

Newsletter of Micropalaeontology



February 2007

Number 75

Edited by I.J. Slipper



The Micropalaeontological Society

CONTENTS

Society news	3
Group news	10
Society officers	18
Conferences ahead	20
Conference reports	30
Micro Courses	34
Micro News	37
Book Review	38
Diary	42

Pictured here is Dr Samantha Gibbs receiving the Charles Downie Award from Professor David Siveter at the AGM in November 2006. This was for her paper on mid-Pliocene nannofossil evolutionary events published in P3 in 2005. If you have read a paper in 2006 which you believe is worthy of the Charles Downie Award, please contact the secretary with your nominations - further details are to be found on pages 4 and 29.

Copy deadline for next issue: **1st June 2007**

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Society News

Report from the Chair - Prof. David Siveter

Firstly, thanks to all those who took heed of my request in the last Newsletter to try to recruit new members to TMS. At the Annual General Meeting in November, TMS Secretary **Michal Kucera** gave the heartening news that our Society had recruited some 45 new members in recent months; most of these, I am pleased to report, fall within the younger age bracket. I extend a warm welcome all new members and encourage them to participate fully in the activities and meetings of the Society. Please continue to spread the word of the benefits of membership amongst students and colleagues and direct them to the www.tmsoc.org web site for an online application form. In this respect I would also like to give a welcome to **Clive Jones** of the Natural History Museum, London, who recently joined TMS Committee in the new post of Membership Treasurer. The tasks undertaken by the Treasurer had lately become particularly onerous and Clive will gradually take over responsibilities for annual subscriptions and associated matters from Treasurer Steve Packer, who will oversee wider issues relating to the finances of the Society.

By all accounts the AGM on *Microfossils and Climate Change* was well received. Thanks to the speakers, to **James Davy** and **Paul Bown** at UCL, the sponsors *Petrostat Ltd.* and *Shell* and to **Mark Williams** for organising an enjoyable and stimulating meeting. Also, renewed congratulations go to **Samantha Gibbs** for securing the Charles Downie Award and to former TMS Chairman **John Whittaker** for the award of Honorary Membership of the Society. As a long-time friend - one of the very first people who helped me when I began my PhD studentship - it was a particular pleasure for me to acknowledge John's "very distinguished and sustained contribution to Micropalaeontology and unstinting and much valued service to TMS over many years."

For those of you unable to be present at the AGM you still have the chance to get a permanent (and much fuller) record of the scientific theme of the meeting. Mark Williams, together with Committee colleagues **John Gregory** and **Daniela Schmidt**, are in the final throws of reviewing some 40 papers for a TMS special pub-

lication that should be delivered to the Editor and the Geological Society for an anticipated 2007 publication. With contributions embracing aspects of climate change from the Cambrian to the present day, and replete with specially funded colour figures, it promises to be an exciting state of the art volume with much for students and professionals alike. "Great for use in teaching my new 'Microfossils and Climate' module", says Mark. For the Society it promises to be a best seller.

Also in the latter part of the year, TMS acquired corporate membership of the International Palaeontological Association. As many will know, IPA fronted the successful 2007 International Palaeontological Congress in Beijing. As a paid-up member, TMS will now have, as with other learned society members, an official channel for potential input into the programme of the next IPC. The IPA website also directs the user to three very useful web-based databases that permit an on-line search of directories of palaeontologists, palaeontological collections and palaeontological web sites. IPA has asked TMS to encourage its members to access and enter information in these directories. The Secretary of TMS will serve as our representative on the Council of IPA.

Looking forward, the next AGM will be something of a special event. TMS has chosen to couple its AGM with its contribution to the bicentenary celebrations of the Geological Society by hosting a meeting devoted to one of the main themes of the anniversary, namely 'geological heroes'. The 2007 AGM meeting will take place at University College London on the afternoon of Wednesday November 7th, when six invited speakers will showcase key micropalaeontological heroes and their contribution to the history and development of our discipline. As the history of micropalaeontology had already been highlighted by TMS committee members **Andy Henderson** and **John Gregory** as the possible basis of a meeting or special publication, it is particularly appropriate to see it launched in 2007. We hope that as many people as possible will turn up for this AGM and for the TMS specialist group meetings arranged for 2007.

Secretary's Report - Dr Michal Kucera

2006 TMS ANNUAL GENERAL MEETING SECRETARY'S REPORT

INTRODUCTION

This has been my third and last year in office. However, I have so much enjoyed working for the Society that I have decided to follow in the footsteps of my predecessor(s) and agreed to stand for re-election at the 2006 AGM. Another reason to carry on was that many of the initiatives started during the last three years are only now beginning to yield material results and I would love to have the opportunity to enter the 400th member of the Society into the database. Speaking of which: some of you will have noticed a slight irregularity to the address labels used for the November issue of the Journal. Alas, the membership database experienced a minor hiccup, which has since been discovered, its source identified (me playing with Excel under stress) and the problem was swiftly rectified. At any rate, the Society is completing its 36th year of existence in a healthy and active state and I look forward to another three years of supporting the Society's committee work, and administration of TMS grants and awards schemes.

SPECIALIST GROUP MEETINGS 2005

The Society continues promoting micropalaeontology through small, focused international meetings organised by its specialist groups. "Biology and Palaeobiology of Foraminifera and Coccolithophores" organized jointly by the Foraminifera and Calcareous nannofossil Groups took place in May 2006 in Liverpool, and was visited by 50 researchers. The 3rd Joint Meeting of the Palynology and Silicofossil groups of TMS took place in March 2006 in Utrecht and a very successful Ostracod group meeting was held in May 2006 in Drongen Abbey near Ghent in Belgium. The Society is proud on the success of these meetings and we are looking forward to the exciting events planned for 2007.

CHANGES TO THE COMMITTEE

Dr Andy Henderson has been elected at the 2005 AGM for a second term as the Webmaster. In addition, **Dr Mark Williams** has been co-opted to the committee as a Publicity officer, replacing Dr Steve Starkie.

New specialist group representatives appointed since the 2005 AGM were:

- **Dr Howard Armstrong** (Microvertebrate Group Chair) who replaces Dr Paul Smith.
- **Robert Raine** (Microvertebrate Group Secretary) who replaces Dr Henning Blom.
- **Dr Jens Herrle** (Nannofossil Group Secretary) who replaces Emma Sheldon.
- **Dr Richard Pearce** (Silicofossil Group Secretary) who replaces Dr Ivo Grigorov.

The Society is grateful to all committee members who have volunteered their time and effort.

CHARLES DOWNIE AWARD

The Charles Downie Award is given annually to the member of TMS who, in the opinion of the Committee, has published the most significant paper, in any journal, based upon his or her post-graduate research. The committee decided that the 2006 award will be given to Dr Samantha Gibbs for her publication: Gibbs, S. J., Young, J. R., Bralower, T. J. & Shackleton, N. J. Nannofossil evolutionary events in the mid-Pliocene: an assessment of the degree of synchrony in the extinctions of *Reticulofenestra pseudumbilicus* and *Sphenolithus abies*. *Palaeogeography Palaeoclimatology Palaeoecology* 217, 155-172 (2005).

GRANTS-IN-AID

Two Grants-in-aid have been awarded in 2006: to Benjamin Kotrc (Bristol) to visit the MMRC facility in Berlin and Tom Dunkley Jones (UCL) to participate at the INA 2006 conference in Nebraska. The committee was pleased by the large number of applications and encourages student members to apply in 2007.

MEMBERSHIP DATABASE

The Society's updated database comprises 394 members who have paid their membership dues for 2006. Of these, 217 are resident in the UK, 100 in Europe, and 77 in the rest of the world. The membership of the Society has increased slightly compared to the last year (387 members). Particularly encouraging was the increase in new members joining the Society: since January 2006 TMS welcomed 43 new members, which is the highest number since electronic records are available. Clearly, TMS is experiencing a generation shift and we are pleased to see that young micropalaeontologists continue to recognize the Society as an important platform for furthering the science.

NEWSLETTER

Dr Ian Slipper continued in his office as the Newsletter Editor. *Newsletter of Micropalaeontology* No. 73 was issued in January 2006 and No. 74 in July 2005. The January issue was accompanied by a new Directory of Micropalaeontologists.

WEBSITE

Dr Andy Henderson has been re-elected as the Society's Webmaster and continued to develop the website. The site is continuously updated and used to disseminate information to the membership including details of specialist group meetings. The link is: <http://www.tmsoc.org>. In addition, a new means of communication with the membership: an electronic newsletter, has been launched and used during 2006.

PUBLICITY

The 25th volume of the *Journal of Micropalaeontology* has been celebrated by a silver banner and a solicited review article that will appear in Issue 2, Volume 25 of the *Journal*. Dr Mark Williams has acted as co-opted Publicity Officer and a range of new publicity materials are being produced and piloted at international meetings. The activities of the Society on this front appear to have been reflected by the influx of new members and we are keen to continue developing new means of increasing the visibility of TMS.

Michal Kucera

<michal.kucera@uni-tuebingen.de>

TMS Secretary, 11/11/2006

Treasurer's Report - Dr Stephen Packer

The TMS accounts for 2005-2006 were presented at the AGM in November. Copies of the accounts will be available on the TMS website and are also re-produced in this newsletter. The end of year balance continues to show a slight improvement relative to last year and is in line with the overall strategy of attempting to increase the financial reserves of TMS, whilst maintaining support to our core activities and other micropalaeontological events around the world.

Library and membership subscription income has grown, reflecting increases in the institutional rate for the *Journal of Micropalaeontology* and an increase in new members (individual and institutional). Production costs for the *Journal* are higher this year, reflecting an annual increase in the page rate, and also include an undercharge cost from Geological Society Publishing House (GSPH) for 2005. Costs for the scanning of back issues of JoM are also included in this financial year.

Revenue from Gift Aid continues to grow. This allows us to reclaim tax on subscriptions and donations. I would urge all UK tax payers to complete and return a Gift Aid form if possible, if you haven't already done so (you only need to complete a form once and it's valid whilst you still pay a subscription). The GA form can be downloaded from the TMS website. Thank you to those of you who have already completed and returned forms. The new extended format AGM, introduced in 2005 has higher overall costs. However the positive feedback from members attending suggests that it is well worth the extra investment. The 2006 AGM was sponsored by **Shell UK** and the wine reception by **Petrostrat Ltd**. If your company would like to sponsor the 2007 AGM, please get in-touch.

Both the Journal and the Newsletter provide a platform for advertising your institution or company to a global market at very reasonable prices, so please do not hesitate to contact the appropriate editor should you wish to submit an ad.

I will be continuing as TMS Treasurer for a further year, whilst the society continues the search for a replacement, if you are interested in taking on this role please contact either myself directly or a member of the committee.

It is a pleasure to welcome Clive Jones (Natural History Museum, London) to the committee. Clive has taken on the role of Membership Secretary and will be handling 2007 subscriptions, payments and membership items. Clive's contact details are:

Clive Jones
Collections Manager,
Micropalaeontology
The Natural History Museum
London SW7 5BD
Tel: 020 7942 5580
Fax: 01420 474876

Subscription rates for 2007 will remain unchanged at 35 GBP for ordinary members and 20 GBP for retired / student members. 2007 subscription invoices will be issued towards the end of the year and are due for payment on the 1st January 2007. As always we would ask you to pay promptly and to complete the form in full. Please return all subscription forms to Clive Jones, at the address above.

