Newsletter of Micropalaeontology



February 2009

Number 79

Edited by I. J. Slipper



CONTENTS

| 1 | |
|--------------------|----|
| Society News | 3 |
| Society Officers | 16 |
| Group News | 18 |
| Conferences ahead | 29 |
| Conference reports | 31 |
| Letters | 36 |
| Announcements | 39 |
| Obituaries | 40 |
| Micro-Leisure | 42 |
| Diary | 43 |
| ı | |

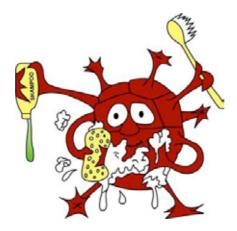
Pictured above - our President Michal Kucera presenting the second Brady Medal at the AGM in November 2008 to Professor Katharina von Salis, for "her multifarious contributions to the study of calcareous nannofossils and the mentoring and support to generations of young practitioners in that field."

The Society is growing - the print run for this *Newsletter* of *Micropalaeontology* now exceeds 600 copies for the first time. Though most of the reports come from the officers, the Editor is always pleased to recieve items from all quarters. If you feel that your group is underrepresented, do something about it and send in your news and trivia.

Copy date for the next issue - 1st July 2009

The Micropalaeontological Society

The Paly Parlour



The one-stop shop for all your bio & chemostratigraphic laboratory services!

Dr Rae Jones 15 years experience, references available State-of-the-art local authority backed lab Also Hotshots, Micro, Nanno, Kerogen, Vitrinite, etc.

For barren strata we can offer additional chemostrat processing, analysis and interpretation

Unit F4 Britannia Enterprise Centre Pengam Rd, Blackwood, Caerphilly, NP12 3SP Mobile 07841 750 945, Fax/Ansa 01443 862 331 Email rae330@btinternet.com

Let your samples unbind in our hot spas
Enjoy a break with a relaxing massage
Release the tensions of millions of years of sedimentary
confinement in our saunas
Lighten up in our jacuzzi
Then shed any remaining mineralogical inhibitions

Why?

Because your fossils mean everything to you!

Society News

Report from the President - Professor Michal Kucera

The Committee has started this year with a vision to increase the status and visibility of TMS, expand our membership, engage in professional education and raise our assets. Less than a year later, I am pleased to report that the Society has lost none of the momentum and note that the first milestones along this ambitious programme have been reached. Having welcomed almost fifty new members this year gives us hope that the target of 500 members will be met in the near future. We are clearly doing something right and I wish to believe that the increasing membership is a sign of recognition of the role the Society plays in supporting and representing our science.

Among the various activities of TMS, scientific meetings play a particularly important role in raising the awareness of the Society and serving the science. During 2008, TMS organised a successful Lyell Meeting on "Marine Climate Change" in March, as well as the Ostracod Group meeting in Suffolk, the joint Foraminifera and Nannofossil groups meeting in Tübingen and a Palynology Group meeting in Birmingham. The AGM in November 2008 with its now firmly established format of six speakers was a success again and the topic of "Microfossils and Extinction", a prelude to the Darwin year 2009 AGM on "Microfossils and Evolution", filled the J.Z. Young lecture theatre with over 100 attendees. TMS continues to support conferences and special sessions across the discipline and the Committee is in the process of devising a new scheme of "TMS invited speakers", which was piloted at the 12th International Nannoplankton Association meeting in Lyon in September 2008. In this context it is a pleasure to report that in spring 2008, TMS has joined a consortium of several learned societies and institutions in a bid to organise the 3rd International Palaeontological Congress in London. We have now learned that the bid has been successful and TMS is thus a co-organiser of the 2010 IPC. making sure that our discipline is amply represented in the programme!

The status of TMS has been further underscored last year by the establishment of a new prestigious award: the Brady Medal. The second Brady Medal has been awarded at the AGM in November 2008 to none less than **Professor** Katharina von Salis, for her multifarious contributions to the study of calcareous nannofossils and the mentoring and support to generations of young practitioners in that field. Katharina has made a lasting impression in every field she entered, beginning with her engagement in the Deep Sea Drilling Project, by founding the International Nannoplankton Association and fighting for the equality of women in science. TMS is proud that the Brady Medal continues to honour such remarkable personalities and I would like to encourage the members to consider nominating candidates for future awards: instructions and forms can be found on TMS website. Speaking of awards, I am extremely pleased to see that our scheme of TMS Student Awards has set off during this year and the first awardees are reported later in this Newsletter. We hope that more of those members who teach micropalaeontology classes will become aware of this opportunity to motivate students the procedure is extremely simple: register your courses once and you are then free to nominate one student per year.

