International Palaeontological Association, the Australasian Association of Palaeontologists, the Macquarie University Centre for Ecostratigraphy and Palaeobiology and IGCP Projects 410 and 421.

Preamble:

Five interlocking events - 3 conferences, 2 IGCP meetings and associated excursions have been programmed to follow on from the Australian Geological Congress (3-7 July, 2000, University of Technology, Sydney). The conferences and meetings are:

1. Australasian Palaeontological Convention-2000 (APC-2000) - including a celebration honouring Professor Barry W. Webby.

2. THE THIRD INTERNATIONAL SYMPOSIUM ON THE SILURIAN SYSTEM (SIR FREDERICK MCCOY SILURIAN SYMPOSIUM).

3. The Second Australasian Conodont Symposium (AUSCOS-2).

4. IGCP 410 Meeting (The Great Ordovician biodiversity event: implications for global correlation and resources).

5. IGCP 421 Meeting (North Gondwana mid-Palaeozoic bioevent/biogeography in relation to crustal dynamics).

Venue:

Orange, NSW, 260 km west of Sydney, in the heart of the most instructive Ordovician, Silurian and Early Devonian sequences in eastern Australia. Orange is serviced daily from Sydney by regular air services (4 per day).

Program:

Excursion package 1 (3 days and 2 nights).

(Sat 8 July): 8.00 am Travel to Yass via Bungonia: Bungonia Group and the Silurian of the Yass Synclinorium; night: Yass.

(Sunday 9 July): Travel to Wellington: Silurian (Llandovery-Wenlock): Quarry Creek, Borenore (graptolites/conodonts/corals); night: Wellington.

(Monday 10 July): 8am Wellington to Orange: Late Silurian-Early Devonian - Wellington, Eurimbla and Nubrigyn (autochthonous and allochthonous sequences: channel deposits, carbonate fans, intermittent platform exposure and grand-scale

platform-margin collapse); night: Orange. Evening: Registration for APC-2000/ AUSCOS-2/McCoy Silurian Symposium/ IGCP Meetings.

Conference package (5 days and 6 nights)

(Tuesday 11 July): First day of papers - parallel sessions: APC-2000 -general themes; AUSCOS-2 - Cambrian, Ordovician and Silurian conodonts.

(Wednesday 12 July): Second day of papers - parallel sessions: APC-2000 -general themes; AUSCOS-2 - Silurian, Devonian and younger conodonts.

(Thursday 13 July): Excursion interlude: Three alternatives will be offered:
1. Day trip to Cliefden and Bowen Park; Late Ordovician shelly faunas/conodonts.
2. Day trip to Wellington. Pliocene-Holocene biodiversity: Wellington Caves/ phosphate mine/caves vertebrate fauna; Western Plains Zoo (Dubbo); Lake Burrendong Arboretum.
3. Wineries of the central western New South Wales.

(Friday 14 July): Third day of papers - parallel sessions: APC-2000 (Meso-zoic and Cainozoic papers) ;Sir Frederick McCoy Symposium papers. Evening: Conference Dinner

Saturday 15 July): Papers for APC-2000/AUSCOS-2/McCoy Symposium continued and Meetings of IGCP410 and IGCP421.

Excursion package 2 (5 days and 5 nights)

(Sunday 16 July): Travel by road to Tamworth via Scone, Timor and Nundle: examination of Timor and "Crawney" limestones, (shelly faunas, conodonts; autochthonous and allochthonous sequences); night: Nemingha (near Tamworth).

(Monday 17 July): Cambrian-Devonian of the Tamworth Belt: Woolomin, Loomberah, Tamworth Hospital Quarry (shelly faunas, conodonts, mainly allochthonous sequences); night: Nemingha (near Tamworth).

(Tuesday 18 July): Autochthonous Early and Middle Devonian limestones at Sulcor, Attunga and Yarramanbully (shelly faunas, conodonts; autochthonous and allochthonous sequences); Travel to Goondiwindi (via Moree Artesian Spa Baths); night: Goondiwindi .

Possibility: Depart Tamworth for other destinations (own arrangements).
(Wednesday 19 July): Travel to Biloela. Mid-Palaeozoics at Monto (briefly) en route; night: Biloela.

(Thursday 20 July): Travel to Gladstone: Devonian-Early Carboniferous of Mount Morgan-Rockhampton-Raglan area (Mount Etna, Horrigan Creek, Mt Holly (conodonts, corals; autochthonous vs allochthonous stratigraphy); dinner at Raglan Hotel; night at Gladstone.

Excursion package 3 (5 days and 4 nights)

(Friday 21 July): Depart Gladstone 11am for Heron Island by catamaran for Sir Frederick McCoy Symposium Carbonate/Build-up Workshop - focussed on carbonate sedimentation and reef-structuring organisms. Convenor: John Jell.
(Saturday 22 July to Monday 24 July): three full days on Heron Island.

(Tuesday 25 July): Depart Heron Island at 1.30pm to arrive Gladstone at 3.30pm. Flights back to Brisbane/Sydney/Cairns around 4pm or 6pm. Participants to make their own airline bookings.
Note:

1. Participants not wishing to participate in Excursion package 3 may either make their own onward travel arrangements from Gladstone, e.g. by air, bus or train to Sydney/Brisbane/Cairns or wherever or, alternatively may return to Sydney via the coast route (Bruce and Pacific Highways) on 21-22 July with the excursion vehicles - paying $200 plus accommodation and meals enroute.
2. Participants may also join Excursion package 3 at Gladstone but will need to make their our airline bookings to Gladstone to arrive there by 10.30 am on Friday, 21 July (e.g. flying from Sydney around 6.15 am) in order to catch the catamaran departing from the Gladstone Marina at 11am.

TO RECEIVE SECOND CIRCULAR (LATE 1999), PLEASE RETURN FORM AS SOON AS POSSIBLE - BEFORE OCTOBER, 1999.

COSTING:
NOTE:
1. Unless otherwise stated, costs include breakfast, lunch, morning and afternoon tea, shared accommodation and travel. Evening meal is not included unless stated. Single accommodation can be organised at an additional cost of US$25 per night. 2. Costs given in UD$ are approximate. Exchange rates may fluctuate. Firm costs to be given in second circular but are not expected to fluctuate more than 10% (in either direction).
EXCURSION PACKAGE 1: Full cost = US$210.
This will include: Travel costs from Sydney (pick up points to be notified); accommodation at Yass and Wellington; breakfasts, lunches, morning and afternoon teas; field guide.
CONFERENCE PACKAGES:
A. Full cost -= $US370.
This will include: Accommodation (6 nights in Orange), breakfast, lunch, morning and afternoon teas, conference program and abstract volume, mid-conference excursion (including transport and entry fees), conference dinner, and conference fee (US$100).
B. Economy conference package: A "no frills" conference package involving bunk style (bring your own sleeping bag) accommodation close to Orange is being negotiated for students, postgraduate or anyone who needs special consideration. Please indicate on your form if you wish to be considered for this deal. A special package will also be offered to participants living in or close to Orange or who are making their own accommodation arrangements in Orange.
EXCURSION PACKAGE 2: Full cost: US$410.
This will include 5 nights accommodation (Nemingha [2 nights]; Goondiwindi, Biloela and Gladstone); breakfasts and lunches, morning and afternoon teas, entrance to the Moree Artesian Spa Pool, field guide.
EXCURSION PACKAGE 3: Full cost: US$350.
This will include catamaran transport Gladstone to Heron Island return (approximately 70 km); shared accommodation, all food (including evening meal), workshop booklet, bench fees at the Heron Island Research Station. Participants will need to bring swimming gear, snorkel, mask, flippers, dive boots or shoes suitable for reef walking (e.g. old hard-soled gy boots), cheap dive gloves ($5 type), and, if possible, a wet suit.

PUBLICATIONS:
We are presently negotiating for a number of publications:
1. A festscrift in celebration of the contribution Prof. Barry Webby has made to Australian and international palaeontology, possibly combined with:
2. A collection of papers of a general nature (Contributions by young-career researchers are especially encouraged).
3. The AUSCOS-2 volume of conodont papers.
4. The Sir Frederick McCoy Silurian volume

Details will be available in the Second Circular (late 1999).

Palaeontology Down-Under - Interlinked Meetings for the year 2000
Indication of interest
Please e-mail to: gawilson@laurel.ocs.mq.edu.au or FAX to George Wilson on 61 2 9850 6053.
NAME……

ADDRESS:……
…….
……COUNTRY……
FAX:……..PHONE……
e-mail:……..

I am interested in participating in all or some of the palaeontology meetings YES NO
in Australia in the year 2000. Please send me the second circular.

I would like to participate in Excursion Package 1
YES NO MAYBE

I would like to participate in the Conference Package……
.YES NO MAYBE

I would like to be considered for the Economy Conference Package

YES NO MAYBE

I would like to participate in Excursion Package 2…….
YES NO MAYBE

I would like to participate in Excursion Package 3…… ……
YES NO MAYBE

I will be presenting a paper/poster for the APC-2000 Barry Webby program
YES NO MAYBE

I will be presenting a paper/poster for the APC-2000 general program
YES NO MAYBE

I will be presenting a paper/poster for the AUSCOS-2 program
YES NO MAYBE

I will be presenting a paper/poster for the Sir Frederick McCoy Silurian
YES NO MAYBE
Symposium

I will make my own arrangements regarding accommodation in Orange
YES NO

SILURIAN DEPOSITIONAL ENVIRONMENTS AND SEQUENCE STRATIGRAPHY AT THE NORTHERN EDGE OF THE ILLINOIS BASIN

Organizers: Donald G. Mikulic & Joanne Kluessendorf

This trip will visit classic exposures in northeastern Illinois which have played an important role in determining the Silurian sequence stratigraphy and depositional history of the region. Based on extensive quarry exposures, the entire Silurian section will be examined. The Thornton Reef, which is one of the best-exposed Paleozoic reefs in the world, will be highlighted. Many seminal concepts of reef paleoecology were formulated at Thornton Reef by Heinz Lowenstam and others. Understanding reef growth there has aided the economic development of the aggregate and petroleum industry in the Great Lakes area.

For information: Donald G. Mikulic, Illinois State Geological Survey, 615 E. Peabody Dr., Champaign, IL 61820, (217) 244-2518, mikulic@isgs.uiuc.edu.

HEINZ A. LOWENSTAM SYMPOSIUM: SILURIAN GEOLOGY AND PALEONTOLOGY OF CENTRAL NORTH AMERICA

Organizers: Donald G. Mikulic & Joanne Kluessendorf

This symposium honors Heinz A. Lowenstam in recognition of the research on Silurian geology and paleontology he conducted while at the Illinois State Geological Survey in the 1940s and 50s. Because of his classic work on the Silurian reefs, paleoecology, and paleogeography of the State, Illinois has an international geological reputation. His model for Paleozoic reef development is still considered a standard by

the scientific community. This year will mark the fiftieth anniversary of the publication of his important paper "Niagaran reefs in Illinois and their relation to oil accumulation." The economic importance of Silurian reefs as a significant source of midwestern aggregates and hydrocarbons demonstrates the continued value of this research.