Thank you for your continued support of TMS and I look forward to seeing many of you again during 2007.

Stephen Packer

New Members

We welcome the following new members to the Society:

Naomi Griffiths
Jamie Bennett
Ioana Micoara
Joshua Ball
Ramesh Parathasarathy
James Casford
Nigel Hooker
Jawad Afzal
Phil Jardine

Robert Daly
Amr Deaf
Carin Andersson Dahl
Khaled Al-Wosabi
Lewis Collins
Michael Montenari
Caroline Dawber
Hanno Kinkel
Stephan Steinke
Sam Fielding

TMS Statement of accounts for financial year 2005-2006

INCOME		EXPENDITURE	
Balance from 2004-2005	15605.50	Journal of Micropalaeontology	
		Volume 24, Parts 1 & 2 (u/c from 2005)	855.00
Membership Subscriptions		Volume 25, Part 1 (inc. postage)	12816.00
Individual/Student 2005	40.00	Volume 25, Part 2 (inc. postage)	12549.00
Individual/Student 2006	12558.84	Scanning of JoM	690.98
Individual/Student 2007	75.00		
Gift Aid	940.64	Sub-total costs of the JoM	26910.98
Sub-total	13614.48	Newsletter of Micropalaeontology & Directory	
Library Subscriptions	17363.00	Printing costs Number 73 & Directory	520.80
		Postage: Number 73 & Directory	436.34
Total Subscription income	30977.48	Printing costs Number 74	243.00
		Postage: Number 74	279.33
Miscellaneous Income		Sub-total costs for N/L & Directory	1479.47
Surplus Foram/Nanno Grp Meeting May 05	208.10	Annual General Meeting	
Surplus Foram/Nanno Grp Meeting May 06	434.34	Hire of lecture theatre at UCL	0.00
Refund of bank error	34.60	Speaker's meal	202.30
Advertising revenue 2006	1020.00	Reception	653.68
Donations to Higgins Fund	165.00	Speaker's expenses	513.26
Donations to Downie Fund	50.00		
Sale of JoM backparts	375.00	Sub-total AGM 2005	1369.24
TMS Foundation	371.00	Miscellaneous outgoings	
Special publications royalties (GSPH)	6.38	IPA Subscription	79.53
Bank account interest (BR acc)	290.81	Newsletter Editors expenses (IS)	52.49
Springar Science & Business royalties	177.19	Special Publication Editors expenses (MBH)	53.45
AGM 2005 Sponsorship (Petrostrat)	250.00	JoM Editor's expenses (JG)	386.73
Amazon royalties	36.01	Treasurer's expenses (SRP)	358.53
Total Miscellaneous income	3418.43	Postal expenses (HWPB)	262.59
TOTAL INCOME	50001.41	Committee meeting expenses (Nov 05)	304.44
		Committee meeting expenses (Mar 06)	91.77
		Committee meeting expenses (Jun 06)	155.07
		Grant-in-Aid 2006 (TDJ)	200.00
		Grant-in-Aid 2006 (BK)	200.00
		EEON Subscription	172.00
		Downie Award 2006 (SC)	200.00
		Credit Card Company fees	470.53
		Direct Debit fees	54.46
		Bank Charges	43.00
		Sub-total	3084.59
		TOTAL EXPENDITURE	32844.28

BALANCE FOR FINANCIAL YEAR 2005-2006 (Current & Business Reserve accounts):	17157.13
TOTAL CASH ASSETS	17157.13
The total cash assets includes:	
Downie Fund	2077.52
Higgins Fund	1235.00
This financial year ran from 11th November 2005 to 11th November 2006	
Dr. S.R. Packer (Honorary Treasurer)	
Dr. J.B. Riding (Honorary Auditor)	

2006 TMS ANNUAL GENERAL MEETING
University College London, Medical Sciences
A. V. Hill Lecture Theatre, Wednesday 15th November 2006

Introduction

The Chairman, Prof. David Siveter opened the AGM by welcoming the members and guests. Approximately 90 persons, including 47 members, were in attendance.

Reports

The Society's Chairman, Secretary and Treasurer reported on the progress since the previous AGM.

Elections of Committee Members

The members present first confirmed Dr Jackie Lees and Dr Joachim Schönfeld as the scrutineers. There being only one nomination for each of the six offices, namely that by the Committee, the Secretary suggested that the list of nominees be confirmed by the members present *en bloc*. The suggestion found majority support and the Secretary read out the nominations:

Prof Michal Kucera for a second term in office as the Secretary; Proposer: Dr S. Packer; Seconder: Prof D. Siveter

Dr Steve Packer for a second term in office as the Treasurer; Proposer: Prof A. Lord; Seconder: Dr M. Williams.

Mr Clive Jones for the office of the Membership Treasurer (new office); Proposer: Prof M. Kucera; Seconder: Dr I. Slipper.

Dr John Gregory for a second term in office as the Journal Editor; Proposer: Dr A. Henderson; Seconder: Dr D. Schmidt.

Prof Malcolm Hart for a second term in office as the Special Publications Editor; Proposer: Dr I. Boomer; Seconder: Dr J. Young.

Dr Mark Williams for the office of the Publicity Officer; Proposer: Prof A. Lord; Seconder: Prof. D. Siveter.

Following a vote, the scrutineers confirmed that the candidates were elected by due majority of the members present.

Guest Lectures

Following Society business, a series of six talks on the significance and application of microfossils for climate research were delivered. In the first part of the session, *Dr Howard Armstrong* presented a fascinating account on the timing and mechanisms of the Ordovician glaciation, *Dr Mike Stephenson* spoke on the biotic response to global warming during the Permian, and *Dr Toby Tyrell* discussed the possible effects of the current ocean acidification on calcareous plankton in view of the evidence for similar events in the geological past. Following a coffee break, which was held in the South Cloisters, *Dr Nick Hogg* showed new data on the sequence of events in the North Sea related to the Late Paleocene thermal maximum, *Dr Alan Haywood* discussed how numerical models of ancient climate may benefit from palaeontological data and *Dr David Horne* presented a new method on palaeoclimate reconstruction for the Quaternary based on ostracod microfossils. The talks were followed by lively discussion and the Society is pleased to announce that a Special Publication is being produced based on the theme of this year's AGM.

Presentation of Charles Downie Award 2006

Prof David Siveter then presented the 2006 Charles Downie Award to Dr Samantha Gibbs for her paper: Gibbs, S. J., Young, J. R., Bralower, T. J. & Shackleton, N. J. Nannofossil evolutionary events in the mid-Pliocene: an assessment of the degree of synchrony in the extinctions of *Reticulofenestra pseudumbilicus* and *Sphenolithus abies*. *Palaeogeography Palaeoclimatology Palaeoecology* 217, 155-172 (2005).

Conferment of Honorary Membership

Honorary Membership was then conferred by Prof David Siveter on Dr John Whittaker, acknowledging his very distinguished and sustained contribu-

tion to Micropalaeontology and unstinting and much valued service to TMS over many years. Dr Whittaker thanked the Society for the honour, reminiscing about the origin of his enthusiasm for micropalaeontology and expressing his keenness to carry on his service to the science.

Vote of Thanks

The Chairman then formally closed the AGM by thanking the speakers for their interesting contributions, the sponsors Shell Ltd. and Petrostrat Ltd. for their support, the Local Organisers, Dr Paul

Bown and James Davy and Dr Mark Williams, for organising a very enjoyable meeting.

Wine Reception

The audience then adjourned to the South Cloisters where a wine reception, sponsored by Petrostrat Ltd., was held.

Michal Kucera

<michal.kucera@uni-tuebingen.de>

TMS Secretary

26/11/2006

Journal Editor's Report - Dr John Gregory

Issue 25/2 was published in November and the contents are listed below; all these articles are available for free download as pdfs by paid-up members at **www.tmsoc.org**.

1. Celebrating 25 years of advances in micropalaeontology: a review

F. J. Gregory, H. A. Armstrong, I. Boomer, R. Gersonde, I. Harding, J. O. Herrle, D. Lazarus, D. N. Schmidt, J. Schoenfeld & J. R. Young 97

2. Early and Middle Miocene dinoflagellate cyst stratigraphy of the Central Paratethys, Central Europe

G. Jiménez-Moreno, M. J. Head & M. Harzhauser 113

3. *Navilithus altivelum*: a remarkable new genus and species of deep photic coccolithophores

J. R. Young & H. Andruleit 141

4. The type material of the Miocene to Recent species *Globigerinoides sacculifer* (Brady) revisited

M. Williams, D. N. Schmidt, I. P. Wilkinson, C. G. Miller & P. D. Taylor 153

5. Trouble in Paradise? A comparison of 1953 and 2005 benthonic foraminiferal seafloor assemblages in the Ibis Field, offshore eastern Trinidad, West Indies

B. Wilson 157

6. The life and works of Fortescue William Millett (1833-1915), foraminiferologist

R. L. Hodgkinson 165

7. On the stratigraphical and palaeobiogeographical significance of *Borelis melo melo* (Fichtel &

Moll, 1978) and *B. melo curdica* (Reichel, 1937) (Foraminifera, Miliolida, Alveolinidae)

R. W. Jones, M. D. Simmons & J. E. Whittaker 175

8. Obituary: Professor John W. Neale 1926-2006

A. Lord 191

Micropalaeontological Notebooks

1. *Sanyuania cuneata* Zhao & Whatley, 1992 (Ostracoda, Cytheroidea, Cytherideidae) from Japan: morphology, distribution and environmental significance

G. Tanaka 187

2. *Ankumia* van Veen, 1932: a valid name, but a flawed generic concept (Ostracoda, Platycopina, Cytherelloidea)

P. J. Jones 189

There were 27 submissions in total for 2006, and there is already enough material being typeset for issue 26/1 with this issue anticipated to be published on time in mid-April 2007. 26/1 will see several papers covering the less well represented groups including silicofossils and conodonts.

Once again I would like to thank all reviewers for their sterling work.

John Gregory

PetroStrat Ltd

john@jgregory.demon.co.uk

Specialist Group News

Foraminifera Group Report

Joachim Schönfeld & Daniela Schmidt

The Foraminifera Group of The Micropalaeontological Society had a very successful meeting together with the Nannofossil Group at the Department of Earth and Ocean Sciences at the University of Liverpool followed by a field trip to the Lake District on the 25th to 28th of May 2006. This splendid meeting and the excursion will be kept in memory for a long time. We would like to thank again **Jens Herrle** and **Richard Worden** for the perfect organisation of the meeting and the field trip, which was a great experience indeed.