My last missive in the February Newsletter dealt with the concern over the future of structured education in micropalaeontology. Although there are a number of excellent training centres scattered across the Europe and the rest of the world, the UCL MSc programme was unique in providing education across the entire spectrum of our discipline. The TMS Committee has decided to react on the closure of the UCL programme by establishing a platform for financial support for training in applied micro-

palaeontology and by acting as an information hub between the industry and academia. The newly elected Industry Liaison Officer, Dr **Haydon Bailey**, has reported to the 2008 AGM on the current status of this initiative. We have high hopes that the educational trust will be established soon and begin supporting research projects, courses, mobility of students and any measures helping to fill the coming generation gap in the demographic structure of our discipline.

Once again, the *Newsletter* is accompanied by a *Directory of Micropalaeontologists*, which also serves as the handbook of TMS. A glimpse on the listings of past officers, meetings and awards reveals that TMS is coming of age and the celebration of 40 years of our existence is imminent. Despite the extensive range of activities pursued by the Committee at present, the sum of what TMS can support is directly related to the state of our accounts. Although the operational reserve has been increasing steadily under the iron hand of the former Treasurer Dr **Steve**

Packer, the yearly surplus under the current spending structure is bound to be small. This situation is about to change. The Journal Editor, Dr John Gregory, has negotiated a deal with the Geological Society Publishing House, which will not only see the Journal published in print and available online at no cost to TMS, but also establishes electronic submissions and allows expansion of the Journal beyond the current two issues a year. We are extremely obliged to John for facilitating not only a quantum leap in the future of the Journal but also a qualitative shift in the status of the Society's finances. Once the deal has come into effect, our yearly budget for activities other than publishing will multiply.

I would like to thank all TMS members and Committee officers for their hard and unstinting work in the past year, helping to make TMS a vibrant and buoyant Society with excellent prospects for the future. I wish you a happy and successful year 2009 without much of the predicted turbulence and full of great micropalaeontological discoveries!

Secretary's Report - Dr David Horne

This time last year the individual membership of TMS had passed the 400 mark; since then we have welcomed 53 new members. 27 of whom are student members. Current membership stands at 458, comprising 242 British, 118 European and 98 Rest of the World members; there are 68 student members. This increase of 53 over the 405 individual members in the database in November 2007 compares favourably with the similar increase of 48 for 2007. If we can maintain this annual increase of around 50 for one more year, we can hope to exceed 500 by the 2009 AGM. This would be a very significant achievement and I urge all members to contribute by encouraging at least one new member to join TMS during 2009. Such growth in numbers has inevitably meant more work for the officers of the Society; in this context the Membership Treasurer, Clive Jones, now completing his second year of office, has continued to provide vital support for the Secretary

and Treasurer. New members (in addition to those listed in the July 2008 Newsletter) are:

Abramovich, S., Al-Dhubaib, A., Ball, C., Birch, H., Butler, S., Costelloe, A., Cotton, L., Graham, I., Gregory, T., Hill, T., Kelham, A., Mancin, N., Marx, F., Pool, K., Pyman, S., Shaaban Mohamed, A., Stassen, P., Thuy, B., Wall-Palmer, D. M., Warner, A.

STUDENT AWARDS

Six of the new members are recipients of the newly established TMS Student Award (a year's free membership), nominated for outstanding performance in one of the approved micropalaeontological courses (see elsewhere in this Newsletter for details). It is worthy of note that the cost of this award so far has been effectively offset by unsolicited donations from TMS members, a development that was both unexpected and welcome; I hope this trend may continue.

Congratulations to the awardees in 2008 (for 2009 membership):

Scott Butler (Cardiff), Iain Graham (Leicester), Felix Marx (Bristol), Ben Thuy (Tübingen), Debbie Wall-Palmer (Plymouth), Jenny Warner (Southampton).

MEETINGS IN 2008

The Society has continued to promote micropalaeontology through national and international meetings organized by its specialist groups. The 2008 Lyell meeting at the Geological Society in London (Marine climate change - past and future) in February, organised by Daniela Schmidt and Sarah Cornell (Bristol) with Jennifer Pike (Cardiff), was attended by 130 people including a large number of PhD students and young researchers; a Special Publication arising from this meeting is in preparation. Other highlights included an Ostracod Group weekend meeting at Flatford Mill Field Studies Centre in Suffolk in April, the Foraminifera and Nannofossil groups' joint meeting in Tübingen, Germany in May and the International Nannoplankton Association meeting in Lyon, France, in September. The AGM of TMS in November was well-attended (>100) and featured a scientific session on the theme of Microfossils and Extinction, organized by David Horne and Daniela Schmidt.