The Lowenstam symposium at the Geological Society of America-North Central Section meeting will focus on, but will not be limited to, the Silurian geology and paleontology of the central portion of North America. Abstract deadline is 11 January 1999.

For information, contact:
Donald Mikulic, Illinois State Geological Survey, 615 E. Peabody Dr., Champaign, IL 61820, (217)244-2518, mikulic@isgs.uiuc.edu

INTERNATIONAL GEOLOGICAL CORRELATION PROGRAM
(IUGS/UNESCO) IGCP Project 421:North Gondwana Mid-Palaeozoic Bioevent/Biogeography Patterns in Relation to Crustal Dynamics & I. U. G.S SUBCOMMISSION ON DEVONIAN STRATIGRAPHY (SDS)
SECOND CIRCULAR
Morocco Meeting, April 24th to May 2nd 1999
Under the Collaboration and Organization of: The Scientific Institute of the Mohammed V University, Rabat. The Moroccan Geological Survey, Ministry of Energy and Mines, Rabat. The Faculty of Sciences and Techniques, Moulay Ismail University, Errachidia.

ORGANIZING COMMITTEE:
Leader : Prof. Ahmed EL HASSANI, Department of Geology, Institut Scientifique Rabat
Co-Leaders:
1. Othmane FADIL, Head of the Geological Survey , Midelt
2. Abdellah EL MANSOUR, Vice Dean of the Faculty of Sciences and Techniques, Errachidia.
Excursions: Prof. Abdelfatah TAHIRI, Department of Geology, Institut Scientifique, Rabat.
Technical program: Dr. Lahcen BAIDER, Department of Geology, Faculty of Sciences, Casablanca.
Abstracts-book: Dr. Raimund FEIST, Université de Montpellier II , France

PLACE OF THE MEETING
The next international meeting of IGCP 421 will be held in connection with the SDS Annual meeting and will take place in Errachidia (480 km SE of Rabat), Morocco, on April 24th - May 2nd 1999. (Abdellah EL MANSOUR, Vice Dean of the Faculty of Sciences and Techniques, Errachidia.) Fax: +212 5 57 44 85

The field excursion connected with the joint meeting will focus primarily on Silurian to Early Carboniferous sequences in the Eastern Anti-Atlas (Tafilalet and Maôder basins: 3 days) and in the Moroccan Western Meseta (3 days), with special emphasis on Devonian sequences. The excursion will start at Erfoud (70 km South of Errachidia) and finish at Rabat.

The opening ceremony and sessions will take place in the Faculty of Sciences and Techniques in Errachidia and the El Ati Hotel in Erfoud.

REGISTRATION FEE: 8100 MAD (approximately 900 $ at present exchange). For administration reasons we require the payment in Moroccan Dirham. All bank charges and commissions are for your account. The registration fee for participants covers admission to all scientific sessions, a copy of the guidebook, accommodation and participation in the excursion. N.B. Registration fees are reduced for those who participate with their own car (exclusively 4WD) to 6300 MAD (approximately 700$). Please note that the minimum acceptable is 4 participants in one car, because for our safety we plan that the total number of cars in the excursion should not exceed 10 vehicles.

DEADLINES: Registration and field trips fees (full payments) for the participants and their accompanying members must be received: before : March 10th 1999. Note: Places for the meeting and the excursion are limited (40 participants). If there is still places: Registration after March 10th needs 15% extra to the total coast (1035 $), because hotels should be booked by the organizing committee early.

USEFUL INFORMATION
For Visas apply to Moroccan Embassy or consular office in your own country. Invitation could be send for the person who need it. Most of west European and north American countries do not need a visa.

Access to Errachidia: Most of participants will fly to Casablanca airport and join Rabat par a train-navette rapide (shuttle) to Rabat-Ville. Please check time table on: www.oncf.org.ma. (See departure: Aeroport Mohammed V; arrival: Rabat-Ville). We recommend to stay overnight of April 23rd at Terminus hotel (beside the train station). Please note that the fees for this night is not supported by the meeting. We can arrange reservation for those who need it.

Saturday, April 24th : departure from the hotel by bus to Errachidia (about 6 hours traveling)
Climate: the weather in April is very pleasant. The temperature is generally around 30^{o}C but it may sometimes rain.
Bank and exchange: the Moroccan National Currency Unit is the Dirham (MAD). One $ US is about 9 MAD. Exchange facilities of the internationally convertible foreign currencies and travelers cheque are available at the Casablanca airport and most of the bank offices in Rabat, Errachidia, Erfoud. The opening hours are: 8.30- 11.00 and 14.30 - 16.30 Monday through Thursday. On Friday: 8.30 -11.00 and 15.00 -16.30. Credit cards are accepted in all 2 and above star hotels and travel agencies. They are also accepted by some shopkeepers.

Medical insurance: The host country doesn't take in charge the medical insurance of either the participants or their accompanying members. Therefore, it is highly recommended that participants arrange for such with their travel agency.

Language: the working language of the meeting is English. No simultaneous translation will be provided.

Phone: Many phone-shops exist everywhere (boutiques) and opened from 7.00 to 11.00. Note that the personal handy phones could be used in most areas we shall visit (even in Errachidia and Erfoud).

ACCOMMODATION: Rabat is 3 stars hotels; Errachidia, Erfoud and Azrou are 4 stars hotels.
Web Sites: General information on Morocco: www.mincom.gov.ma SDS-IGCP Meeting; second circular: www.israbat.ac.ma Train time table: www.oncf.org.ma/SCRIPTS/horaire.asp

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GENERAL PROGRAM:
Saturday April 24th: Arrival of participants to Errachidia.
Registration of the Participants. Night in Errachidia

Sunday April 25th: opening ceremony and scientific sessions:
Night : in Erfoud (Hotel ElAti). N.B. other scientific sessions can be arranged in Erfoud in the conference room after dinner. This hotel has copious spaces in the hall that will allow small groups to discuss comfortably.

First part : the Atlas Anti (Tafilalet and Maider basins).

Monday 26th : 8h00 Departure for the excursion. Eastern Tafilalet Boutchrafine section (lower Emsian to Famennian) Hamar Lakhdad mud mound structure. Guide: Coordinator Prof. BULTYNCK (Belgium) Night: Hotel El Ati (in Erfoud)

Tuesday 27th: Western Tafilalet. Jbel Amelane section (Emsian to Famennian). The GSSP Mech Irdane section (Emsian to Givetian). Guide: Coordinator Dr. Thomas BECKER (Berlin) Night : Hotel El Ati (in Erfoud)

Wednesday 28th: Erfoud ñ Msissi - Erfoud. Jbel Issemour section. (Late Silurian to early Eifelian). Guide: Coordinator Dr. Eberhard SCHINDLER (Frankfurt) Night : Hotel El Ati (in Erfoud)

Thursday 29th : Journey crossing of the High Atlas: Erfoud-Azrou. Night : Hotel Amros in Azrou

Second part : The north-western Meseta..

Friday 30th : The Gara de Mrirt sections. Tibouda section (Emsian to Famennian), and Bounebdou section (Lower to Upper Devonian). Guide: Coordinator Prof. Abdelfatah TAHIRI (Rabat). Night : Hotel Amros in Azrou

Saturday May 1st : Azrou-Rabat. The Rabat Tiflet zone
Tiflet area: the Tiflet river section. Eo-variscan conglomerates and Tournaisian transgression.. Rabat area : sections of the Bou Regreg. We shall show the Late Silurian

and Lower Devonian, with Bohemian facies and fauna.. Guide: Coordinator Prof. Ahmed EL HASSANI (Rabat). Night : hotel Terminus in Rabat.

Sunday May 2nd: Oued Cherrat sections (30 km SW of Rabat).
The Ain dakhla section (Emsian-EifÈlian). The Nekhila section (Eifelian-Givetian). Guide: Coordinator Prof. Ahmed EL HASSANI (Rabat). Night : Hotel Terminus in Rabat.

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ABSTRACTS:

The abstracts book is being coordinated by Raimund FEIST (co-chairman of IGCP Project 421); Please send directly your abstract to this address: Dr. Raimund FEIST, Laboratoire de Paléobotanique et Paléontologie, Université de Montpelleir II, Place E. Bataillon Cc 064; 34095 MONTPELLIER, France. Fax: +33 467 042032 e-mail: rfeist@isem.univ-montp2.fr

Abstracts must be submitted in English on a PC or MACINTOSH formatted diskette, using Word, together with two printed copies. The text should be typed in a box of 15 cm (width) X 22.7cm (height), in Times font 12, single spaced, generic and specific names should be in italics. The title should be typed centrally in lower case letters, followed by the name(s) and address(es) of the author(s). Any drawings must be in clean hard copy. The abstracts must consist of 1 to 3 pages including figures and references but without photographs. These abstracts will be reproduced exactly as they are submitted in a 21 X 29.7 cm volume (see abstract form). Deadline for receipt of abstracts : March 10th 1999

PRESENTATION OF PAPERS :

Papers can presented either as a talk or a poster. Groups who work on Moroccan Geology are highly recommended to present their latest results and future programs. Talks: must not exceed 20 minutes (15 mn + 5 mn discussion). Projectors for color slides and transparencies will be available. Posters are very welcome. Their size, however, should not be too long, ideally fitting in a 80/120 cm panel. An award will be offered by the Organizing Committee for the best poster.

PUBLICATIONS: Refereed and accepted papers will be published in one of three journals: Bulletin de l'Institut Scientifique de Rabat. They should not exceed 12 pages including plates figures and references and should be submitted to the reading board of this Bulletin within two months after the meeting; Notes & Memoires du Service Geologiques du Maroc, special issue; Special volume in the Courier of Senkenberg. Final decision will be made during the Meeting

RECOMMENDATIONS:

Intending participants are strongly requested to fill in and return not later than March 10th, the registration form. Any cancellation must be made before March 30th. Refunds will be made in Moroccan Dirham, on the basis of the current rate after a deduction of 30% of the total amount to cover the preparation charges. No refunds will be possible after that time.

CORRESPONDENCE :

Transfers must be done to:

Banque Commerciale du Maroc
Agence Rabat Ibn Yacine
Compte No: 177 E 000299
SDS-IGCP Meeting
RIB: 007 810 0000001775000299 64

Important: please send a copy of your transfer order (by Fax or mail).