Another highlight for foraminiferal researchers was the FORAMS 2006 International Symposium on Foraminifera, which was held at Natal, Brazil, from 10th to 15th September 2006. This successful meeting was organized by **Eduardo Koutsoukos** and gathered more than 130 participants. They gathered at a fancy hotel with convention centre just separated by a wired fence from the reality of a developing country. The participants came from all continents, many of them from North America, The Netherlands and Germany, and also a significant number of colleagues from Brazil. There were up to two parallel sessions, the talks were of excellent quality, and many PhD students presented the leading edge of their research. There were interesting sessions on modelling, morphotypes, and DNA sequencing. They led to controversial discussions about the possibility of defining a foraminiferal species by their genetic code, morphological features, or a combination of both. After the meeting, the participants were allowed to leave their retreat to excursions on geological, social, touristic themes. The foraminiferal community will re-assemble in 2010 at Bonn, western Germany. We hope so many participants to

come that the former Bundestag parliament hall will have to be required in order to provide enough seats.

Many substantial contributions were published on all aspects of foraminifera during the past six months, and many well-known names and schools were seen in the authors' lines. And then on 7th September, like a beat of a drum, there was this paper in *NATURE* vol. 443 by **Nils Risgaard-Petersen** from Silkeborg, Denmark, demonstrating that certain benthic foraminifera can breath nitrate instead of oxygen and thus can live for more than a month at depths in anoxic sediments. This paper provoked intense discussions even among those who were not aware of foraminifera yet. Popular, high-ranked journals, which became a measure of individual and corporate scientific excellence, have rarely published contributions on foraminiferal ecology. We hope that this paper will help to further open the minds of the editors and encourage PhD students like Nils to submit their results to journals with a broad readership.

The next spring meeting of the Foraminifera and Nannofossil Groups will take place on Thursday 7th and Friday 8th of June 2007 at the Université d'Angers, France. **Frans Jorissen** will take on the local organisation. Details will be soon announced on the TMS website.

Joachim Schönfeld

Foraminifera Group Chair
<jschoenfeld@ifm-geomar.de>

Daniela Schmidt

Foraminifera Group Secretary,
<d.schmidt@bristol.ac.uk>

Ostracod Group Report - Carys Bennett & Ian Boomer

TMS Ostracod Group Meeting
Birmingham, 13th - 15th October 2006.

The October meeting of the TMS ostracod group was held at the University of Birmingham, in the inspiring Lapworth Museum and dome lecture theatre. We regularly hold twice-annual meetings that encompass scientific talks, a field trip and social events, to which all are welcome. Attendees came from a range of backgrounds, including professors, PhD and masters students, plus an ostracod worker from British Gas. Some of the group arrived early on the Friday evening for a social prior to the meeting, and the talks took place on Saturday, with the fieldtrip on Sunday. Friday evening saw an intrepid four-some investigating the White Swan pub and restaurant in Edgbaston (highly recommended) with an interesting wine list included an intriguing Australian Red called '5th Leg', a significant term for all ostracod workers. Two bottles were taken to ensure quality throughout the case.



There were six talks presenting current research on ostracods, spanning the Silurian to the Holocene. **Ian Boomer** (University of Birmingham) introduced a new non-marine ostracod species from Turkey. **Dave Horne** (Queen Mary's College, London) discussed a methodology for distinguishing the temperature range of non-marine quaternary ostracods, and the use of ostracod databases. **Carys Bennett** (University of Leicester) presented an update on her PhD on Lower Carboniferous ostracods and their colonisation of non-marine waters. **Beth MacDonald** (University of Birmingham) gave a summary of ostracod research in her PhD on the Triassic - Jurassic boundary, and how ostracods gave an insight into the palaeoenvironment. **David Siveter** (University of Leicester) intrigued the audience with tales of sexual dimorphism and an unusual new species. **Mark Williams** (University of Leicester) showed some exciting new images of an exceptionally preserved ostracod with soft parts from the Antarctic. There was much discussion and sharing of ideas, with the more experienced ostracodologists lending a hand to those new comers. With the many thousands of ostracods out there, what better place to discuss a possible new species or research idea?

The official business of the group was reported by our chairman **Ian Boomer**. This included an update on the forthcoming second edition of *A Stratigraphical Index of British Ostracoda*. The group decided that our next meeting will be at the University of Leicester in May 2007. The next international meeting for ostracod fans is the European Ostracod Meeting on 4th - 7th September 2007, in Frankfurt. Information about this meeting will be appearing on a website soon, accessible via TMS links page. We would like to thank **Alan Lord** who has finished his two year stint at ostracod group secretary for a wonderful job, and welcome **John Whittaker** as the new secretary.



Ostracodologists: Siveter, Slipper, Bennett, MacDonald, Wakefield, Boomer, Lord & Horne

Official business done we retired to a promised rugby beer tent on site but 'local difficulties' forced us to reconvene at a real ale establishment (White Horse) in Harborne followed by a fine Italian meal. The Sunday fieldtrip was to Blockley Quarry in Gloucester, where a variety of Lower Jurassic ostracods were found. The fieldtrip participants were joined by 'local' foraminiferal worker **Phil Copestake** - a pleasant re-union. Once we had taken our fill of *Ibex-Jamesoni*

Zone Pliensbachian ammonites and sediment samples, and rescued Beth (and her wellie-boot) from the mud, we headed off for a much-deserved pub lunch (Snowhill Arms, Snowhill - again, highly recommended) before we departed for home. We look forward to meeting new and not-so-new ostracodologists and other micropalaeontologists in Leicester next year (27th-29th April) !

Silicofossil Group Report - David Lazarus

Although the last Interrad meeting in New Zealand is now for most of us only a fond memory, work continues on the proceedings volume, with 15 submitted manuscripts covering all aspects of radiolarian research from Palaeozoic to living faunas. The volume is expected to appear as a tandem issue of the sister journals *Micropaleontology* and *Stratigraphy* approximately September 2007.

The Radiolarian Society's annual newsletter appeared in October. Sixty-five pages of radiolarian news and summaries of the radiolarian literature, compiled under the able and diligent editorship of **Guiseppe Cor-**

tese, Alfred Wegener Institute, Germany. Although the newsletter is available only to members of the society, interested TMS members can contact me for additional information if interested. One news item there with a relationship to TMS was the reappearance of several dozen original Challenger Expedition plankton slides, in a complicated story involving TMS members **Jeremy Young** at the Natural History Museum in London and yours truly in Berlin. These had been privately held by descendents of E. Haeckel in Germany for more than a century and, through the generosity of the current owner, have now been made available to

radiolarian workers for re-examination. The existence of this collection had long been suspected but never confirmed, and in this way had long been an uncertainty hanging over recent attempts to re-typify Haeckel's numerous radiolarian species. So, at (long) last, one uncertainty laid to rest.

Also coming up - and quite soon - is the First Central European Diatom Meeting, being held in Berlin at the Botanical Garden and Museum. These meetings, in the earlier form of 'german speaking diatom specialists' have regularly attracted nearly 100 participants, and this year's meeting - as the title indicates - should be even more inclusive and exciting than even the past meetings were. [See full announcement on page 20]

Last-but-not-least, a short announcement of interest to marine micropalaeontologists working not just on radiolarians: The Micropaleontological Reference Centers have a new, completely redone website at: <http://iodp.tamu.edu/curation/mrc.html>. There are links to updated lists of holdings, maps etc as well. The MRCs hold around 20,000 prepared, age-dated samples of foraminifera, nannofossils, radiolarians and diatoms, drawn from deep-sea drilling sites around the globe. Duplicate sets are maintained at many locations on different continents, including a full set in Basel, and subsets in Bremen and Berlin. They are available to researchers either for use at the host institution, or, when appropriate, by loan. Consider using the MRCs in your research and teaching! - Dave Lazarus, Berlin

Palynology Group Report - Ian Harding & Duncan MacLean

Planning for our 2007 group meeting is now in the initial stages. We are initiating discussions with both the Linnean Society and the BGS with a view organising a joint meeting and a venue respectively, although a date has yet to be decided upon.

Preliminary contact has been made with Danish colleagues with a view to arranging a joint meeting in Denmark under the auspices of TMS and the Collegium Palynologicum Scandinavicum in 2008.

Various members of the Group attended and spoke at the Bilbao conference on the *Climate and Biota of the Early Paleogene* in June, at the CIMP Palynology meeting in Prague in September and the American Association of Stratigraphic Palynologists AGM held in October alongside the GSA meeting in Philadelphia.

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2006 TMS ANNUAL GENERAL MEETING MICROFOSSILS AND CLIMATE CHANGE

Abstracts of presentations

1. *Tracking the Ordovician glaciation*

Howard A. Armstrong, Department of Earth Sciences, Durham University, South Road, Durham DH1 3LE

(h.a.armstrong@durham.ac.uk)

Commonality of patterns and processes, identified from geological proxy data, occur in the sequence of events leading to Cenozoic and Ordovician glaciations. Both glaciations were set against a backdrop of long-term declining $p\text{CO}_2$ likely initiated by changes in plate configuration that resulted in increased weathering and nutrient cycling into the oceans. Rapid expansion of ice volume was triggered by the re-direction of warm, circum-equatorial currents into high latitudes to provide a source of warm moist air and high levels of snowfall. Once ice sheets were large enough to survive successive precession and obliquity maxima, eccentricity pacing of ice margin processes embedded in obliquity and precession largely controlled their size.

Changes in family and generic diversity (d_{norm} and stage length corrected) in conodonts, ostracods and graptolites suggest glacial change affected biodiversity. The rising diversity trajectory to the Llanvim was terminated in the Caradoc. This was followed by a slight rise in diversity in all groups into the Ashgill as taxa adapted to the new environmental conditions. A decline in diversity, of varying severity, into the Llandovery reflects the impact of mass extinction.

Commonality in the sequence of events and pattern of environmental change leads to the rejection of the Ordovician glaciation being unique in Earth history.

2. *Biotic change in relation to deglaciation and global warming in the Early Permian*

Mike Stephenson, British Geological Survey, Keyworth, Nottingham, NG12 5GG

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The Carboniferous-Permian ice age is the most widespread and well-represented ice age in geological history and has the benefit - for geologists at least - that it has truly ended, and therefore can be studied in its entirety. Deglaciation sequences of the Early Permian of Gondwana contain abundant fossils that record postglacial climate warming and are a potentially detailed record of the way that biota react to climate change over geological timescales. The sequences have until now been distinguished mainly on lithological criteria by reference to climate-sensitive lithologies such as diamictite, limestone, glacial shales (with dropstones and varves) and associated geochemistry, whereas identification on biotic criteria such as vegetational or faunal change has not been employed. The maximum rate of deglaciation probably occurred around the *Granulatisporites confluens* palynological Biozone, at least in Australia, Antarctica, East Africa, India and Arabia, in late Asselian - early Sakmarian times. Data from this biozone, which are admittedly widely-scattered geographically, and of different stratigraphic scales and resolutions, show diversity increase from glacial conditions to postglacial conditions. Amongst the marine fauna, a cold water fauna consisting of bivalves such as *Eurydesma* and *Dellopecten*, and brachiopods such as *Lyonia* and *Trigonotreta*, were established in the earliest post glacial marine transgressions that did not affect all of Gondwana. Above this is a more diverse, increasingly warmer, temperate fauna, including brachiopods, bryozoans, bivalves, cephalopods, gastropods, conularids, fusulinids, small foraminifers, asterozoans, blastoids and crinoids.