CHANGES TO THE COMMITTEE

Dr Jenny Pike was elected Secretary at the 2008 AGM, and will take over in January 2009 from Dr David Horne who was co-opted to the position in 2007 when the former Secretary, Dr Michal Kucera, was elected President. Dr Haydon Bailey was elected to the newly established post of Industrial Liaison Officer. Since there were no nominations for the post of Webmaster, Dr Andy Henderson agreed to continue for an additional year The Society is grateful to all committee members who have volunteered their time and effort in furthering its aims and activities.

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 postgraduate research. The Committee awarded the 2008 Charles Downie Award (best paper published in 2007) to **Kirsty M. Edgar** for her paper (Edgar, K. M., Wilson, P. A., Sexton, P. F. & Suganuma, Y.) entitled: "No extreme bipolar glaciation during the main Eocene calcite compensation shift" which was published in *Nature*, 448, 908-911. Kirsty received her award from the President at the 2008 AGM (as reported elsewhere in this *Newsletter*).

GRANTS-IN-AID

Three Grants-in-aid were awarded to PhD students in 2008; **Nicholas Owen** (Trinity College Dublin) and **Katharina Stolz** (University of Bremen), both to attend the joint Foraminifera and Nannofossil groups' Spring Meeting in Tübingen, and **Dinah Smith** (University of Leicester) to attend the Ostracod Group meeting at Flatford Mill. The Committee encourages student members to apply in 2009 (February 28th deadline).

NEWSLETTER

Dr **Ian Slipper** continued as the Editor of the *Newsletter of Micropalaeontology*; no. 77 came out in February 2008, no. 78 in August, and no. 79 is due to appear in February 2009 together with a new *Directory of Micropalaeontologists*.

WEBSITE

Dr **Andy Henderson** has continued to develop the website and issue electronic newsletters, in spite of distractions such as changing jobs and becoming a father! The website is regularly updated and used to disseminate information to the membership including details of specialist group meetings, as well as providing access to back issues of the *Journal of Micropalaeontology*. The link is: http://www.tmsoc.org.

PUBLICITY

Dr **Mark Williams** has again produced a fine set of TMS calendars, which were available at this year's AGM. Continued PR activities have clearly contributed to the growth in membership and the Committee recognizes the need to increase the visibility of TMS at international meetings.

Treasurers' Report - Dr Jackie Lees & Mr Clive Jones

Due to exceptional personal circumstances, the final TMS accounts for 2007-2008 were not presented in detail at the AGM in November, but were briefly summarised by the Treasurer, and explained to be in reasonably good health. The accounts can now be perused in this Newsletter, and will appear on the TMS website in due course.

Expenditure this year has been pretty similar to that of last year, with the notable exceptions of the amounts paid out for the Lyell meeting (held at the Geol Soc in February) and the joint foram/nanno spring meeting (held in Tübingen). The former has been covered by sponsorship from the Geol Soc, PalAss and the Challenger Society (although the apparent profit from this is misleading – we are still waiting to be invoiced by the Geol Soc). The organisers of the spring meeting made use of the Society's credit card machine for participants' payments, the monies from which were then transferred to fund the meeting.

The end-of-year balance is similar to that of last year, which is reasonable, considering it has been a year of learning the ropes for the new Treasurer. Next year, the strategy is to set to on building on this amount, in order to eventually get the Society into a position to be able to regularly financially support micropalaeontological teaching, learning, study and events, and also to be able to continue to formally acknowledge those who have made a significant contribution to the science, via our awards programs. These goals are particularly important in modern times, in this year when the MSc course in Micropalaeontology at UCL was closed down (despite having Natural Environment Research Council support, being well-attended, and maintaining an excellent record of placing graduates in both industry and academia), and also when a person's scientific profile, i.e. employment opportunities, can be boosted by having a recognised, learned society's award on one's CV.

We'd like to take this opportunity to appeal to you to help TMS achieve these goals – pay your

subscription on time (if you are not sure whether you've paid or not, please e-mail or phone Clive or the Secretary - they can check for you), send in your Gift Aid form, make a donation to the Foundation or one of the Funds, place an advert in the JoM or this Newsletter (please approach the appropriate Editor).

Library subscriptions have slightly increased this year, but this may reflect late-payers from last year, as noted in the last Treasurers' report.

Gift Aid has yet to be claimed for 2008, and there are a number of invoices in the mail (for adverts, social events sponsorship), payment of which will boost next year's accounts. As you may know, Gift Aid allows us to reclaim tax on subscriptions and donations from UK taxpayers. You need only fill out the Gift Aid form once (downloadable from the website) and it remains valid for as long as you subscribe. Please fill out the form and send it to me, Jackie – it really makes a difference. And thank you to all those members who have already done so. If you can't remember whether you have done this or not, just let me know and I'll check the list.

Half-time refreshments and the wine reception at this year's AGM were sponsored by PetroStrat, for which we are, as always, grateful. The AGM is a hugely enjoyable scientific and social event - if you or your company would be willing to sponsor next year's AGM, please contact Jackie.