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REGISTRATION FORM FOR IGCP 421-SDS MEETING
Errachidia (Morocco) April 23rd to May 3rd., 1999

First name:
Surname:
Title:
Address:

(City) (State)
(Post or Zip code) (Country)
Phone: (office) (home)
E-mail address:
Fax:
I will attend the IGCP421-SDS meeting in Morocco: Yes No
I will present a paper: Yes
No
Title of the paper :

I will present a poster: Yes
No
Title of the Poster:

I am interested in participating in the excursion: Yes
No
I shall be accompanied by:
I shall travel with my own car (4WD) Yes No
If YES please indicate :
1. Registration number of the car (if itís known),
2. Names of colleagues who are going to travel with you in the same car
Accomodation: Rooms are double occupation please indicate your preference of sharing room.
Name & surname:

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This form should be returned as soon as possible (before March 10th 1999) to:
Prof. Ahmed EL HASSANI, Institut Scientifique, B.P. 703 RABAT-AGDAL 10106 RABAT, MOROCCO. by : FAX: + 212 7 77 45 40 and: e-mail: hassani@emi.ac.ma

John A. Talent
Centre for Ecostratigraphy and Palaeobiology (MUCEP)
Dept. of Earth and Planetary Sciences
Macquarie University 2109, Australia
e-mail: jtalent@laurel.ocs.mq.edu.au
voice: (61.2) 9850 8336
fax: (61.2) 9850 6053

PALEOZOIC MICROVERTEBRATES WEB PAGES

Mark Wilson co-leader, IGCP 406

The 1998 Annual Report and the 1998 Publications List for IGCP 406 (Circum-Arctic Palaeozoic Vertebrates) are now posted on the web. Links can be found on the following pages: Please review both the Annual Report and (especially) the Publications List and inform me <mark.wilson@ualberta.ca> of any additions or corrections.

New Working Group: A new working group has been established. Please see the report, Appendix 1, for more details.

Further information provided by Peep Maennik, Estonia:

The Annual Report also contains draft notices of the meetings of IGCP 406 planned for - Riga, Latvia, in 1999. Please see the report, Appendix 2, for details; and Syktyvkar, Russia, in 2000. Please see the report, Appendix 3, for details. IGCP Project 406 will have its next- year (1999) annual meeting in Riga, Latvia, in conjunction with the 4th Baltic Stratigraphic Conference (for more information about both meetings contact Dr. Ervins Luksevics, e-mail: ldm@com.latnet.lv), and in 2000 in Syktyvkar, Russia. Field-trip(s) to the Palaeozoic sections in the Subpolar Urals are planned. Preliminary registration to the Syktyvkar meeting is announced below.

More information about IGCP 406 is available from

Palaeozoic Microvertebrates Page -
http://www.biology.ualberta.ca/wilson.hp/Paleozoic.html
Palaeozoic News Page -
http://www.biology.ualberta.ca/wilson.hp/Palaeozoic.News.html

IGCP PROJECT 406 CIRCUM-ARCTIC LOWER AND MIDDLE PALAEOZOIC VERTEBRATE PALAEONTOLOGY AND BIOSTRATIGRAPHY MEETING "PALAEOZOIC PAN-ARCTIC TECTONICS, AND EVOLUTION OF BASINS AND FAUNAS" SYKTYVKAR, RUSSIA, JULY 12-15, 2000

FIRST CIRCULAR

Invitation. All interested Palaeozoic workers are invited to attend the IGCP Project 406 meeting (CAPV-2000) in Syktyvkar, Russia, from July 12th to 15th, 2000. The conference will be devoted to the evolution of Early and Middle Palaeozoic faunas and sedimentary basins, and palaeotectonical development of Circum-Arctic regions.

Program.

Excursions. Two simultaneous pre-conference excursions are planned:

1. July 5-11 - this excursion will visit the Lower and Middle Palaeozoic sections in the Subpolar Urals. Ordovician, Silurian, Devonian and Carboniferous strata, representing various sedimentary environments, can be examined. The maximum number of participants in this excursion is 20.
2. July 7-11 - this field-trip will take the participants to the Southern Timan where various facies (including stratotype of the well-known "Domanic facies") of the strata of Late Devonian age will be demonstrated.

At the end of the excursions, both groups will meet in Ukhta where several core-sections representing Lower and Middle Palaeozoic strata in the Pechora Syneclise will be demonstrated by the Timan-Pechora Scientific Research Centre.

Post-conference excursion.

July 16-20 - if there will be more than 20 persons interested in to visit the Lower and Middle Palaeozoic sections in the Subpolar Urals, also a post-conference excursion to this region can be organized.

Scientific sessions. July 12-15 - sessions will be held in Syktyvkar, in the Institute of Geology, Komi Science Centre, Uralian Division of Russian Academy of Sciences. The main topics of presentations will be:

A. Palaeontology and Biostratigraphy;
B. Sedimentology and Sequence Stratigraphy;
C. Tectonics and Basins.

Both, talks and posters are welcome.

Abstracts. Abstracts should be submitted before January 31, 2000. The text (in English, no more than two printed pages, including illustrations and references) should be sent by e-Mail as an ASCII file or as a text-file on 3.5" discette (use MS “Word” or “WP for Windows”). If you use special or national letters, or you want to add illustrations, please send a hard copy separately. Abstracts will be puplished in special publications of Ichtyolith Issues.

Estimated costs. Because of uncertainties of the economic situation in the country the final costs are not yet known. We hope to give the details in the Second Circular (January, 2000). Considering the prices at the moment, the estimated costs are:
registration fee - 50$ (includes excursion guide, abstract volume, programme, and coffee-breaks during sessions); accommodation in Syktyvkar - $30 (cheapest hotel) - $130 (the best hotel) per person per day; conference dinner -$30; excursion to Subpolar Urals - $800 (includes transportation and accommodation during excursion); excursion to Souther Timan - $500 (includes transportation and accommodation during excursion).
An attempt will be made to reduce prices for students and to give some financial support to other participants. Also, we are trying to find sponsors. Any suggestion concerning sources of financial support are greatly appreciated.

Preliminary registration. In order to know the number of interested persons and to start with organization, please fill the Registration Form included. The Registration Forms must be returned before July 13th, 1999. The Second Circular will be sent only to persons who pre-registered.

Contact addresses:
Anna Antoshkina
Instute of Geology, Komi Science Centre,
Uralian Division of Russian Academy of Sciences
54 Pervomayskaya St.
167610 Syktyvkar
RUSSIA
Fax: 821 2 425 346
e-mail: Antoshkina@geo.komi.ru

Peep Männik
Institute of Geology
7 Estonia Ave
10143 Tallinn
ESTONIA
Fax: 372 6 312 074
e-mail: mannik@gi.ee

Please complete and return to:
Anna Antoshkina
CAPV-2000
Instute of Geology, Komi Science Centre,
Uralian Division of Russian Academy of Sciences
54 Pervomayskaya St.
167610 Syktyvkar
RUSSIA
Fax: 821 2 425 346
e-mail: Antoshkina@geo.komi.ru

CAPV-2000
Pre-registration

Forename: Initial(s): Surname:
Title: Sex (M/F):
Institution:
Address (street): City:
Postal code: Country: State:
Phone:
Fax:
e-Mail:

Please underline
I shall attend yes probably
and intend to be accompanied by one two more accompanying persons
I intend to give a lecture yes no
I want to present a poster yes no
I intend to submit an abstract (abstracts) entitled

I intend to join excursion to the Subpolar Urals
pre-conference yes no
post-conference yes no
I intend to join excursion to the Southern Timan yes no

I need financial support yes no

I need an official invitation yes no

Signature

[Accommodation will be specified in future]

HOLOSTRAT launched

Stewart Molyneux (British Geological Survey)

Imagine that you are interested in the carbon isotope stratigraphy of a particular section or interval. Or perhaps you want to learn about its bentonites, or graptolites, or geochronology, or any other aspect of stratigraphy. Where do you go for information? You might have a comprehensive and well-ordered collection of literature that you know thoroughly, or you might undertake a library search or talk to colleagues. But new and exciting possibilities for compiling and integrating stratigraphic information are created by the launch of HOLOSTRAT, a joint venture between the British Geological Survey (BGS) and the Stratigraphy Commission of the Geological Society of London. HOLOSTRAT establishes an area on the BGS website **(http://www.bgs.ac.uk)** for the geological community at large to obtain information on the stratigraphy of the UK, literally putting that information at your fingertips. (See the article by Peter Allen and Peter Rawson, *Geoscientist*, November 1998, p. 14).

The first contribution to HOLOSTRAT is now available on the BGS website, and is a compilation of files relating to the type Ludlow Series in the Welsh Borderland. You can reach it by clicking the Free Downloads button on the BGS Home Page, and then following the path through 'HOLOSTRAT'. The compilation contains a series of hyperlinked PDF (Portable Document Format) files, so you will need Adobe Acrobat Reader to view them, but Acrobat Reader is freely available as a download from the Adobe website, and we have provided plenty of opportunities for users of HOLOSTRAT to obtain it.

The PDF files may be viewed on-line in your web browser, or if you prefer can be downloaded as either a self-extracting executable or a zipped file. Once you have opened the Ludlow volume, you can investigate any of the many aspects of Ludlow stratigraphy that it contains. An introductory page contains links to files on chronostratigraphy, geochronology, lithostratigraphy, methods of correlation (biostratigraphy, bentonites, chemostratigraphy) and important sections, while additional links between files relate various aspects of Ludlow stratigraphy to each other, and to maps, vertical sections and other diagrams. A holostratigraphical chart shows the relationships between the various methods of correlation (mainly biostratigraphical), and contains links to a file that explains the relationships displayed. References are included for each section, but are also compiled in a bibliography.

The structure of HOLOSTRAT means that it can grow and develop as revised and/or additional information becomes available, and our hope is that, over time, HOLOSTRAT will become a major reference source for information on UK stratigraphy. The Ludlow volume is the first to be completed, but other compilations in preparation, dealing with aspects of Albian and Oxfordian stratigraphy, are likely to be put up later this year. The provision of stratigraphic information in this form is novel, and we would like as much feedback as possible. So please take a look at HOLOSTRAT, even if Upper Silurian stratigraphy is not your primary interest, and let us know what you think of it.

email: s.molyneux@bgs.ac.uk

A VIEW FROM THE OPPOSITE POLE: A RESPONSE TO C. H. HOLLAND AND R. B. RICKARDS

Lech Teller and Adam Urbanek

Whether we like it or not, a discussion on stratigraphic boundaries involves two kinds of argument: objective and subjective. Anyway we should accept as a common starting point that a different view is not necessarily a wrong view. Had C. H. Holland and R. B. Rickards shared this approach, their criticism (Silurian Times No 6, 1998, pp. 19-20) of our views published in Palaeontologia Polonica, 56 1997 would not have been so bitter. Teller and Urbanek do not suggest that stratigraphic boundaries be set at the horizons of mass extinction. What they try to achieve is a better correlation of stratigraphic subdivisions with major biotic events. In this they are not isolated judging, among others, by another item published in the same issue of "Silurian Times" as well as by a number of letters from our colleagues who obtained reprints of our paper. We are also for a common language in stratigraphy provided that our point of view has also been considered.. And last but not least: accusations of nationalism are simply deserving of no comment.