The palynomorph succession shows some consistency across Gondwana in Asselian-Sakmarian rocks. Very broadly a change from monosaccate pollen assemblages, associated with fern spores to more diverse assemblages with common non-taeniate bisaccate pollen occurs through the deglaciation period. In Oman, where this has been studied in greatest detail, the upland saw changes from a glacial monosaccate pollen-producing flora to a warmer climate bisaccate pollen-producing flora; while in the terrestrial lowlands, a parallel change occurred from a glacial fern flora to a warmer climate colpate pollen-producing and lycopsid lowland flora. The sedimentary organic matter of the clastic rocks of the Oman sequence records a corresponding $\delta^{13}\text{C}$ trend (from approximately -21 to -24‰) believed to reflect palaeo-atmospheric change due to postglacial global warming.

However the trends are relatively 'broad brush'. The chief difficulty in providing fine detail is that these mainly non-marine sequences are difficult to correlate precisely so we don't know if the differences between them are due to differences in age or palaeogeography. In order to integrate the data and generalise we need to correlate very precisely using, if possible, non-biostratigraphic techniques, to avoid circularity of argument. The steep Early Permian curve for $^{87}\text{Sr} / ^{86}\text{Sr}$, presents an opportunity, especially since brachiopods (the best preservers of original $^{87}\text{Sr} / ^{86}\text{Sr}$), are common in Early Permian deglaciation sequences. However the $^{87}\text{Sr} / ^{86}\text{Sr}$ data that underlies the smoothed curve is capricious and difficult to use in high-resolution correlation. The best hope is to use high resolution radiometric dating of ash layers that are common in, for example, Brazil, Namibia, and Eastern Australia. A framework developed to sub-million year resolution would allow disparate biotic deglaciation successions to be correlated and integrated and data on local timing of increase and decrease of Gondwana glaciers to be derived.

3. Nanofossils, carbonate production and atmospheric CO₂, Cretaceous to Recent

Toby Tyrrell, National Oceanography Centre, Southampton University, European Way, Southampton, SO14 3ZH (tt@noc.soton.ac.uk)

Some aspects of ocean chemistry have changed over the last 100 My (Mg/Ca ratio, carbonate ion concentration), whereas others have stayed more or less the same (CaCO₃ saturation state). The interrelationship of these chemical changes with coccolithophores, and with overall CaCO₃ production, will be discussed. Underlying much of our understanding is the carbonate compensation feedback, which must maintain (over timescales >10 ky or so) a balance between burial of CaCO₃ and the river inputs of dissolved calcium and carbon. The geological record is a powerful resource for helping us understand the probable impacts of the current and upcoming ocean acidification. However, because of carbonate compensation, it is only appropriate to study high CO₂ events of rather sudden onset (< ~10 ky) and short duration, such as the PETM, Cretaceous oceanic anoxic events and, possibly, the K/T impact event. Studying the Cretaceous as a whole is not relevant, because carbonate compensation would not have allowed the high atmospheric CO₂ levels to be accompanied by a prolonged acidic ocean. Attempts to quantify nanofossil extinction (species turnover) during short acidification events such as the PETM are therefore of great interest.

4. A Palynological Record of the Late Paleocene Thermal Maxima (LPTM) in the UK Central North Sea

Nick Hogg, Shell UK Ltd, 1 Altens Farm Road, Nigg, Aberdeen, AB12 3FY (Nick.Hogg@Shell.com)

The LPTM is well preserved in the North Sea Basin of North West Europe and has been documented across a broad range of facies tracts from the punctuated records of the UK onshore basin margin to the more continuous records of the epicontinental basin centre. In the past several years, the desire to understand the occurrence and development of petroliferous deepwater sand systems during this time period has enabled Shell UK to amass an unprecedented account of palynological events through this micropalaeontologically and nannopalaeontologically depauperate interval. Here, I present an account of the land and plankton record in a restricted epicontinental basin over the late Paleocene Thermal Maximum and discuss the influence of climate, catchment areas and potential feedback mechanisms through this time period.

5. *Modelling Ancient Earth Climate*

Alan M. Haywood. Geological Sciences Division, British Antarctic Survey, High Cross, Madingley Road, Cambridge, CB3 0ET (ahay@bas.ac.uk)

Models are of central importance in many scientific contexts. The centrality of models such as the Lorenz model of the atmosphere, the Lotka-Volterra model of predator-prey interaction, the double helix model of DNA are cases in point. Scientists spend a great deal of time building, testing, comparing and revising models. In short, models are one of the principle instruments of modern science, but they are by definition simplifications of reality and can be considered merely as tools to help us understand complex natural systems (e.g. the climate system).

Numerical models of climate, often referred to as General Circulation Models (GCMs), are being increasingly used to simulate how Earth's climate and environments have changed over geological time. There are many reasons for this but arguably two of the most important reasons include (a) the evolution of Earth Sciences as a whole into a modelling as well as observationally based science and (b) the clear scientific and political requirement, in light of anthropogenic modification of climate, to evaluate the performance of GCMs over a diverse range of past climate scenarios.

This talk will provide a brief summary of climate change during the Cenozoic and review the rationale for palaeoclimate modelling. Examples, of the types of data and how data can be synthesised and used to drive and/or evaluate palaeoclimate models will be presented by reference to the CLIMAP (Climate Long Range Investigation Mapping & Prediction) and PRISM (Pliocene Research Interpretation & Synoptic Mapping) Projects. Finally, three case studies are presented which 1) investigate the assertion that the Pliocene was characterised by a permanent El Niño-like state, 2) explore the role of polar ocean gateways in the initiation of the East Antarctic Ice Sheet and development of Antarctic Circumpolar Current at the Eocene/Oligocene boundary and 3) study the greenhouse climate states of the Eocene/Cretaceous and how well models reproduce such conditions.

6. *A Mutual Temperature Range method for European Quaternary nonmarine Ostracoda*

David J. Horne, Department of Geography, Queen Mary, University of London, Mile End Road, London E1 4NS (d.j.horne@qmul.ac.uk)

The value of nonmarine ostracods in Quaternary palaeoclimate reconstruction has long been recognized, mainly in terms of the use of indicator species and, more recently, analyses of the trace element and stable isotope chemistry of their calcareous valves. A new Mutual Temperature Range (MTR) method for European Quaternary nonmarine Ostracoda is presented, using the NODE (Nonmarine Ostracod Distribution in Europe) database and a modern climate dataset in conjunction with DIVA-GIS software. The MTR method is intended as a step towards the development of a sophisticated Mutual Climate Range (MCR) method; preliminary testing has yielded good matches with both modern temperatures (using living assemblages not already in NODE) and palaeotemperatures inferred by the coleopteran MCR method, but further testing and refinement are needed. Assumptions about the climatic tolerances of living and fossil ostracod species, as well as complicating factors (such as the relationship between water temperature and air temperature, habitat preferences and taxonomic errors) require careful examination; nevertheless, the ostracod MTR method shows considerable promise.

ANNOUNCEMENT

The Committee at its meeting in November 2006 considered changing the name of its leading officer. The Committee considered that the title "Chair" and "Chairman", as it appears in our Constitution, is anachronistic and, moreover, that a society of our standing and ambition should, like all other societies of this type known to us, be led by a "President". Although only a formal change, its implementation requires an amendment of the wording of the Society's Constitution and Rules. In order to expedite this process, the Committee decided to call an:

Extraordinary General Meeting

To take place immediately prior to the next Committee meeting on 14 March 2007 in the de la Beche Room, NHM London, commencing 1.30 pm. Members of TMS who wish to express their opinions on this matter are asked to contact the Secretary, Michal Kucera <michal.kucera@uni-tuebingen.de>. The EGM agenda will have only one item: amendment of the Article 5 of the Constitution and Paragraphs 2 i), 3 ii), 5 ii) and 8 of the Rules, to change the words "Chair" or "Chairman" to "President".

Changes to the committee 2006

The terms of office of the **Chairman** of the Committee come to an end at the 2007 AGM. Potential candidates for this post are encouraged to contact the incumbent and/or the Secretary to discuss the nature of the work involved.

Nominations for all committee positions should be submitted to the Secretary Michal Kucera <michal.kucera@uni-tuebingen.de> by October 2007. Nominees, proposers and seconders should all be members of the Society.

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Conference Announcements

1st Central European Diatom Meeting (21. Treffen Deutschsprachiger Diatomologen)

Will take place in Berlin at the Botanic Garden and Botanical Museum Berlin-Dahlem (BGBM), Friday morning, 23 March until Sunday noon, 25 March 2007.

Main topics of the congress:

Diatoms are going molecular: implications for identification, taxonomy and phylogeny (key note speaker: **Irena Kaczmarska, Birgit Gemeinholzer**)

Diatoms as bioindicators: problems and perspectives (key note speaker: **Gabriele Hofmann**)

Biogeography of diatoms (key note speaker: **Horst Lange-Bertalot**)

We are looking forward to your registration. You will find Registration Forms and further information on our congress page at: **<http://www.bgbm.org/diatoms/2007.htm>** Please organize your accommodation as soon as possible; see this site for help: <http://www.bgbm.org/diatoms/accommodation.htm> If there are any technical problems, if we forgot something or if you need more information don't hesitate to ask us! Please inform your team about the meeting, encourage master and PhD students in diatom research to attend the meeting. If you know of interested diatomists who were not informed or who do not have Internet access please let us know. With best regards **Regine Jahn** and **Wolf-Henning Kuser**.

European Geosciences Union, General Assembly 2007 Vienna, Austria, 15 - 20 April 2007

Session SSP17

Environmental perturbations during the Palaeozoic-Mesozoic interval: Organic geochemical and palynological proxies

Convener: Ulrich HEIMHOFER, Bochum (Germany), ulrich.heimhofer@rub.de

Co-Convener: Annette E. GÖTZ, Halle (Germany), annette.goetz@geo.uni-halle.de

The objective of this session is the reconstruction of palaeoenvironmental change in the marine and terrestrial biosphere by integrating organic geochemical and palynological techniques. Major environmental perturbations documented in the Palaeozoic and Mesozoic sedimentary record are often associated with prominent changes in terrestrial vegetation patterns, marine productivity, phytoplankton and microbial communities as well as in organic carbon burial and preservation. The composition and distribution of sedimentary organic matter is a sensitive recorder of these changes and allows to trace changes in palaeoclimatic and palaeoceanographic evolution as well as in ecosystem structure and biogeochemical cycling across critical intervals on different time-scales during the Palaeozoic and Mesozoic Era. To better understand the causes and consequences of palaeoenvironmental change we encourage contributions from different disciplines studying sedimentary organic matter from various perspectives including stable isotope and biomarker studies, palynofacies and maceral analyses as well studies with focus on spore-pollen and marine palynomorph assemblages. The high potential of such integrated analyses will benefit from the dialog between the various disciplines. Thus, we welcome all colleagues to contribute to this session for a broad scientific exchange and discussion.

Further information: <http://meetings.copernicus.org/egu2007/>

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TMS

(founded 1970)

The Micropalaeontological Society

TMS is the world's leading micropalaeontological society. We organize specialist meetings through the year on aspects of research into foraminifera, palynology, ostracods, silicofossils, nannofossils & microvertebrates.