SILURIAN RESEARCH 1997-1998

RICHARD J. ALDRIDGE (U.K.)

A manuscript with Ivan Sansom and Moya Smith on mongolepid fish remains from the early Silurian of South China has been submitted for publication. As reported last year, work progresses slowly on a monograph of Silurian conodonts from South China (with Wang Cheng-yuan) and on a manuscript on Late Silurian oceanic episodes and events (with Lennart Jeppsson) also progresses.

ANNA ANTOSHKINA (RUSSIA)

I continue research on Paleozoic reefs of the Urals and stratigraphy and sedimentology of the Silurian of the Timan-Urals region.

I am carrying out collaborative research on Upper Silurian stromatolite reefs in Alaska and Urals with Constance Soja (USA), and a summary of our joint project follows. In July 1998, we conducted joint field work in the Northern, Middle and Southern Urals to compare Upper Silurian (Ludlow) stromatolite reefs with those we have been investigating in Alaska's Alexander terrane. Building upon Antoshkina's earlier research (Antoshkina 1994, 1998), we were particularly interested in determining the size and extent of the reefs and associated deposits (e.g., fore-reef breccias). We also focused on documenting the taxonomic composition, diversity, and distribution of the microbial constructors, associated sphinctozoan sponges (aphrosalpingids), and the problematic hydroid, Fistulella. The goal of our research is to identify the degree of similarity in the Alaskan and Uralian stromatolites and to use these data to help resolve global paleogeographic problems in the middle Paleozoic, including corroborating or revising our paleogeographic model of the Alexander terrane's location within the Uralian Seaway in the mid-Paleozoic.

Aphrosalpingids were first described by E. I. Myagkova (1955) from sections exposed along the Vishera River in the Northern Urals. Because of their enigmatic form, these chambered or tubular organisms were classified until recently as archaeocyathid-like or as calcareous algae, but Rigby et al. (1994) recognized their systematic position to be a family of sphinctozoans within the Class Demospongea. The association of the aphrosalpingids with Silurian stromatolites is significant because these microbial-sponge complexes appear to represent a previously unrecognized stage in the evolution of platform-margin reef s built by a consortium of microbes and metazoans from the

Cambrian-Mesozoic (Soja 1994). The paleoecology of the aphrosalpingids is still under investigation, but these sponges appear to have occupied important ecological niches within the reefs, contributing to the development of the stromatolites as bafflers and as a nucleus for microbial encrustation.
Our preliminary data suggest the following:
1. Brachiopods Didimothyris didyma Dalm. indicate that the aphrosalpingids at the Ilych River locality, Northern Urals, occur in the upper Ludlow. 2. Aphrosalpingids are larger in size and occur in greater density in the Uralian stromatolites than they do in the Alaskan deposits. In the Urals, they are as much as 4 cm in diameter and up to 6 cm in length. Oblique surfaces in the reefs reveal the presence of 80 aphrosalpingids in a 45 x 30 cm2 area. This confirms our earlier interpretations (Antoshkina 1979, 1994; Soja, 1994) that the aphrosalpingid sponges played an important role in reef construction and were not restricted to cryptic habitats within the reefs (Zhuravleva and Myagkova, 1974; Wood, 1995; Zhuravlev, 1997). 3. Reef surfaces also revealed interesting synecologic relationships between the aphrosalpingids and Fistulella. Previous research suggested that aphrosalpingids and Fistulella were mutually excluded from co-existing in the same microbial reefs, co-occurring only as allochthonous fragments. However in the Northern Urals, some of the aphrosalpingids appear to have been attached to or encrusted on the external walls of the hydroid "polyps." Preliminary evidence suggests that Fistulella specimens encrusted by the aphrosalpingids are significantly larger (up to 2 cm in a diameter) than those with a maximum diameter of 4-6 mm first described from Silurian and Devonian reefs of the Urals by Shuyskiy (1973). We will be investigating whether this symbiotic relationship created optimum conditions for the development of larger, more robust individuals. 4. Peri-reefal breccias comprising well-preserved clasts indicate that aphrosalpingids were the dominant skeletal component to be resedimented along the slope. This confirms the importance of the sphinctozoans with respect to other metazoans in these platform-margin stromatolite reefs of Late Silurian age.
CHRISTOPHER R. BARNES (CANADA)
I have three main topics of ongoing research that involve Silurian strata. First, Shunxin Zhang (PDF 1997-98) and I have completed a project to document that conodont faunas from the Becscie, Merrimack and Gun River formations (Lower LLandovery) of Anticosti Island. This represents the last part of the entire Anticosti sequence for which the conodonts had remained undocumented, based on my earlier collections; three papers on the diverse fauna have been submitted. Second, I am involved in studying the Lower Paleozoic stratigraphy and conodont faunas from the Canadian Rocky Mountains; in this past summer's field work Leanne Pyle and I extended the collections through the Llandovery in both the platform and basin sequences. Third, Dave Jowett has started an M.Sc. thesis on Llandovery to early Ludlow conodonts from the slope facies of the Cape Phillips Formation with extensive collections made in summer of 1998; Mike Melchin was the field work leader and the team will also investigate graptolites, radiolarians, chitinozoans and carbon isotopes.
JAMES E. BARRICK (USA)
Continues research on Silurian conodont biostratigraphy and biofacies in the southern midcontinent region of the United States and hopes to be able to evaluate the pattern of proposed oceanic events and episodes in this area.
MICHAEL BASSETT (UK)

Carried out fieldwork in Iran in May-June 1998, looking mostly at Cambrian and Devonian faunas, but also some Silurian sections. Work on facies sequences in Bolivia and on Gotland is now in publication draft form. Among various brachiopod studies, the discovery of a Ludlow age lingulide in South Wales, with pedicle soft tissue preservation is a current particular focus of study.

DENIS BATES (UK).

Nancy and I are still preparing our manuscript on Paraplectograptus, Gothograptus (Eisenackograptus) eisenacki, Gotho. nassa and intermedius, and Holoretiolites.
Nice specimens that Ania has brought here confirm a lot that we have already worked out.

CLAES BERGMAN (SWEDEN)

Study of a Silurian paulinitid polychaete fauna from the Canadian arctic archipelago. Study of jawed polychaetes from the Silurian of Scania, Sweden.

STIG M. BERGSTROM (USA)

Continues studies with W.D. Huff and D. R. Kolata on Silurian K-bentonites in North America and Europe. Also doing some conodont work in the Llandovery, partly in cooperation with O. Lehnert. Greatly enjoyed the Spain meetings last summer!

The Lower Paleozoic K-bentonite Project : submitted by Stig M. Bergstrom, Warren D. Huff, and Dennis R. Kolata

During the past decade, we have been involved in a multidisciplinary and regionally extensive study of Lower Paleozoic volcanic ash deposits (K-bentonites). Our studies thus far have focussed on their geographic and stratigraphic occurrence, geochemistry, mineralogy and their tectono-magmatic and paleogeographic significance. We have not yet investigated the very few known Cambrian K-bentonites and most of our work, both in the field and in the laboratory, has been devoted to Ordovician K-bentonites, particulary in eastern North America, northwestern Europe, and the Precordillera of Argentina. Results of these studies have been presented in about 65 publications (articles, abstracts, monograph). During the last few years, we have also studied Silurian K-bentonites in North America and northwestern Europe, especially those in the Llandovery of eastern North America, the British Isles, and Baltoscandia. These investigations have to date resulted in 6 articles and 7 abstracts. Of special interest to Silurian workers are several recent publications that include (see Publication List in this issue of Silurian Times) descriptions of such beds from Nova Scotia, eastern Canada (Bergström et al., 1997), northwestern Europe (Bergstrom et al., 1998a; Huff et al., 1998), and the Southern Appalachians of United States (Bergstrom et al., 1998b).

Some of the many ash bed occurrences studied have been known in the geological literature but several others, such as those in the Southern Appalachians, are new discoveries. A particulary interesting recent discovery is the so-called Osmundsberg K-bentonite (Bergstrom et al., 1998a) that we have traced, with a variable degree of confidence, in upper Llandovery sections across much of Baltoscandia to as far away as northern Ireland. This unusually thick bed (115 cm at the type locality in central Sweden) represents an enormous ash fall that in magnitude is comparable with the well known Millbrig and Deicke ash falls in the Middle Ordovician that are among the largest known in the Phanerozoic geologic record. Because of its potentially great significance as a widespread isochronous reference horizon, it is obviously important to establish the precise stratigraphic position of the Osmundsberg K-bentonite. Based on currently available information, it is in the turriculatus Zone and apparently, in strata older than at

least a portion of the carnicus-proteus Subzones and younger than at least a part of the utilis-johnsonae Subzones. Attempts this summer to date this ash bed more precisely at its type locality were not successful, the greenish mudstone 0-1 m above its top being barren of graptolites apart from very rare specimens of Rastrites linnaei. We have recently extended our Silurian K-bentonite studies geographically and stratigraphically. Hence a paper on the ash beds in the important section along Dnestr River in southen Ukraine and another on a K-bentonite bearing succession in southern Sweden are in review.

Our studies thus far suggest that Silurian K-bentonites are more widely distributed than is apparent from published records and we would very much appreciate if Silurian workers would bring to our attention occurrences of plastic, sticky, gray clay beds that may be K-bentonites.

BILL BERRY (USA)

In regard to matters Silurian - Stan Finney and I have been finding more graptolites in a Nevada formation that is part of the western assemblage overthrust rocks. The unit, the Elder Sandstone was first recognized in the Shoshone Range in the 1960s by USGS mappers. Graptolites they collected were convolutus zone and some Wenlock (flemingii type) forms. The Elder was never seen in outcrop until we unearthed it in the trench we had dug to study the Late Ordovician succession along Vinini Creek. We collected more convolutus zonre material at the base and lots of torn up gothograptids with slender dubius group forms at Vinini Creek. In August, Stan took me to localities in the Independence Range where he found the Elder stratigraphically beneath the Slaven Chert (considered to be Devonian). We have obtained slender bohemicus group forms at one level there and higher - M. birchensis - close to the top of the Elder. Stan has traced the Elder around in the Independence Range . The unit seems to occur widely in the Carlin trend gold area now that its lithological characteristics can be seen in some good outcrops. So, a little piece of new Silurian graptolite information.

HENNING BLOM (SWEDEN)

Ph. D. studies on Middle Palaeozoic microvertebrates, with special reference to Silurian-Lower Devonian vertebrate remains from the Circum-Arctic. About to bring together publications about the vertebrate microremains from Franklinian Basin, North Greenland. Studies also include anaspids, thelodonts and acanthodians from the Silurian of Skandinavia.

CAROLE BURROW (AUSTRALIA)

My work has continued this year on the Silurian (and Devonian) fish faunas of Australia. Although no relevant new publications are out yet, papers on the Ludlow-age teleostome from Yea, Victoria (co-author Gavin Young), Australian Silurian vertebrates (co-author Sue Turner), a review of placoderm scales (co-author Sue Turner), and Late Silurian microvertebrate faunas from Cornwallis Island, Arctic Canada (co-authors Jo Vergoossen, Sue Turner, Tom Uyeno, and Ray Thorsteinsson) are all in press. I am also still working on descriptions of vertebrates from the ?Wenlock/Ludlow Silverband Formation, the Grampians, Victoria, ?Ludlow microvertebrate fauna from the Pendock 1A borehole, Western Australia, and Late Silurian poracanthodid acanthodian microremains from Pete Hanson Creek, Nevada.

CHEN XU (CHINA)

Research on Ordovician Series/Stage GSSP candidates from China. 2. Ordovician Biodiversity of South China. 3. Early Llandovery recovery from Latest Ordovician mass extinction.

An international working group has been organized by myself including Rong Jia-yu, Zhang Yuan-dong, Fan Jun-xuan, Zhan Ren-bin, Wang Zhong-zhe, Wang Zhi-hao, Yin Lei-ming and Geng Liang-yu from the Chinese side and Chuck Mitchell and David Harper from abroad. The project is mainly working on the Hirnantian Substage. It is supported by the Chinese Academy of Sciences (Academia Sinica). During the past 3 years, We have re-studied 4 classic sections, the Wangjiawan and Fengxiang sections of Yichang (deeper water facies) and the Honghuayuan, Tongzi and Ludiping, Saotao sections (near shore shallow water facies) in the Yangtze region. Systematic and continueous collections of graptolites, brachiopods, trilobites, as well as conodont, acritarch, chitinozoan samples have been done and the results of the identification have been completed. The Carbon-Oxygen analysis has been also carried out recently. Recently, I worked with Chuck Mitchell in USA. We are also fortunate that Mike Melchin visited us and give us very good comments. The biozonation based on these field works and the indoor works has been prepared. In descending order they are:

Parakidograptus acuminatus Zone
Akidograptus ascensus Zone
Normalograptus persculptus Zone
Hirnantian beds:
Normalograptus ojsuensis-N. extraordinarious Zone
Paraorthograptus pacificus Zone
    Diceratograptus mirus Subzone
    Tangyagraptus typicus Subzone
    Un-named Subzone
Dicellograptus complexus Zone
Foliomena-Nankinolithus / Dicellograptus complanatus Zone

The base of the Hirnantian Substage will be coincided with the base of the N. ojsuensis-N. extraordinarius Zone and includes N. ojsuensis-N. extraordinarius, Hirnantia, and N. persculptus zones. The working group will submit propose reports to the Ordovican Symposeum (Prague meeting) this year in June.

This project also includes another joint work with Stan Finney and Stig Bergstrom on the base of the Upper Ordovician. Stan and Stig visited China last year on the Pingliang and Longxian sections of the west margin of the North China Block. Stan and Stig will continuously work with me and my Chinese collegues. Stan, Stig and I will submit propose report at the coming Prague meeting.

A related project lead by Rong Jia-yu and also supported by the Chinese Academy of Sciences (Academia Sinica) on the O-S, F-F, and P-T mass extinction and recovery is being carried out at the same time.

EUAN CLARKSON (UK)

Euan Clarkson and Cecilia Taylor (Edinburgh), Colin Scrutton and Howard Armstrong (Durham) and David Harper (Copenhagen) are still continuing work on the faunas of the Silurian inliers of the Midland valley of Scotland. Emma Gallacher (Galway) has begun a monograph of the Upper Llandovery brachiopods of the Pentland Hills under David

Harper's supervision. Vicenta Carrio-Lluesma (National Museums of Scotland, Edinburgh) continues the study of gastropod faunas from the Pentland Hills, despite the birth of Pablo some months ago. Liz Hide (National museums of Scotland, Edinburgh) has started to study large fossil sponges from the Pentland Hills, and with Euan Clarkson and Cecilia Taylor has re-collected productive localities. Cliff Lovelock's Ph. D. thesis on palaeoenvironments of the Silurian Lesmahagow Inlier, Scotland, has been examined and approved and we expect some interesting publications

Sue Rigby (Edinburgh) has completed two papers on the Rastrites maximus zone of Southern Scotland, and the functional morphology of large Rastrites, which will shortly be submitted to press.

An important conference will be held in Edinburgh on 23- 25 September 1999. 'The Southern Uplands Terrane - tectonics and biostratigraphy within the Caledonian Orogen' (Peach & Horne Centennial - a hundred years of research in the South of Scotland). This will be held under the auspices of the Royal Society of Edinburgh, the oraganisers being from Edinburgh University, British geological Survey and National Museums of Scotland. For further information contact Dr Jim Floyd, British Geological Survey, Murchison House, West Mains Road, Edinburgh EH 10 6HF, or Dr Phil Stone, at the same address. e-mails j.floyd@bgs.ac.uk p.stone@bgs.ac.uk.

E. N. K. Clarkson, D. A. T. Harper & A. N. Hoey (1998) Basal Wenlock Biofacies from the Girvan District, SW Scotland. Scottish journal of geology 34, 61-71, deals with a regressive sequence passing from shallow-water, wave dominated facies into redbeds, and with faunas belonging to the Howellella-Protochonetes and the Podowrinella associations.

PAUL COPPER (CANADA)

We (at PARRC = Paleozoic Reef Research Centre, Laurentian University, Sudbury P3E 2C6: includes Darrel Long, Frank Brunton, Jin Jisuo in part, and visitors, plus grad students), are continuing work on Anticosti and Ontario, Silurian Gotland-UK. Work in progress includes the Hirnantian reef episodes on Anticosti, just below the O/S boundary, with reefs in both the basal Prinsta Mbr and Laframboise Mbr of the Ellis Bay Fm.; the East Point Aeronian reefs (with a highly diversified, exotic coral, strom, and microbial fauna-flora, plus rare lithistid sponges), and the microbiota of the Chicotte coral-sponge reefs (Telychian). Dieter Schmidt (Muenchen) will help with the Wetheredella flora, or are these forams? Brachiopod papers finished with Jisuo Jin include the Parastrophinella Hirnantian fauna, the Aeronian- Telychian stricklandiid faunas (new genera), and a small paper on Dicoelosia (all in J. Paleontology 1997-1998).

We announce the GAC-MAC May 26-28, 1999 paleo sessions and Silurian field trip to Lake Timiskaming (May 29-30, 1999): we hope many will attend.

CARLO CORRADINI (ITALY)

Is working mostly on Sardinian faunas on Ockerkalk conodont stratigraphy; he has just completed two papers (with E. Serpagli): one on a top Llandovery-Pridoli conodont zonation one and the second on the revision of the Kockelella Group from top Homerian to mid Ludfordian and its evolution.

ENRIQUE DIAZ-MARTINEZ (SPAIN)

I am continuing research on the Silurian (as well as rest of the Paleozoic) of the Central Andes, in cooperation with IRD (formerly ORSTOM) and local Peruvian and Bolivian institutions (I presented a synthesis of this research at the last ISSS field meeting). With

Yngve Grahn's help on chitinozoans, we are refining the age of the glacially-influenced deposits in the area (Cancañiri Fm.), which seem to be Llandovery. I am also beginning research on the detailed sedimentology of glaciomarine deposits at the base of the Silurian in Spain, and a revision of the Silurian in SE Peru (Altiplano and Eastern Cordillera).

I am looking for someone interested on doing U-Pb dating of zircons of granitoid clasts in the Paleozoic glacial marine diamictites of the Central Andes. Supposed to be Grenville-related basement. Maybe an isotope geochronologist already working on the Grenville orogen in North America, Scotland or Scandinavia ?

REIN EINASTO (ESTONIA)

Has been working on Ordovician and Silurian sedimentology, cyclicity and sequence stratigraphy throughout the central East-Baltic.

ANNALISA FERRETTI (ITALY)

Is continuing her work on the cephalopod limestone biofacies from the Austrian Carnic Alps within a team-study coordinated by H. P. Schönlaub. A general report was published with K. Histon and a conclusive paper is planned for 1999. On the occasion of the pre-meeting excursion in Sardinia of the VII International Conodont Meeting held in Europe (ECOS VII, Italy 1998), a global revision of the Silurian exposed both in SW and SE Sardinia has been made, with special focusd on the main biofacies recognized there.

BARRY G. FORDHAM (AUSTRALIA)

Work continued on mid-Paleozoic time scales and conodont biostratigraphy of the Silurian to Lower Carboniferous of the Yarrol Province (central Queensland, Australia).

GENG LIANGYU (CHINA)

Continues to work on 1.the correlation between Silurian graptolites and chitinozoans with Fu Li-pu; 2.Taxonomy and biogeography of Ordovician-Silurian chitinozoans from the Tarim basin, S. Xinjiang, China; 3.Silurian chitinozoans from Chongyang, SE Hubei, China with Cai Xiyao; and 4. Silurian chitinozoans from S. Jiangsu, China with Yang Xiaoqing.

MAURIZIO GNOLI (ITALY)

He is working on cephalopods from Sardinia, the Carnic Alps and other areas of North Gondwana.

YNGVE GRAHN (BRAZIL)

At present I am studying Silurian Chitinozoa from the Parana Basin in Brazil (Vila Maria Fm), Paraguay (Vargas Pena and Cariy Fms) and Argentina (Zapla Fm, Chaco Basin). Except for the Vila Maria Fm, the chitinozoan faunas are both abundant and diverse.

WOLFGANG HANSCH (GERMANY)

After other business I started again with ostracode studies in the Silurian of Thuringia (Germany).

KATHLEEN HISTON (AUSTRIA)

A paleoecologic and taphonomic study of the nautiloid fauna of the Silurian Cephalopod Limestone Facies in the Carnic Alps continues with Annalisa Ferretti and Hans Peter Schönlaub. A taxonomic revision of Austrian nautiloid collections and of Italian nautiloid collections (with Maurizio Gnoli) from the Carnic Alps is almost completed.

ANETTE.HOGSTROM (SWEDEN)

Continued focus on machaeridians, especially microstructural aspects combined with a similar approach on other problematic sclerite-bering groups.