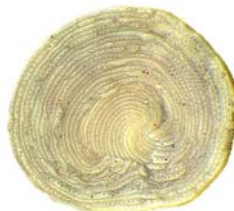
The society holds its AGM in the Autumn of each year with 6 invited speakers on themes such as climate change.

We publish the *Journal of Micropalaeontology* (two parts a year), whose remit includes palaeobiology, palaeoenvironments, evolution, taxonomy & biostratigraphy.

For a profile of the society & the benefits of becoming a member, please visit our website at:

<http://www.tmsoc.org>

To join, fill in the membership form opposite. Please make cheques payable to "Micropalaeontological Society" and send with the form to: **Clive Jones** (Membership Treasurer)
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TMS Membership application/renewal form

Membership is open to individuals as student, ordinary, or retired members (for libraries please contact the society) **subscriptions are due 1st January**

Rates for 2006 are:

Student Membership - £20 per annum (form to be countersigned by supervisor)

Individual Membership - £35 per annum

Retired Membership - £20 per annum

I would like to become a member of The Micropalaeontological Society in the category of : Student ☐ Ordinary ☐ Retired ☐

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☐ In addition to normal membership, I would also like to become a TMS foundation member (suggested additional donation £25)

I would be interested in receiving details of the following specialist groups

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**The Micropalaeontological Society's Foraminifera and Nannofossil
Groups Joint Spring Meeting
Thursday 7th - Friday 8th June, 2007 at the Université d'Angers, France.**

Integrated Studies of taxonomy, ecology and geochemistry

This meeting will continue the tradition of promoting contact and exchange of ideas between workers in their respective groups, and of encouraging cross-links between the disciplines and the expertise from the host institution. For the 2007 meeting we will focus on Integrated Studies which have become increasingly important during the past years. Micropalaeontology is being enhanced by the use of molecular genetics to test species concepts and develop phylogenetic models, culture studies enhance our understanding of geochemical palaeoproxies and organisms ecology, and palaeontologists are increasingly using a range of geochemical and biotic tools to interpret palaeoenvironments. This integration of approaches is facilitating a far better understanding of microorganisms' response to changing environmental conditions and their role in ecosystems functioning today and during the Cenozoic and Mesozoic. We encourage contributions demonstrating the advances resulting from integrated studies from different disciplines and their application for foraminiferal and nannofossil ecology, stratigraphy and palaeoceanography from the Recent and the geological record. Whilst we encourage people to follow this broad theme, this is an open meeting and we will be pleased to accept presentations covering other aspects of calcareous nannofossil and foraminiferal research.

The meeting will be followed by an excursion to the ambient Loire Valley on Saturday, 9th June, 2007. The field trip will be lead by Fabrice Redois and Jean-Pierre André, Université d'Angers, and focus on the Miocene faluns, and Jurassic and Cretaceous outcrops from the Paris Basin. The excursion will end with a visit of one of the famous Anjou wine estates. The costs, including a sandwich lunch, will be 20 EUR.

Students and professionals are encouraged to present updates of their research, techniques, and industrial applications. Both oral presentations and posters are welcome. The meeting will include poster sessions as well as viewing of posters during coffee breaks. The registration fee will be in the order of 30 EUR. Additional information about the meeting (abstract submission, deadlines, schedule etc.) and field trip will be posted to the Micropal listserver and will be available on The Micropalaeontological Society's Internet pages (<http://www.tmsoc.org>).

Anyone wishing to contribute a presentation or a poster is kindly asked to send an expression of interest and a provisional title of the presentation to Joachim Schoenfeld by the end of February 2007 (jschoenfeld@ifm-geomar.de; Message subject: "TMS-FG& NG PRESENTATION"). Also please indicate whether you will participate in the field excursion. At this stage we need to get an idea of how many people will attend in order to set up the facilities, and to provide appropriate space and time for posters and talks. So expressions of interest are fine.

Joachim Schoenfeld, Jeremy Young, Daniela Schmidt, and Jens Herrle. (Chairmen & Secretaries, TMS Foram. Group, TMS Nanno. Group)

Christophe Fontanier, Emmanuelle Geslin, and Frans Jorissen. (Organizing committee at Angers)

The 1st International Sclerochronology Conference
July 17-21, 2007 in St. Petersburg, Florida, USA

We are pleased to announce the 1st International Sclerochronology Conference to be held July 17-21, 2007 in St. Petersburg, Florida, USA at the Hilton St. Petersburg. The purpose of the conference is to bring together scientists from academia, museums, government institutions, and other backgrounds to discuss the latest techniques and concepts in the rapidly developing field of sclerochronology and to manifest new ideas and collaborations that will move this science forward.

So Mark Your Calendar and make plans to attend this first-time international event focusing on fostering enduring lines of communication and bringing to light the many recent advances in this field of study. Please visit the conference website for detailed information:

<<http://conference.ifas.ufl.edu/sclerochronology>>

Oral and Poster abstracts will be accepted ONLINE no later than March 15, 2007.

For more information, please contact the UF/IFAS Office of Conferences by phone (352) 392-5930, by fax (352) 392-9734, or by E-mail: spb@ufl.edu - OR - Bill Arnold, Fish and Wildlife Research Institute by phone (727) 896-8626 or by E-mail: bill.arnold@myfwc.com

**5th International Congress "Environmental Micropaleontology,
Microbiology and Meiobenthology" EMMM 2007**
Friedrich-Alexander-University Erlangen-Nuremberg, Germany
August 24 to September 1 2007

I am pleased to inform you that the 5th International Congress "Environmental Micropaleontology, Microbiology and Meiobenthology" EMMM 2007 will be held at the Friedrich-Alexander-University Erlangen-Nuremberg, Germany, on August 24-September 1, 2007. The Congress will include the Pre-Congress Field Trip (August 24-25), Scientific Sessions (August 26-29) and Post-Congress Field Course (August 30-September 1). The EMMM2007 First Circular, the Abstract Template and the Registration Form are posted on ISEMMM website

<<http://www.isemmm.org/conferences.html#5th>>

Important dates:

March 31, 2007 Abstract submission closes

April 15, 2007 Notification of abstract acceptance

May 1, 2007 Second Circular on ISEMMM website

July 31, 2007 Program of the conference

Prof. Valentina Yanko-Hombach, President of ISEMMM and Executive Director of EMMM 2007
ISEMMM

Charleswood Technology Centre, 3227 Roblin Boulevard Winnipeg, MB R3R 0C2, Canada

Phone: +1 (204) 489-4569

Fax: +1 (204) 489-5782 E-mail: president@isemmm.org

European Ostracodologists' Meeting VI (EOM VI)

Wednesday 5 to Friday 7 September 2007.
Forschungsinstitut Senckenberg, Senckenberganlage 25,
Frankfurt-am-Main.

Organisers: A.R. Lord, assisted by Frau C. Franz.
(E-mail: Alan.Lord@senckenberg.de; Claudia.Franz@senckenberg.de)

Contributions are invited for the following Oral sessions -

Theme 1. Ostracod records of deep-time global warming: with special reference to the Paleocene/Eocene Thermal Maximum (Convenor: A.R. Lord).

Theme 2. Ostracoda and Extinction Events (Convenor: S. Crasquin-Soleau).

Theme 3. The Biology and Ecology of Palaeozoic Ostracoda: with emphasis on interpreting their palaeobiology or major events in the early ecological radiation of the group (Convenor: D. J. Siveter).

Theme 4. Metadatabase applications for Ostracoda (Convenor: K. Martens).

Theme 5. Biology and Ecology of post-Palaeozoic ostracods (Convenors David J. Horne (London) and Renate Matzke-Karas (Munich)).

Poster Session. A poster session will be held on Friday 7 September, open to any topical or important results concerning Ostracoda.

For further information and Preliminary Registration see:
<http://www.senckenberg.de/eom>

American Association of Stratigraphic Palynologists **40th Annual Meeting** **Panama September 8-12, 2007**

Hosted by the Smithsonian Tropical Research Institute - a division of the Smithsonian Institution - one of the world's leading centers for basic research on the ecology, behavior and evolution of tropical organisms.

Events to include:- Opening mixer - Pre-meeting field trip to Barro Colorado Island or to the Canopy Crane at Metropolitan Park in Panama City - Tour of the Miraflores Locks at the Panama Canal

Guidelines:

- Contributions accepted until July 5
- Student Financial Aid available
- Hotel rooms reserved at discount rate at the Hotel El Panama
- Additional information at
<<http://striweb.si.edu/aasp07>>

Contact us at aasp2007@si.edu

The Eighth International Workshop on Agglutinated Foraminifera



IWAF-8 -- First Circular Cluj-Napoca, Romania, September 7-13, 2008

The Grzybowski Foundation and the Department of Geology, Babes-Bolyai University are pleased to announce the dates of the next International Workshop on Agglutinated Foraminifera. The workshop is open to all participants interested in the taxonomy, ecology, evolution and stratigraphy of the Agglutinated Foraminifera, and follows workshops previously held in Amsterdam, Vienna, Tübingen, Kraków, Plymouth, Prague, and Urbino over the last 27 years. The workshop will consist of three days of technical sessions, followed by a field excursion in the spectacular Transylvanian Basin and Southern Carpathians.

The meeting will be held in the Department of Geology, Babes-Bolyai University, situated in the former Roman town of Cluj-Napoca, Romania. The conference room offers modern projection facilities, and lunchtime meals will be taken in the University Restaurant opposite the Geology Department. Microscopes will be available for working groups and demonstration purposes.

Costs:

The registration fee for the conference is estimated to be approx. 120 euros, and a discount will be given to student participants. The fee will cover conference materials, refreshments at the meeting, and the welcoming reception. Field trip costs will be calculated separately. The Grzybowski Foundation will make available a limited number of travel grants for participants from eastern European countries. Accommodation will be at the local Hotels near the central square, at the discount rate of approximately 50 euros/night. The full details of the costs will be made available in the second circular.

Preliminary Program:

Sunday September 7 - arrival and welcoming reception

Monday September 8 to Wednesday 10 - Technical Sessions

Wednesday September 10 - Conference Dinner

Thursday September 11 to Saturday September 13 - Field Excursion (Transylvania, Carpathians).

Information and Registration:

Sorin Filipescu, Department of Geology, Babes-Bolyai University, str. Kogalniceanu 1, 400084 Cluj-Napoca, Romania sorin@bioge.ubbcluj.ro

Mike Kaminski, UCL, m.kaminski@ucl.ac.uk

Journal of Micropalaeontology Sale of Back Issues

TMS has a considerable number of back issues of past volumes of the *Journal of Micropalaeontology* and is having a sale in order to try and clear much of this back stock. Not all volumes are available, but we certainly have the majority of the Journal's first 21 volumes for sale at the give-away price of **£1 per issue** plus postage and packaging. Should you wish to purchase back issues of the Journal, then please use the form below.

Volume 1 to Volume 4, part 1 are already sold out.