CHARLES HOLLAND (IRELAND)

I continue to work most of the time on Silurian cephalopods.We are still completing a second edition of Geology of Ireland.The long delayed book in English on our Transhemisphere Telychian project really does seem about to appear.

I am glad that sense has prevailed and that we are maintaining our Silurian stratigraphical classification which everyone is using. There are still some who do not seem to understand that it is a language of communication.

LENNART JEPPSSON (SWEDEN)

I continue working with Silurian Episodes and Events and with conodonts and their taxonomy, nomenclature and distribution. Among the manuscripts are The Late Silurian sequence of Episodes and Events (with R. Aldridge); a project on Mulde Event data, hopefully useful for a model of secundo-secundo events (with M. Calner); a revision of the early Sheinwoodian of Gotland. Isotope studies of the Ireviken Event (with Corfield and Siveter) and the Lau Event (several authors) are in advanced stage. Hopefully next year I will finish a monograph of Ctenognathus (with Caroline Strömberg). Much time should also be spent with the new locality catalogue for the Silurian of Gotland. Interest in gotland as reflected in the use of Allekvia Field Station reamins high.

MARKES JOHNSON (USA)

The National Geographic Society has awarded a grant to Markes Johnson for a project in cooperation with Rong Jia-yu (Nanjing Institute of Geology & Palaeontology) on "Late Silurian rocky shores of North China (Inner Mongolia)." Field work will be conducted in the Baotou area of Inner Mongolia during June 1999. Details of sea-level change from the upper part of the standard Silurian sea-level curve will be tested and fossils of rocky-shore organisms will be searched for.

MARK KLEFFNER (USA)

I am completing the latest revision of a conodont- and graptolite-based Silurian chronostratigraphy (with James Barrick) and preparing a manuscript based on it that I hope will be submitted for publication early in 1999. I am also attempting to use conodont distribution in the Appalachian Basin to extend sequence recognition from the foreland portion of that basin in New York into Ohio and Tennessee. I plan on revisiting a project I began almost ten years ago, on the nature of the Lockport/Salina contact, by collecting from some additional, potentially promising sections. Finally, on a smaller scale, I hope to complete a project on the nature of the Brassfield or lower Noland/Dayton and Dayton/Estill contacts in southern Ohio.

JIRI KRIZ (CZECH REPUBLIC)

I almost completed monograph on the Silurian and lowermost Devonian bivalves of Bohemian type from the Carnic Alps, which should be submitted for press before the end of 1999. It is based on the bivalves I collected there during last 30 years. Before end of year 1998 I will complete editing of the joint paper on the Silurian of Northern Gondwana for the N.Y. State Museum Bulletin James Hall Meeting second volume.
In the press is my book on the Geological Monuments of Prague with longer English summary. Described are there many conserved Ordovician, Silurian and Devonian classic localities on the Prague territory, history of their research, detailed geology, position and importance for the future research.

Next year I plan to continue on my monograph on the lower Devonian bivalves of Morocco and will start to make database of the Silurian lithostratigraphic units of

Bohemia for the new research programme of our Survey: Database of the lithostratigraphic units of Bohemia.

One of the interesting results of my work on the Silurian bivalves of the Carnic Alps is the evaluation of the relationship between the Perunica Prague Basin, Sardinia, the Montagne Noire and the Carnic Alps regions during the Silurian. All regions where the Silurian and lower Devonian cephalopod limestone facies occurs, especially the Perunica with the Prague Basin, the Carnic Alps Basin, the North Gondwana Montagne Noire, Mouthoumet and Sardinia Basins were relatively close to each other and connected by surface current system which made possible for common larval stages to cross from one island group or microcontinent within the North Gondwana to its neighbour group. Comparison with Recent condition speaks for maximal distances less than 1000 km. It may be documented especially by the presence of the same Bivalvia dominated communities in all regions in which occur even the same species. When new species occur, they are very closely related to the species of other regions and this can be result of the quick adaptation to slightly different conditions caused by depth, type of sediment or temperature.

The earliest Silurian community from the Carnic Alps known from the Mt. Cellon and Mt. Cocco Sections represents very interesting step in the history of the Cardiola Community Group. The Carnalpia nivosa Community from the Cyrtograptus rigidus Biozone (Køí□, 1979, 1997), layer no. 12b (Walliser, 1964), Sheinwoodian, Wenlock is composed of the majority bivalve species which are known only from the region of the Carnic Alps. The carbonate facies of the same age like in the Carnic Alps is known from the Prague Basin, in the vicinity of the Svatý Jan Volcanic Centre (Kriz 1991) but the same bivalves were never found there. On the other hand, in the Carnalpia nivosa Community occur some bivalves („Ctenodonta" simplicitor, Dualina secunda, Maminka comata and Spanila gracilis, which later occur in the Carnic Alps Basin and in other regions in the upper Wenlock, Homerian (Montagne Noire, Sardinia and Prague Basin). It can be postulated that in the Sheinwoodian was the region of the Carnic Alps Basin more isolated from other Gondwana regions. The Carnalpia nivosa Community occupied one of the oldest known occurrence of the Silurian cephalopod limestone biofacies (Kriz 1979, 1998a, Ferretti & Kriz 1995), which shows all the characteristic of the temporary ventilated bottom facies, especially very common juvenile stages of bivalves and gastropods as the result of temporary mortality during relatively short anoxic conditions survived by adult individuals

The later Wenlock, Homerian, Cardiola agna Community - Slava pelerina - Isiola zila Subcommunity contains more species of bivalves known from other Gondwana regions and from Perunica Prague Basin but still contains the species known only from the Carnic Alps region (Isiola zila sp. n. and Cardiola schoenlaubi sp. n.) but related to the forms from other regions. There certainly started closer currents communication between the Gondwana, Perunica and Carnic Alps Basin regions.

The relationships with Gondwana and Perunica regions increased distinctly during Ludlow time, especially during the Colonograptus colonus, Saetograptus chimaera, Saetograptus linearis zones and up to the Neocucullograptus kozlowskii Zone. This time is characterised by the presence of the Cardiola consanguis Community, Cardiola docens Community and Cardiola alata Community. They all contain identical species of bivalves and show very close relationships to the communities known from Bohemia (Perunica),

Sardinia and Montagne Noire (Gondwana) as opposed to relationships with Baltica and Avalonia (Schönlaub 1998a). In general they show in the Carnic Alps lower diversity than in other regions, but this may be related to the more restricted conditions, e. g. temperature.

HEINZ KOZUR (HUNGARY)

I work on Silurian of turkey, conodonts, ostracods, Muellerisphaerida, stratigraphy, paleogeography, and Silurian of Hungary (same fossil groups)

ANNA KOZLOWSKA-DAWIDZIUK (POLAND)

Evolution, phylogeny, biostratigraphy, and ultrastructure of Silurian retiolitids. Project: The influence of lungreni Event on retiolitids evolution.

Kozlowska-Dawidziuk, A. 1998. Ultrastructural study on retiolitid graptolites. Lethaia 31, 42.

Kozlowska-Dawidziuk, A. 1998. Diversity of siculae length in retiolitids. Temas Geologico-Mineros ITGE, 23, 205-208.

Kozlowska-Dawidziuk, A. 1998. XVI Konferencja Paleontologow - Wiktorowo 02-04. 1998. Przeglad Geologiczny 46, 1203-1204.

JEFF KUGLITSCH (USA)

I am currently investigating conodont biostratigraphy of the Silurian subsurface Michigan Basin and conodont biostratigraphy and strontium isotope stratigraphy of adjacent Silurian outcrops in Wisconsin and Upper Michigan. I am also examining the relationship between Silurian ostracode and conodont faunas in the same region and am doing a detailed description of an Aeronian ostracode fauna from eastern Wisconsin. My other interests include Silurian microvertebrates and foraminiferida.

PHILIPPE LEGRAND (FRANCE)

Has just completed his doctoral thesis entitled “Approche stratigraphique de l’Ordovicien terminal et du Silurien inférieur du Sahara algérien par l’etude de Diplograptides (Graptolites)”. Presently he is studying Lower silurian monograptids of the Algerian Sahara, and graptolites of Saudi Arabia.

ALAIN LE HERISSE (FRANCE)

Continues work on acritarchs and related forms, from the upper Ordovician up to the upper Devonian. He is studying various aspects : the late Ordovician extinction and the Early Silurian recovery (contribution to the PICG 410 and to the project CIMP/Aramco "Palynostratigraphy of Saudi Arabia"), the strategic post-crisis to the Wenlock/Ludlow boundary with Monika Masiak from Warsawa, Poland, the distribution of Silurian and early Devonian acritarchs from Libya and Brazil basins, in co-operation with Philippe Steemans from Liege, Belgium, and Claudia Rubinstein from Mendoza, Argentina and Luiz Padilha Quadros from Rio de Janeiro, Brazil. He is specially interested in the evolution of biodiversity of acritarchs in time: results on this topic have been presented in several Symposia and meetings this year.

ALFRED LENZ (CANADA)

Work continues in Arctic Canada, in particular on late Wenlock monograptid and retiolitid graptolites. This project has now been expanded to include a collaborative study of the monograptidss and retiolitids with Anna Kozlowska-Dawidziuk (Institute of Paleobiology, Warsaw), radiolarians by Paula Noble (University of Nevada at Reno, Nevada), palynomorphs, including chitinozoans, by Aicha Achab, Esther Asselin and Assedine Soufiane (Georesources, Quebec, Canada), and organic carbon variations by

Chris Holmden (University of Saskatchewan, Saskatchewan, Canada). Samples for this study were collected in 1998, and further collecting is planned for the coming two years. Other projects include a biostratigraphic and taxonomic study of the graptolites of the Wenlock to Ludlow boundary, including a fully exposed interval of the lower/upper Homerian extinction beds, at Vseradice, Czech Republic, with Anna Kozlowska-Dawidziuk and Petr Storch (Geological Institute, Prague); a systematic study of Silurian graptolite synrhabdosomes with Juan Carlos Gutiérrez-Marco (Universidad de Complutense, Madrid, Spain) and Petr Storch (Czech Geological Survey, Prague); Silurian graptolites of northern Spain, with Juan Carlos Gutiérrez-Marco and Lech Teller (Institute of Paleobiology, Warsaw, Poland); completion of a study on sicular annuli and thickened interthecal septa in Silurian monograptids, with Anna Kozlowska-Dawidziuk; and a systematic study of Tremadoc graptolites from northern Yukon, with Dennis Jackson (England).

Graduate student Denis Tetreault is nearing completion of a PhD study on a spectacular latest Wenlock Konservat Lagerstätten fauna and flora in central Ontario. Sherrill Senior is beginning a PhD study of Cyrtograptus and related graptolites, beginning with a large collection she made in the Arctic Islands, last summer.

STEVE LODUCA (USA)

Work continues on the taphonomy, systematics, and evolution of Silurian noncalcified thallophytic algae. Geochemical studies carried out in this regard are being expanded to explore changes in the stable carbon isotopic compositions of marine strata through the Silurian. Research also continues on the Silurian stratigraphy of the Michigan and Appalachian Basins.

DAVID LOYDELL (UK)

David Loydell continues his collaboration with Peep Mannik on integrating the graptolite and conodont biozonations in the Baltic. With the completion of the study of the Ohesaare core (with Dim Kaljo also; see publication list) attention has shifted further offshore to look at material from north-eastern Latvia. First impressions are that the faunas are rich and well-preserved. Miscellaneous projects in Wales with Richard Cave are under way. Most are field-based and large collections are being amassed from eastern mid-Wales. A project on parasitism on graptolites (largely the work of Denis Bates) is nearing completion, as is work with Joanne Kluessendorf and Don Mikulic on some of the Silurian graptolite faunas of the American Midwest. It is hoped that work will start in 1999 on the Corral de Calatrava section in Spain, in collaboration with Juan-Carlos Gutiérrez-Marco and Petr Storch. Current student projects include those of Jude Thorogood on correlation using bentonites (near completion), Kate Saunders (on dendroid graptolites from Konservat-Lagerstätten), Stephen Doherty (on the Wenlock of north Wales) and (just starting) Anthony Butcher on the Silurian of south-west Illinois. Kate and Anthony's projects are supervised in part also by Joanne Kluessendorf and Don Mikulic. Gary Mullins' (PDRA) work on integrating the graptolite and chitinozoan biozones in the Banwy River section is approaching its final phase - publications will be prepared next year.

Comment: An error in Loydell (1998): Early Silurian sea-level changes.

On page 458 of this paper, I referred the fauna from a graptolitic mudstone described by Jaeger and Schonlaub (1970) from the Rauchkofel Bodentorl section in the Carnic Alps to the lower part of the griestoniensis Biozone. This was an error - the correct horizon is

lower spiralis Biozone. The material received from Jaeger's collections in the Museum fur Naturkunde, Berlin contained the specimens upon which Jaeger and Schonlaub's (1970) paper was based (collected in 1969) and a further collection stated to be from this locality made in 1976 presumably by Jaeger (H. P. Schönlaub, pers. comm.) and considered to be from the same horizon. The latter collection was the first examined and found to be dominated by Stimulograptus clintonensis, a species not recorded from the spiralis biozone, but common in the middle part of the Telychian (crispus, sartorius and griestoniensis biozones). The presence in the 1969 collection of many narrow monoclimacid fragments seemed to confirm the horizon as griestoniensis Biozone and as my aim at this time was simply to establish the age of the graptolitic mudstone to aid in the production of the sea-level curve published this year, I did not examine the entire fauna (several hundred specimens) thoroughly. However, when I came to start work on describing the fauna in detail I realised that the 1969 collection comprises a fauna indicative of the lower part of the spiralis Biozone. It contains no specimens of Stimulograptus clintonensis. The narrow monoclimacid present is probably Monoclimacis woodae and the specimen identified as Monoclimacis directa is an oblique view of Monoclimacis crenulata. It thus seems that there are either two graptolitic horizons in this section, one of mid Telychian age and one of early spiralis zone age, or that the 1976 collection was made from another locality in the Carnic Alps and at some point the wrong locality information was attached to it. My apologies to anyone who has used the 'revised date' presented in my paper.

ROBERT F. LUNDIN (USA)

Continued work on the nonpalaeocope ostracodes of Gotland. Analysis of shape variation of the nondescript species is being done with Harry Birkmann (phd candidate) through the use of confocal microscopy. systematics and stratigraphic distribution of the Gotland nonpalaeocopes are also parts of the project.

JORG MATLETZ (GERMANY)

I am still working on Ordovician and Silurian graptolites from various regions. I will concentrate on Silurian (Wenlock-Ludlow) graptolites from glacial boulders in Northern Germany and Llandovery graptolites from several sections in Dalarna, Sweden. Further work includes Llandovery to Pridoli graptolites from the Harz Mountains, Germany.

PEEP MAENNIK (ESTONIA)

Work continues on the evolution, ecology and taxonomy of Ordovocian and Silurian conodonts from Baltic, Arctic regions and Siberia, and on conodont-based high-resolution stratigraphy. Joint studies of the distribution of conodonts and graptolites in Baltic are going on together with Dr. D. Loydell from Portsmouth, U.K.

DONALD G. MIKULIC & JOANNE KLUESSENDORF (U.S.A.)

continue their work on Silurian sedimentology, paleontology, reef paleoecology, sequence stratigraphy, and depositional environments throughout the central U.S., as well as their research on Silurian Fossil Konservat Lagerstätten. Joanne is also focusing on Silurian paleokarst and ichnological trends. Don continues to work on Silurian trilobites, especially on the systematics, paleoecology, and taphonomy of trilobites in Silurian reefs of the Milwaukee-Chicago area. They presented papers at the Geological Society of America-North Central Section meeting in March on Silurian trilobites in Ohio, sequence stratigraphy in Wisconsin, and paleokarst of the central U.S. On September 18-20 they led a field trip of approximately 60 geologists on the Sequence Stratigraphy and

Depositional Environments of the Silurian and Devonian of Southeastern Wisconsin for the Joint Fall Field Conference of the Society of Sedimentary Geology (SEPM) Great Lakes Section and the Michigan Basin Geological Society. They are presently preparing a Michigan Basin Geological Society Special Paper based on this field trip. Joanne and Don continue to help supervise David Loydell's (University of Portsmouth, U.K.) doctoral student Kate Saunders' work on Silurian dendroid graptolites of the central U.S. In addition, they are working on a project with the Wisconsin Geological & Natural History Survey to map the Silurian and Devonian rocks of southeastern Wisconsin.

Finally, Don and Joanne would like to announce that they are organizing a symposium honoring Heinz Lowenstam and his work on Silurian reefs for the 1999 Geological Society of America-North Central meeting to be held in Champaign, Illinois, on April 22-23, 1999. They are also planning a field trip on the Silurian Depositional Environments and Sequence Stratigraphy at the Northern Edge of the Illinois Basin for April 23-24 in conjunction with that meeting. (see above).

TATIANA MODZALEVSKAYA (RUSSIA)

Tatiana L.Modzalevskaya is continuing work on various Silurian brachiopod projects including Timanian pentamerid fauna (M.Rubel) and also silurian smooth atrypids and athyrids from Lithuania (P.Musteikis). Additionally with Bernd Wenzel (Erlangen, Germany) work is on ecology of spire-bearing brachiopods in the Timan-Pechora Region.

HELDUR NESTOR (ESTONIA)

Spent three months at The University of Alabama beginning work on a joint project with Carl Stock "Recovery of stromatoporoids from the End-Ordovician mass extinction". It includes systematic collection and study of the Llandovery stromatoporoids from the North American Midcontinent.

VIIU NESTOR (ESTONIA)

Continues her study on Silurian chitinozoans and biostratigraphy of Baltoscandia and West-Kaliningrad area. A paper on Llandovery chitinozoansfrom the Oslo region is in preparation.

PAULA J. NOBLE (USA)

I continue to work on Silurian radiolarians with the hope of refining them as a biostratigraphic tool. Recent projects include work on the Cape Phillips Formation, Canadian Arctic, with Alf Lenz, and Silurian siliceous units in the Roberts Mountains allochthon, Nevada.

GODFREY NOWLAN (CANADA)

I am currenlty working mainly on the Cambrian and Ordovician of the WIlliston Basin, but have recently completed some projects with Silurian content (see publications). I continue to have an interest in conodont biostratigraphy in the Arctic Islands, WIlliston Basin, Hudson Bay Lowlands and Appalachian areas of Canada and I am working actively on Silurian conodonts from the Clam Bank Formation of western Newfoundland, the Severn River Formation of Manitoba, the Interlake Group of Saskatchewan and North Dakota and from eastern Ellesmere Island, Canadian Arctic Archipelago. I am continuing collaboration with Sue Turner (Queensland Museum) on fish remains from the Silurian of Canada.

Sadly, Tim de Freitas has left the Geological Survey of Canada and gone to greener pastures in the oil industry, taking a job with Imperial Oil Resources Ltd.

FLORENTIN PARIS (FRANCE)

Most of my present work is focusing on problems of biodiversification in northern Gondwana regions in connection with IGCP n° 410 "The Great Ordovician Biodiversification Event" (co-leaders: B. WEBBY, M. DROSER & F. PARIS). I am paying a special attention to the Late Ordovician crisis and to the Silurian faunal recovery, up to the end of the anoxic event that extended during most of the Silurian times in northern Gondwana regions. These aspects of my researches are also supported by a French "CRISEVOLE" Project including 12 scientists (paleontologists, sedimentologists and geochemists) from several universities. In North Africa and south-western Europe, palynomorphs, and especially the chitinozoans proved to be very efficient for dating the successive events around the Ordovician-Silurian boundary. Investigations are also carried out on the delta C13 of sorted palynomorph residues in order to locate the most significant excursions of stable isotopes.

During the 8th ISOS (International Symposium on the Ordovician System) that will held in Prague , Czech Republic from June 21 to 25, 1999 (contact and information: Eva Pacecova, Czech Geological Survey, fax +420 - 2 - 58 18 748; E-mail: ISOS@cgu.cz), a special session will be devoted to Palynomorphs (acritarchs, chitinozoans, scolecodonts, cryptospores...) under the auspices of IGCP n° 410 and of the CIMP. Silurian palynologists who have data close to the Ordovician-Silurian boundary are warmly invited to submit an extended abstract for this session (contacts: Thomas Servais & Florentin Paris).

SILVIO H. PERALTA (ARGENTINA)

Presently, I'm working on stratigraphical and biostratigraphical aspects of the Silurian of the San Juan Precordillera, embracing or comprising the Tucunuco Group (La Chilca and Los Espejos Formations) and its lateral correlative Tambolar Formation. A detailed correlation analysis has been carried out, together with Laura León (Ph.D. student). Llandoverian graptolites and palynomorphs from the basal part of the La Chilca Formation, in theTalacasto and the La Trampa sections are under study; preliminary data have been published in VII Argentinian Congress on Paleontology and Biostratigraphy (Bahía Blanca).

Llandoverian graptolites and palynomorphs from the oolithic Ironstone (upper) member of the Don Braulio Formation in the eastern slope of the Villicum range, Eastern Precordillera, are under study together with Diana Pöthe de Baldis (Ph.D. student). Palynomorphs were published in Revista Española de Micropaleontología and preliminary graptolite data have been presented in the VII Argentinian Meeting on Sedimentology (Salta Province). Other important research is on the study of trace fossils related to storm dominated shelf and its paleoenvironmental interpretation. Next year, I'm looking forward to working on the Silurian of the Mendoza Precordillera, in the Villavicencio Formation, as well as in the San Rafael area, in the La Horqueta Formation.