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Fax: +44 (0)1707 665248 email: haydonbailey@btconnect.com

Conference reports

The 11th International Nannoplankton Association Meeting - Lincoln, Nebraska Report by TMS Grant in Aid recipient - Tom Dunkley Jones

"Beneath the prairie she felt the future stirring" was the conference motto for INA 11, a quote from the early 20th century pioneer novelist Willa Cather - alumna of our host institution the University of Nebraska and nannopalaeontologist in spirit. Touch-down at Lincoln airport on Saturday evening, 23 September 2006, and I was greeted by the quiet neatness of early-21st century rural America. The twenty or so passengers flying in from the metropolis of Chicago dispersed into the crisp early autumn evening, trees tinged with golden-red offsetting the stars and stripes against a clear blue sky. Welcome to Lincoln, Nebraska.

A day later and our truly international meeting had begun; in a corner of the vast lobby of the Embassy Suites Hotel, delegates from the Philippines, Japan, India, Europe, the Middle East and the Americas had arrived. Many were picking up effortlessly from conversations they had left at INA 10 in Lisbon, others recognised familiar faces from the TMS "foram and nanno group" meetings and new members were being welcomed to their first meeting. The relaxed atmosphere set the tone for three days of great talks, poster presentations and society business all interspersed with the informal chats and discussions, over lunch at Misty's diner or a beer in the evening, that are so productive and make the long hours of individual research worth while.

The science presentations began, first thing Monday morning, with the famous appendage-bearing coccolithophores of **Jeremy Young**; over the next two days Mário Cachão assumed various identities to cover research from sunspots to multivariate morphon analysis, **Tim Bralower** told us about his hopes for accelerated data collection with his Malvern master-sizer and **Dave Watkins** and students gave us a great overview of the Cretaceous nannofossils of the Western Interior Seaway. My time came and along with my supervisor, **Paul Bown**, our

two talks focused on our studies of exceptionally well-preserved nannofossils from Tanzania. Recent SEM imaging, long-term species diversity data - often equalling or exceeding time-equivalent total global species diversities for the late Paleocene and Eocene - and high-resolution ecological data through the Eocene-Oligocene boundary provided a forum for a wider discussion on issues of preservation, evolutionary histories and ecology. Conversations with highly-experienced industry biostratigraphers confirmed some of our findings and proved the advantages of co-operation between academia and industry. As a group we discussed the potential for future taxonomic and biostratigraphic collaboration, research that requires a community-wide approach and forms the basis for all our research and applications of micropaleontology.

The week ended with a trip to some classic Cretaceous localities in NE Nebraska. Some confusion between Dave Watkins, maps and one-way streets in Sioux City and we'd lost the Young-Kinkel-Koch party for the day (we'd got lost and they hadn't...) but by sunset we had all seen some Cretaceous rocks, including the find of a half-meter long fossil fish, and been reunited in Niobrara State Park. Situated at the confluence of the Niobrara and Missouri Rivers, this park lies on the route of explorers Lewis and Clark and our cabins for the night were scattered around the site where they had unearthed a Late Cretaceous mosasaur. Our modern day geological adventurers (especially the Anglo-German contingent) were somewhat perplexed by the park's no beer policy but were admirably entertained by demonstrations of Portuguese fire-jumping. By the time we made our separate ways out of Lincoln airport thoughts were turning to INA 12, the beautiful city of Lyon and the next two years of nannoplankton research. A big thank-you to Dave Watkins, Brandi Harkins and all the INA 11 team for months of hard work and to the TMS for their contribution to my attendance.

Climate and Biota of the Early Paleogene, 12-20th June, Bilbao

Samantha Gibbs

In June the latest 'Climate and Paleogene of the early Paleogene' meeting was held in Bilbao at the Palacio Euskalduna conference centre on the banks of the Rio Nervion. The conference centre was close to the Guggenheim Museum, perhaps Bilbao's most famous landmark, and meant our next-door-neighbour for the week was a 40ft, flower-covered puppy!

The organization committee was led by **Vittoriano Pujalte** and **Xabier Orue-Etxebarria** of the University of the Basque Country, who ran a particularly professional and smooth conference. The meeting was attended by ~150 people including micropalaeontologists, geochemists, modelers, and even the odd geophysicist. Contributions by TMS members included **Cathy Stickley**, **James Eldrett**, **Ian Harding**, **Aradhna Tripathi**, **Robert Speijer**, and myself.

Since the last CBEP meeting I attended (Leuven, 2003), huge advancements that have been made in understanding the biotic response to abrupt intervals of climate change, in the high-resolution identification of a number of abrupt global warming events ('hyperthermals') that highlight that the Paleocene-Eocene Thermal Maximum (PETM) was not alone, and the refinement of astronomically-calibrated time scales. There were notable lively sessions on Eocene glaciations, the mid Paleocene biotic transition, the effects of late Paleogene hyperthermals, and the PETM isotope excursion in terrestrial versus marine sections.

Highlights included new stratigraphic controls on the PETM and early Eocene hyperthermals (**Thomas Westerhold** and **Ursula Röhl**), the characterization of the infamous

recently identified hyperthermal the 'Elmo' (**William Clyde** and **Ellen Thomas**) the innovative use of n-alkanes in terrestrial and marine sections (**Francesca Smith**, **Mark Pagani** and **Luke Handley**), and new ice rafted debris records from the Eocene (**James Eldrett** and **Ian Harding**).

The conference included a cultural tour to the town of Gernika, the seat of the Basque Biscayne Assembly, and a Basque winery. After the conference there were field trips to the classic Paleogene section at Zumaya and a palaeo-shelf transect trip through the Pyrenees. With the help of enthusiastic participants and wonderful guides the Pyrenean fieldtrip turned into a bird-watching, butterfly, and chamois-spotting extravaganza! Not to mention an interesting jolly through various wine making regions of the north of Spain.

Vittoriano, **Birger Schmitz** and a merry band of geologists guided us through a basin-platform-coastal plain transect including the Lizarraga pass in the west of the Pyrenees at the platform edge, through the platform deposits of the beautiful Ordesa National Park, the intercalated continental and shallow marine deposits of the Campo sections to the continental section at Esplugafreda.

Geologically, my personal highlight on the fieldtrip was the discovery of amber pieces from a soil horizon at the PETM. Overall, it was a hugely enjoyable week of rioja, Iberian ham, vultures, tapas and, of course, stimulating scientific discussion. It was interrupted only by passionate football supporting, in particular from Holland, UK, Argentina and..... Australia. Eternal optimists!

1st Canadian Ostracodologist Meeting (COME 2006)

Centre d'Études Nordiques, Université Laval, Québec, Québec City

November 16-18 by Finn Viehberg

The successful COME-2006 (1st Canadian Ostracodologist Meeting) was held at the Centre d'Études Nordiques, Université Laval in Québec, Québec City from November 16-18. It featured one day of talks, as well as an open workshop on taxonomy, useful software, books and methods. Social events included a dinner on Thursday in Old Quebec City. The presentations of current, past, and future research projects clearly showed once again the great potential of ostracodes in the Environmental and Earth Sciences.

A total of three projects focused on the ostracode fauna in non-marine (Sub-)Arctic waters. The development of these calibration sets is of high interest and importance, as they will finally reveal modern analogs for paleoecological studies in North America. So far, some fossil assemblages still remain without analogs and the interpretations therefore remain uncertain (**Joan Bunbury**, Ontario; **Brandon Curry**, Illinois; **Martin Sirois**, **Finn Viehberg**, Québec).

In addition, the announcement by **L.D. Delorme** (Ontario) to transfer his collection of over 6,000 sites (including the environmental data) to the Canadian Museum of Nature in Ottawa (where it is now accessible) was greeted by all participants of the meeting.

Because of the robust "bauplan" of Ostracoda, it is always a great pleasure at o.-meetings to cover research topics from the Neogene to the Paleozoic! However, this may not always be the case, because the number of colleagues involved in projects studying older records decreases steadily, while major questions remain open. (Stratigraphy & Taxonomy of Amphisites from the Permo-Carboniferous; **Larry Knox**, Tennessee) It was decided that the next meeting will be held at the University of Ottawa in early 2009 featuring a visit to the Canadian Museum of Nature including the Delorme Ostracode collection.

Last but not least, all participants agreed that regular North-American meetings (Canada, Mexico and USA) would contribute to further improve and strengthen the interactions within the thinly spread community of ostracodologists. Finally, we acknowledge the funds provided by the CEN to organize the meeting.

Finn Viehberg (Organizer) Reinhard Pienitz (Patron) Joan Bunbury, University of Ottawa, Ottawa, Ontario Brandon Curry, Illinois State Geological Survey, Champaign, Illinois Denis L. Delorme, Burlington, Ontario Larry Knox, Tennessee Technological University, Cookeville, Tennessee Martin Sirois, Université Laval, Québec, Québec

TMS Grants in Aid

TMS Grants-in-Aid are awarded annually to help student members of the Society in their fieldwork, conference attendance, or any other specific activity related to their research which has not been budgeted for. Grants-in-Aid cannot be awarded for miscellaneous expenditure (e.g. slides, sample bags, sample preparation, laboratory costs, SEM photography or producing, photocopying, printing and binding of theses), nor can they be awarded retrospectively. A maximum of £200 can be awarded to each successful applicant, and a total of £600 is available annually. Awardees are also expected to write a short report for the Newsletter once their grant has been used. Applications forms may be obtained from the Secretary

<micah.kucera@uni-tuebingen.de >. Deadline for applications is 28th February 2007.

Charles Downie Award

An award of £200 will be made for the best paper published during 2006 and will be presented at The Micropalaeontological Society AGM in November 2007.

Nominations for the best paper published in 2006 should be submitted either to the appropriate TMS Specialist Group, or The Micropalaeontological Society Secretary **Dr Michal Kucera** <michal.kucera@uni-tuebingen.de> by 28th February 2007.

TMS FOUNDATION

The Micropalaeontological Society Foundation is a sponsorship scheme to help support the *Journal of Micropalaeontology*. The Foundation is made up of members, non-members and institutions who wish to support the science of micropalaeontology via the production of the *Journal*. Any level of subscription is welcome. A minimum annual donation of £25 is suggested; donors of £25 or more will be acknowledged in the *Journal* and in the *Newsletter*.

Subscription is welcome at any time. Please send donations to:

Dr Stephen Packer, TMS Treasurer, Middlemarch, 17 Brewhouse Lane,
Rowsham, Buckinghamshire, United Kingdom, HP22 4QT

Please make cheques payable to "The Micropalaeontological Society". If you wish to pay by credit card, please include the amount you wish to donate, card number, expiry date and cardholder's address; for debit cards please include the issue number.

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Micropalaeontological Courses

Geobiology MSc at Cardiff University

Cardiff University School of Earth, Ocean and Planetary Sciences is introducing a new one year taught MSc degree course in GEOBIOLOGY in October 2007.

Geobiology is a rapidly developing interdisciplinary and holistic approach to Earth and Life sciences that explores the inter-relationships of life and environments on Earth through geological time.

Cardiff is a friendly and vibrant capital city, and the School of Earth, Ocean and Planetary Sciences is a leading international centre for research and teaching with particular strengths in Geobiology.



Course Content

Stage 1, Autumn and Spring Terms, Taught Courses:

Biogeochemical Cycles, Climate Change, Geobiology Frontiers, Geobiology Residential Field Course, Geomicrobiology, Marine and Terrestrial Biospheres Past and Present, Transferable Skills.

Stage 2, May-mid-September, Research Project:

Subject to the agreement of the MSc Course Director, this may cover any geobiological topic and may be field or laboratory based. Topics will be supervised by one or more members of the Geobiology Teaching Team, and will be submitted as a written Dissertation in September.

We welcome applications from graduates with backgrounds in Biological, Earth or Environmental sciences.

For further information please see our website:

<http://www.earth.cardiff.ac.uk/teaching/msc/>

4th International Short Course: Applied Micropalaeontology

David Jutson, Gitte Laursen, Emma Sheldon, Joerg Pross and Martin Langer

A Short Course to be held at the
Department of Paleontology
University at Bonn
March 27-31, 2007

Course Fees:

80 Euro (Students and Post-docs) / 200 Euros (Professionals)

Additional Information and further program details are available at:

<http://www.paleontology.uni-bonn.de/index.htm>

MSc in Micropalaeontology

Jointly run by:

Department of Earth Sciences, University College London
Palaeontology Department, The Natural History Museum

Unique training in a critical specialisation

Subject: Micropalaeontology is the study of microfossils, such as foraminifera, coccoliths and plant pollen. It is a core discipline within modern academic and industrial geology since it provides the prime basis for biostratigraphic dating of drill-core samples, and a wide range of proxy data for palaeoceanography and climate change research.



Course Structure: A 6-month taught course provides intensive tuition in the major microfossil groups and their application in modern geology, this includes a 1 week fieldtrip (this year to Languedoc, SW France). There is then a 2 week work placement and 4.5-month research project. Tuition is by world authorities, including many guest lecturers.

Research Project: The projects are practical-based, typically using previously unstudied material to address real biostratigraphic, palaeobiological or palaeoenvironmental problems. Projects are written-up to a rigorous deadline, and many subsequently lead to publications.

Natural History Museum Link: The course is run jointly with the NHM, providing a very strong teaching base and access to the outstanding facilities in the NHM. The taught course is based at UCL, with many opportunities to visit the museum. Projects are based at both UCL and the NHM.

Entrance qualifications: Minimum of a second class degree or equivalent in a relevant subject.

Funding available: The course is currently supported by 3 NERC Masters' Training Grants and a Curry Fund scholarship.

How to apply: See www.es.ucl.ac.uk/graduate_teach.htm for application procedures (and fees); contact the course director, Dr Paul Bown (micropal@ucl.ac.uk) for details, or visit the course website. www.es.ucl.ac.uk/graduate/micropal/UCL-NHM_MSc.html



About us: UCL is one of the top UK research universities: named "Sunday Times University of the Year" for 2004. The Department of Earth Sciences was rated level 5 in the last Research Assessment Exercise and has been graded "Excellent" for its teaching.

The NHM is an international leader in the scientific study of the natural world with ca. 400 scientific staff, unrivalled collections, first-rate facilities and outstanding libraries.

PhD Positions

Queen Mary, University of London

Dr David Horne has two PhD topics in a pool of topics at Queen Mary, University of London (Dept of Geography); details are given below. The pool of 15 Physical Geography topics is listed on the QMUL website. Funding is only available for three, so there will be a lot of competition. Awards will be made purely on the basis of the academic ability and previous experience of the applicants, regardless of the topic. The closing date for applications is 23rd March 2007. Six or seven applicants will be shortlisted and invited for interview on 4th April 2007. We expect to make a decision on appointment immediately after the interviews.

Details of all available PhD topics (including one or two key references) may be found at:

<http://www.geog.qmul.ac.uk/postgraduate/physicalprogs/physpgfully.html>

1- Late Quaternary palaeoclimatic and palaeoceanographic evolution of the Marmara Sea Gateway

Training in micropalaeontological techniques will be provided, with particular attention to ostracod taxonomy, palaeoecology and biostratigraphy.

2- Palaeothermometry of European Quaternary deposits using ostracods

The student would receive training in ostracod taxonomy and ecology, database management, GIS (e.g., ArcGIS software) and appropriate analytical methods.

Main supervisor and further information: Dr David J. Horne (D.J.Horne@qmul.ac.uk)

Details of how to apply may be found at:

<http://www.geog.qmul.ac.uk/postgraduate/physicalprogs/physphd.html>

University of Birmingham

Please see the links below for details of a PhD position at the University of Birmingham, pass on to suitable undergraduate/MSc students:-

"Reconstructing Quaternary palaeoenvironments and assessing geohazards in the Caspian Sea"

supervised by Dr Ian Boomer (Univ of Birmingham) and Dr John Athersuch (StrataData Ltd)

A limited number of funded positions are available at the University of Birmingham, the positions are open to UK and EU students only.

Details of the project can be found at:

<http://www.gees.bham.ac.uk/research/postgradresearch/physical/Boomer%20reconstructing%20paleoenvs.pdf>

Details of how to apply can be found at:

<http://www.gees.bham.ac.uk/research/postgradresearch/physical/index.htm>

Further enquiries regarding applications should be made to the Postgraduate Tutor, Dr Andy Baker

(a.baker.2@bham.ac.uk)

Micropalaeontological News

New Palaeontological Website

The Brazilian Society of Palaeontology has a new site, Portuguese/English,
www.sbpbrasil.org

In this page there are links such as "Constitution and by-laws of the BSP", "Publications", "Brazilian Legislation", "Be a Member", "Virtual Store", and so on.
J.C. Coimbra

Digitised Proceedings

The Smithsonian Library, along with the Smithsonian Scholarly Press, is in the process of digitizing all the Contributions series. The Zoology series will be done early in 2007; it will be possible to link to the full text of the issues. The Contributions site is at:

<http://www.sil.si.edu/smithsoniancontributions/>

Nomenclator Zoologicus online

Nomenclator Zoologicus, Volume 1-10,

A list of the names of the genera and subgenera in Zoology from the tenth edition of Linnaeus 1785 to the end of 2004 is online at the following URL:

<http://www.ubio.org/NomenclatorZoologicus/>

Charophyte Calendar

A calendar for 2007 featuring Scanning Electron Micrographs of extant charophyte oospores has been produced by Michelle Casanova. If anyone is interested in ordering a calendar go to the web site

www.charophytes.com

to see a picture of the front page and download an order form. All proceeds will go to the new journal. There will be a limited number of copies, so get in quick. Enjoy charophytes! For more details contact Michelle at amcnova@netconnect.com.au.

New charophyte volume

Ingeborg Soulie-Marsche announces that the Proceedings of the 4th International Symposium on Charophytes (Robertson, Australia 2004) containing twelve papers concerned with diverse aspects of charophyte research has been issued as a special volume of *Cryptogamie/Algologie* Contents are available at:

<http://www.cryptogamie.com/>
where the volume can be purchased online.

Ostracoda in the Worlds Press Again

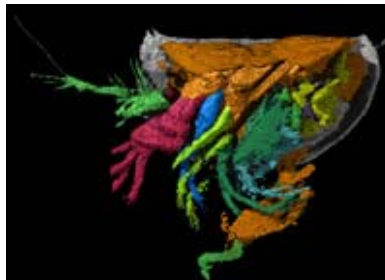
Following on from the story in issue 74 of this *Newsletter*, David Siveter and team from Leicester have yet again managed to get worldwide press coverage featuring Ostracoda.

It was widely reported, and the following is typical from *The Times* newspaper in November under the banner

425-million-year-old mother

"Leicester - A tiny mother shellfish dating from 425 million years ago has been discovered with eggs and young still inside (Lewis Smith writes). The pregnant ostracod, from a family of crustaceans still around today, is the oldest example of a mother known to be caring for her young. Researchers who found the crustacean have called it *Nymphetelina gravida*. The findings were reported in the scientific journal *Proceedings of the Royal Society*."

Well done, yet again, to our Chairman and his team.



Book Review

Recent Developments in Applied Biostratigraphy

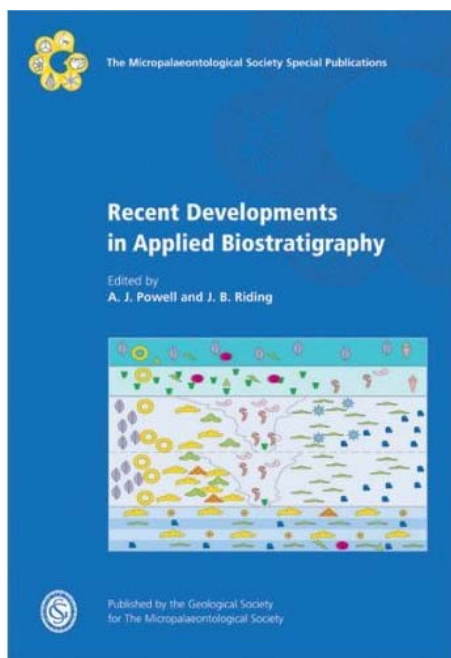
Editors; **A. J. Powell & J. B. Riding**, The Micropalaeontological Society Special Publication, The Geological Society, London. 256 Pages. November, 2005. TMS Member price £42.50 / \$77.00; GSL Member price £51.00 / \$92.00

This volume is the first in the Special Publication Series of The Micropalaeontological Society to be published by the Geological Society Publishing House. The book contains a selection of papers that were presented at a successful joint meeting of TMS, the American Association of Stratigraphic Palynologists (AASP) and the North American Micropalaeontology Section (NAMS) of SEPM in London in September 2002.

The 12 papers are divided into four main themes which cover a broad range of modern applications of biostratigraphy to hydrocarbon exploration and development. The first three themes are: UK North Sea field development; outcrop analogues; and international exploration and development. The final section discusses new methodologies, such as the application of correspondence analysis, multivariate correlation of wells, and a new well site palynological processing technique. Six of the papers are from the North Sea, two from the Middle East (Saudi Arabia), one from Spain, one from South America, one from Russia and one from Sudan. Most of the papers represent collaborations between oil companies and consultants (the sponsoring operating companies are given in parentheses for each paper reviewed below). All are interesting and intriguing, including traditional biostratigraphic and palaeoenvironmental papers accompanied by those reporting new analytical methods.

In hydrocarbon field development situations, conventional regional scale biozonation schemes typically cannot offer sufficient resolution to support a detailed reservoir model. Thus over the last 15 years or so, this demand for higher stratigraphical resolution in field development studies (for reservoir zonations and correlation) has resulted in the development of new methods, three of which (by **Monteil, Gary *et al.*, Dale *et al.***) are the subject of papers in this book. **Monteil (BG)** describes the application “morphostratigraphy” which he defines as “a new non-taxonomic biostratigraphical technique”, based on the recognition of particular morphological features within variable “species”, in this case applied to a turbiditic deep-sea reservoir (Paleocene Maureen Formation, Fleming Field, UKCS). While this approach has usefully allowed the recognition of additional biozones within the reservoir, it is not clear how this approach differs from the traditional method of recognizing distinctive variants and subspecies to develop refined reservoir zonations.