An enthusiastic worker on the Silurian stratigraphy since 1971, is my colleague Diana Pöthe de Baldis, who is working on palynomorphs (acritarchs, chitinozoans and prasinophyceae) of the Tucunuco Group and Tambolar Formation, in the Central Precordillera; for her Doctoral Thesis theme. Laura León is working on Ichnological and Paleonvironmental aspects of the Tambolar Formation for her Doctoral Thesis theme, and Elba Persia, a degree student of Geology, is working on taphonomic aspects of the Los Espejos Formation, in the Talacasto creek.

Llandoverian ironstones are extensely distributed on the western margin of South America, mainly along the Andean Belt of the Argentina, Bolivia and Perú and are paleoclimate diagnositic deposits. They contain significant graptolite, palynomorph (acritarchs, chitinozoan and prasinophyceae), and brachipod faunas, already under study. Silurian workers form San Juan University (Argentina) are able to receive and/or submmit information about this topics from/to others colleagues of the Silurian "team".

Announcement of coming meetings of interest to Silurian workers: 14th. Argentinian Congress will be held in Salta Province, April 1999.

Stratigraphy of the Lower Paleozoic of South Portugal (Ossa Morena Zone).

JOSÉ MANUEL PIÇARRA D'ALMEIDA (PORTUGAL)

Silurian graptolites of Portugal (with A. Lenz, P. Štorch and J.C. Gutiérrez-Marco). Portuguese-French Project "Silurian-Devonian boundary in France and Portugal: biologic crises, biostratigraphy, stratigraphy and palaeogeography" (with J.T. Oliveira, J.M. Romão, M. Robardet, J. Le Meen and R. Gourvennec) - IGCP Project 410 and 421

HELGA PRIEWALDER (AUSTRIA)

I'm working on chitinozoans of the upper Ordovician - lower Devonian interval from Austria, mainly from the Carnic Alps.

JOHN RICHARDSON (UK)

Marine-nonmarine correlation at the Ludfordian-Pridoli and Silurian-Devonian boundaries. Work on four sections in the Cantabrian Mountains in collaboration with Rosa Rodriguez (U. of Leon) and Stuart Sutherland (Natural History Museum, now Calgary, Canada) has enabled a spore zonation through the Upper Silurian and Lower Devonian to be established. For the Pridoli/Lochkovian boundary, the chitinozoa give a slightly different level compared to that of the spores, and this anomaly is being further investigated. The chitinozoa studied by Sutherland contain many forms not recorded so far in Bohemia and Podolia, and this may be part of the problem inhibiting accurate stratigraphical correlations. The work has been expanded into North Africa in collaboration with Dom Massa. Rodriguez of Leon University reported on the Cantabrian part of the work at the XII Simposio de Palinologia, 1998. The project is being financed for three years by an NERC grant.

MICHEL ROBARDET (FRANCE)

Has continued studies on the Silurian of the Iberian Peninsula and has been particularly concerned by the preparation of the 1998 Field Meeting of the Subcommission on Silurian Stratigraphy in Iberia, as co-author of a synthetic paper and a guide-book for the excursion in the Ossa Morena Zone. Will continue field work in the Iberian Peninsula: in the Catalonian Coastal Ranges (Spain) with Dr. Juan Carlos Gutiérrez-Marco - in Portugal (Portugal-France joint program on the Upper Silurian and the Silurian / Devonian transition) with Drs. Jean Le Menn and Rémy Gourvennec (Univ. Brest) and Drs. J.M. Piçarra, J.T.Oliveira and J.M.Romao (IGM Beja and Lisboa).

CLAUDIA RUBINSTEIN (ARGENTINA)

I continue working on the refinement of the Silurian biostratigraphy in the Central Precordillera, integrating palynological and graptolite data, in collaboration with Edsel Brussa (Universidad Nacional de Salta). First results of Hirnantian to Ludlovian strata were presented in the Pisa CIMP Symposium, in September 1998. Silurian palynological assemblages have yielded acritarchs, prasinophytes, spores, cryptospores and chitinozoans. Recently, I started with studies on the Silurian of Puna, Northwestern

Argentina. In that deposit, abundant cryptospores and acritarchs were found. I am also working on the palynology of the Lipeon Formation (Silurian-Devonian? age) from the Sierras Subandinas, Northwestern Argentina.
I also continue on with the palynology of the Silurian-Devonian boundary of the Brazilian basins with P. Steemans (Liege) and A. Le Herisse (Brest).

OLOF SANDSTRÖM (SWEDEN)

Continued research on Ludlow biostromal complexes on Gotland, Sweden (Sedimentology and paleoecology). - Together with Mikael Calner and Mari-Ann Mötus I am studying a deep setting reef biostrome from the uppermost part of Wenlock, Gotland. - I am planning to make a microfacies study on the reefs and reefal limestones in the upper Hemse Gp. (Ludlow) on Gotland.

ENRICO SERPAGLI (ITALY)

Is working mostly on Sardinian faunas on Ockerkalk conodont stratigraphy; he has just completed two papers (with C. Corradini): one on the revision of the Kockelella Group from top Homerian to mid Ludfordian and its evolution and the second one on a top Llandovery-Pridoli conodont zonation.

PAOLO SERVENTI (ITALY)

He is working on cephalopods from the Carnic Alps, Sardinia and other areas of North Gondwana.

DAVID SIVETER (UK)

Currently working on Silurian myodocope ostracode faunas from Europe, China and Australia (with Jean Vannier and Wang-Shang-qi). Research also continues on the soft-bodied elements and microfauna from the Silurian Konservat Lagerstatte from Herefordshire, UK (with Derek Siveter, Derek Brigg and Paddy Orr).

DEREK SIVETER (UK)

Third International conference on **Trilobites and their relatives**, Oxford, April 2-6, 2001. The Conference will ,be preceded by a field excursion to Scotland and northern England, and succeeded by on to Wales and the Welsh Borderland. The organizing committee is: Euan Clarkson (Edinburgh), Richard Fortey (London), Keith Ingham (Glasgow), Phil Lane (Keele), Alan Owen (Glasgow), Bob Owens (Cardiff), Derek Siveter (Oxford) and Alan Thomas (Birmingham).

Papers are in press on: the taphonomy of a non-biomineralised arthropod from the Silurian of the Herfordshire lagerstatte (with David Siveter and Derek Briggs); the mineralization of homolonotid cuticle from the Silurian of Gotland (with John Dalingwater and Harry Mutvei); and proetid trilobites from the Devonian of Inner Mongolia (with Zhou Zhiqiang and Bob Owens). Also, a chapter has been written for a book (in press) which contains descriptions and assessments of some 130 important Silurian sites in the UK. This publication also contains summary chapters on the palaeogeography, facies and fauna of the UK during this period. Other contributing authors are Dick Aldridge, David Siveter, Phil Lane, Nigel Woodcock and Douglas Palmer. Work on the Herefordshire Lagerstatte continues, and funding has recently been secured for the next three years for a postdoctoral researcher to work on this project with Briggs, Siveter and Siveter.

CONSTANCE M. SOJA (USA)

Collaborated with Anna Antoshkina and Brian White in the Urals last summer investigating Ludlow microbial-sphinctozoan (aphrosalpingid) buildups. In summer '99,

work with Colgate students will be completed in Glacier Bay National Park, Alaska, on Silurian subtidal stromatolites and associated deposits.

ASSEDINE SOUFIANE (CANADA)

Research for Aicha Achab and Azzeddine Soufiane (Canada): Chitinozoa, Late Ordovician, Silurian, Biostratigraphy, Systematics, Paleogeography.

We are continuing our study on the taxonomy and biostratigraphy of chitinozoans from the Late Ordovician and the Early Silurian of Anticosti Island. Our attention will be focused this year on the systematics, biodiversity and biostratigraphy of Silurian Chitinozoa from the Canadian Arctic Islands in collaboration with M. Melchin (St-Francis Xavier Univ.) and A. Lenz (Univ. of Western Ontario) for the graptolite data. The study of chitinozoan data from the Lower Silurian of Arisaig Group, Nova Scotia, is in progress.

DES STRUSZ (AUSTRALIA)

A revision of Silurian-Devonian chonetoid brachiopods from southeastern Australia is nearing completion. Work will then shift to the Orthoidea and Strophomenoidea from the Silurian of the Yass Syncline. There could be brief excursions with Tim Munson into the realm of Silurian Rugosa from Quidong (southern NSW) and Wee Jasper (southwest of Yass).

LECH TELLER (POLAND)

Graptolites, biostratigraphy and paleogeography of the Silurian.

ADAM URBANEK (POLAND, TEMPORARILY RUSSIA)

Study on stolon system in Recent Rhabdopleura compacta (with Prof. P.N. Dilly, London) with comparison to Graptolithina. Newly discovered structural details will enable a closer homology; b) study on the fine structure of Ordovician Mastigograptus sp. (with Dr D. Bates, Aberystwyth) . Specimens in excellent state of preservation reveal a number of previously unknown details.

VIIVE VIIRA (ESTONIA)

Work continues on Silurian (Ludlow and Pridoli) conodonts.

WANG XIAOFENG (CHINA)

Continues to work with Chen Xiaohong on the Ordovician and Silurian graptolites, chitinozoans and sequence stratigraphy in the eastern Yangtze gorges area. A manuscript related with the origin and evoluton of the Paleo-Tethys is completed, with Ian Metcalfe and others, on the study of the Ailaoshan-Jinshajiang suture, West Yunnan,China. A new project dealing with the standard stratigraphic scale for the Sinian System (Neoproterozoic III) will be stared in 1999. Any colleagues, who are interesting in joining in the cooperative study, are welcome.

RODNEY WATKINS (USA)

Silurian Dicoelosia communities; niche-partitioning among tabulate corals in Silurian reefs of the Racine Formation.

EVGENY YOLKIN (RUSSIA)

During last year my main task was a preparation of the paper for the second volume of James Hall Symposium proceedings. It already is sent to editors. It was a pleasure to confirm colleague's indirect evidences (Pedder et Oliver, 1990) that an upside-down position of the Siberian Continent on Scotese et McKerrow's maps for the Middle Paleozoic is highly erroneous. Much time was paid to editorial works with the first issue

of a new journal "News of Paleontology and Stratigraphy" that is considered now as a supplement to journal "Russian Geology and Geophysics" [or "Geologiya i Geofizika"].
GRAHAM YOUNG (CANADA) is working on various aspects of Lower Paleozoic corals. Current Silurian projects include analysis of the stratigraphic distribution of Silurian tabulate corals, and a collaborative project with Steve Kershaw (UK) on growth banding in colonial corals and stromatoporoids**.**

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