Gary *et al.* (BG) describe the use of multivariate similarity matrix on biostratigraphic data to help improve correlations between two wells from the Lower Cretaceous Blake Field of the North Sea. While the method is impressively complex and apparently sophisticated, it appears that the correlations suggested by the method are those that would readily be identified by an experienced biostratigrapher comparing by eye the distribution charts of the two wells. A weakness seems to be that the method requires the use of tie points, in this case the maximum flooding surfaces identified in the two wells. Experience indicates that identification of such surfaces in the North Sea Lower Cretaceous is itself subjective and largely driven by the biostratigraphic data, leading to the potential for circular reasoning with this method. Continuing the statistical approach to increased



Mungo Field (North Sea) where the most likely explanation for the biostratigraphic and lithostratigraphic succession observed in the field wells is that younger section has been injected downwards into older stratigraphy. The unraveling of the stratigraphy in this field has relied on the successful identification of fragments of particular formations on the basis of their microfossil content, related to a clear understanding of sedimentary mixing particularly in cores. While the senior author's naming of the paper ("the Riddle of the Sands") is a clear hint to his recent posting to Egypt, this paper is the latest of Simon's several interesting and engagingly written case histories over the years. This paper also contains a little bonus for biostratigraphers; the first, to my knowledge, publication of BP's detailed biozonation scheme for the Palaeocene of the North Sea, and its calibration of the well known "T" depositional sequences.

biostratigraphic resolution, **Dale *et al.*** (Statoil) document the use of correspondence analysis to the evaluation of palynology of the Norwegian North Sea Palaeocene. The method appears to allow the identification of two well known maximum flooding surfaces between a set of four wells disposed palaeoenvironmentally from offshore to marginal, where the variable depositional setting had resulted in a dilution of the usual marker species abundances that are usually used to identify these flooding surfaces. However, it was a pity that the traditional distribution data for the four wells was not given in the paper to clearly show how the data was improved once statistically massaged. It was also disappointing that the well names, locations nor stratigraphy were not revealed, presumably due to secrecy obsession by Statoil.

In a classic example of the complex stratigraphy that can be developed above and around an intrusive salt dome, an intriguing paper by **Payne *et al.*** (BP) describes how traditional oil industry biostratigraphy has literally been turned on its head in the

Butler *et al.* (Norsk Hydro) document the palynological succession of the Yorkshire coast Middle Jurassic Ravenscar Group, which is a well known and often visited analogue for the North Sea Brent and Fangst Groups, one of the most prolific of North Sea oil reservoir units. The authors document a new correlation of the onshore and offshore units which differs markedly with previously published palynology zonation schemes for the North Sea units. The authors' records of standard Brent/Fangst Group biostratigraphic markers from the ammonite calibrated Ravenscar sections is notable, but what is particularly surprising is the resultant dating of the bulk of the Brent Group as Aalenian (previously considered to be Aalenian – Bajocian), with the recognition of a major unconformity near the top of the Brent Group cutting most of the Lower Bajocian (which is present in the Yorkshire sections). Almost all of the dating evidence of the onshore succession is based on palynology, with little independent dating evidence from ammonites. I wonder how this paper has been received by the North Sea palynology community?

Jones et al. (BP) describe the dating and characterisation of submarine fan environments in the Ainsa fan system of northern Spain (early Middle Eocene) on the basis primarily of foraminifera, and to a lesser extent, palynomorphs. The authors are able to distinguish between channel axis and levee/overbank settings by the lower diversity and higher proportion of epifaunal suspension feeding and infaunal foraminiferal types of the former, although how much of this variation is due to hydrodynamic sorting is uncertain. This is a useful paper, as the Ainsa Fan is now becoming an increasingly visited field area due to the fact that it is a good analogue for the North Sea Palaeocene – Eocene depositional systems, with field projects being led by one of the paper's authors, Kevin Pickering. This paper is of particular interest for me as I am due to attend one of Kevin's trips to Ainsa later this year.

Two papers by veteran foraminiferal case history campaigner Wyn **Hughes** (Saudi Aramco) are included in the book, both from Saudi Arabia, where he works for Saudi Aramco. While this country is usually rather secretive regarding information on the oil and gas industry, Aramco staff have nonetheless been successful in publishing numerous technical papers over the last ten years or so. On the micropalaeontology front, Wyn has published a large number, and these two, the first on the micropalaeontological "dissection" (biofacies and micropaleontology) of the Shu'aiba Formation reservoir, and the second, on the biostratigraphy of the Saudi Arabian Permo-Triassic, are up to his usual high standard. He has published before on the Shu'aiba (at least 10 papers are listed in his references), the main reservoir in the Shaybah Field, a giant 14 billion barrel oil field and one of the most recent to be developed in that country (that contains around one quarter of the world's proven oil reserves). In Shaybah, the micropalaeontological reservoir zonation is the main tool used to subdivide and correlate the reservoir, which cannot be subdivided either on wireline logs nor seismic. **Hughes** sec-

ond paper deals with the micropalaeontology (largely based on foraminifera) of the important Permo-Triassic Khuff Formation, an important reservoir in containing huge gas reserves that are currently being developed in several Middle Eastern countries. This paper is a useful summary of the known micro- (and macro-) biostratigraphy and palaeoenvironmental interpretation of the Khuff, both in Saudi and beyond.

Ilyina et al. (Institute of Petroleum Geology) document the foraminifera and dinocysts of the Callovian to Volgian of Tyumenskaya deep well in West Siberia, Russia, which penetrated the most complete Upper Jurassic section in the region, including extensive core sampling. The authors have usefully established for the first time a complete succession of dinocyst and foraminifera zones for that stratigraphic interval. This paper is an excellent reference work documenting these zonations from an area that shows strong similarities to the Upper Jurassic biostratigraphic succession of the North Sea. Biostratigraphers working this region have long struggled with the identification of agglutinated foraminiferal species only previously documented in obscure Russian papers. In addition, it is evident from this paper that the Western Siberian dinocyst succession is very similar to that of the North Sea, with some exceptions, notably the range of *Oligosphaeridium patulum* to the top of the Middle Volgian in Western Siberia, significantly higher than in the North Sea.

A further important paper in this book is that by **Williams et al.** (BP) documenting the pioneering use of non acid palynology processing technique developed primarily for use at the rig site. This innovative approach eschews the use of toxic hazardous chemicals such as hydrofluoric, hydrochloric and nitric acid, traditionally used to remove rock fragments from the sample preparations. Instead a much simpler and quicker process using hydrogen peroxide, is used. In removing the bulk of the chemical processing from the process, this represents a major breakthrough

which reduces the time (and cost) of processing, and removes the logistical and HSE problems of utilising acids at the well site. The technique has been used by GeoStrat since 1991 in many regions of the offshore North Sea area, and this paper for the first time describes the technique and its use in three areas operated by BP. Hats off to GeoStrat for being willing to release their proprietary technique into the public domain.

The book is completed by further high quality papers on the Tertiary palynology of a well from Colombia (**Jaramillo et al.**, Ecopetrol), and the documentation of the palynology zonation of the Muglad Basin of Sudan (**Stead & Awad**, Greater Nile Petroleum Operating Co.), a remote area that has recently opened up to hydrocarbon exploration.

There are just a few niggles. The book title is a little misleading, in that the papers only reflect applications to the hydrocarbon exploitation industry. Readers seeking applications in other areas, such as environmental studies or archaeology, maybe disappointed. Some of the papers, such as those of Hughes, would have benefited from the use of colour illustrations (although there is one of his on the front cover). Also, given the slimness of this volume, it carries quite a high price. My major gripe, though is that, while 10 of the 12 papers are based on subsurface well data, only five are willing to reveal information such as well names, field names and well logs, that are so important for the reader to place the data in any kind of three dimensional context. BP especially and, to a lesser degree BG, are the only oil companies in this publication willing to reveal a full data set, for which they should be applauded.

These points should not, however, detract from the fact that this is a high quality publication documenting some important and valuable applied case histories. As such it is an notable "sequel" to the earlier Geological Society Special Publication no. 152 (Jones &

Simmons, 1999). For anyone seeking good public domain industry examples to illustrate the essential use of (micro)biostratigraphy in the oil industry, publications such as these are invaluable, and the continued publication of such applied examples is to be encouraged. These two books are among the best examples that can be used to demonstrate to students and sceptical oil company geologists of the value of biostratigraphy, not only in its direct impact, but also its relative cost effectiveness. The book should be on all industrial biostratigraphers' book shelves. I look forward to the next instalment/conference in this potentially rich vein.

Reference;

Jones, R. W. & Simmons, M. D. (eds) 1999. *Biostratigraphy in Production and Development Geology*. Geological Society, London, Special Publication No. 152.

Dr **Philip Copestake**, Merlin Energy Resources Ltd, Newberry House, New St., Ledbury, Herefordshire HR8 2EJ.

Books for review

The editor would be pleased to hear from potential reviewers who would like to obtain free copies of recent books in return for a review to be published in this *Newsletter*. Browse the Blackwell Publishing website for inspiration.

I have a copy of:

Introduction to Geomicrobiology

by Kurt Konhauser published in September 2006. "A timely and comprehensive overview of how microbial life has affected Earth's environment through time."

Please contact me if you would like to receive this review copy.

<i.j.slipper@gre.ac.uk>

TMS ARCHIVE NEEDS YOUR HELP!

Our archivist, **Richard Hodgkinson**, has processed the first batch of boxes of old minutes, correspondence and printed material. During this process, significant gaps, particularly from the early years of the Society's history have been identified. We ask all members and past Officers of the Society: please search your attics, garages, bottom drawers and top shelves: we need your help to try and fill in the following gaps:

- AGM minutes prior to 1994
- Committee minutes prior to 1984
- Any material on Group Meetings (abstracts, minutes, reports), particularly prior to 1986
- Newsletters 1-14
- Correspondence of any kind

If you find any material that should be in the Archive, please contact **Clive Jones** at the NHM
<clive.jones@nhm.ac.uk>

Micropalaeontology Diary

2007

March 23-25	1st Central European Diatom Meeting, Berlin, Germany
April 12-13	Pander Society Symposium, Lawrence, Kansas, USA
April 13-14	Progressive Palaeontology - University of Bristol
April 15-20	Environmental Micropalaeontology Session EGU Vienna
April 27-29	Ostracod Group spring meeting, University of Leicester
June 7-8	Joint Foram/Nanno Group meeting, Angers, France
July 17-21	1st International Sclerochronology Conference, Florida
Aug 24– Sept 1	5th International EMMM, Nuremburg, Germany
Sept 5-7	6th European Ostracodologists' Meeting, Frankfurt-am-Main
Sept 8-12	AASP 40th Annual Conference, Panama
October	Nominations for TMS committee positions
Nov	TMS AGM

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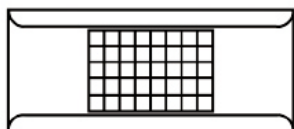
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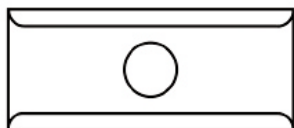
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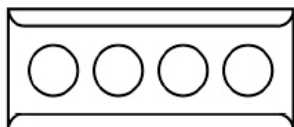
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