And finally, we'd like to remind you about your payment options. Subscriptions are dealt with by Clive; please send him your cheque, or ask him to make a credit card payment for you, or ask him for the account details, so you can transfer funds. In all cases, please make it clear who you are, what year(s) you're paying for, and, if you are paying directly into the account, please make sure your name will appear associated with that amount on the statement. We are hoping to have a PayPal account set up in the not-too-distant future, to give you more options. More on that at a later date.

TMS statement of accounts for financial year 2007-2008

| INCOME | |
|---|----------|
| Current + reserve accounts balance at 5.11.07 | 20932.59 |
| Membership subscriptions 2007-2008 by cheque | 5692.85 |
| Membership subscriptions 2007-2008 by credit ca | 6460.80 |
| Subtotal individual subscriptions | 12153.65 |
| Library subscriptions/GSPH sales of JoM v27 | 18336.96 |
| Subtotal subscriptions/sales | 30490.61 |
| Miscellaneous income | |
| Credit card payments for Tübingen mtg (inc 62.00 credit card fee) | 3364.20 |
| Advertising revenue | 190.00 |
| Donations to Higgins Fund | 100.00 |
| Donations to Downie Fund | 30.00 |
| Sale of JoM back-issues | 36.00 |
| Lyell meeting sponsorship | 4000.00 |
| (Geol Soc, PalAss, Challenger Soc)* Ostracod Group spring mtg deposit part repaymer | 125.00 |
| Amazon royalties | 40.72 |
| GSPH royalties | 358.73 |
| Springer royalties | 227.04 |
| Refunded erroneous DDs | 29.94 |
| [Bank account interest (BBRT account)] | 434.37 |
| Bank account interest (BR account) | 0.10 |
| Subtotal misc. income | 8936.10 |
| TOTAL INCOME | 60359.30 |

| EXPENDITURE | |
|--|----------|
| | |
| Journal of Micropalaeontology | 44004.00 |
| Volume 26, Part 2 (inc. postage) | 14634.00 |
| Volume 27, Part 1 (inc. postage) | 12903.00 |
| Subtotal TMS publications | 27537.00 |
| Newsletter of Micropalaeontology | |
| Printing costs no.76 | 300.40 |
| Postage costs no.76 | 55.84 |
| Postage costs no.77 | 55.00 |
| | |
| Subtotal Newsletter | 411.24 |
| Annual General Meeting | |
| Speakers' meal | 349.70 |
| Refreshments & wine reception | 840.87 |
| Speakers' expenses | 65.30 |
| ореалого охроново | 00.00 |
| Subtotal AGM 2007 | 1255.87 |
| Miscellaneous outgoings | |
| Lyell mtg speakers' expenses | 1463.83 |
| Transfer of payment by credit card | 3302.20 |
| for foram/nanno spring mtg, Tübingen | |
| Chairman's expenses | 44.00 |
| Newsletter Editor's expenses | 35.48 |
| Treasurer's expenses | 35.00 |
| Assistant Treasurer's postal expenses | 160.79 |
| Committee mtg refreshments, Mar 08 | 30.36 |
| Committee mtg refreshments, Jun 08 | 37.51 |
| Brady Medal final installment | 1762.50 |
| Grants-in-Aid 2008 | 600.07 |
| Downie Award 2007 | 200.00 |
| Support for invited speakers (INA12, IW/ | 500.00 |
| TMS calendars | 114.04 |
| Credit card company fees | 609.18 |
| Erroneous DDs (to be reclaimed) | 169.47 |
| Subtotal misc. outgoings | 9064.43 |
| TOTAL EXPENDITURE | 38268.54 |

| Current + rese | rvo accounte | halanco | at // 11 08 |
|----------------|---------------|---------|-------------|
| Current + rese | erve accounts | Dalance | at 4.11.00 |

21656.39

TOTAL CASH ASSETS

21656.4

Accounting period 5.11.07 to 4.11.08

Dr Jackie Lees (TMS Treasurer)

Dr J.B. Riding (TMS Honorary Auditor)

Journal Editor's Report - Dr F. John Gregory

Volume 27/2 has been published:

Contents as follows:

Journal of Micropalaeontology: Volume 27, Part 2, November 2008

- 1. The earliest leperditicope arthropod: a new genus from the Ordovician of Spitsbergen.
 - M. Williams & David J. Siveter
- 2. A larger agglutinated foraminifer originally described as a marine plant: the case of *Arthrodendron* Ulrich, 1904 (Foraminifera), its synonyms and homonyms.
 - M. A. Kaminski, A. Uchman, T. Neagu & C. G. Cetean
- 3. Holocene ostracod palaeobiogeography of the Seto Inland Sea, Japan: impact of opening of the strait.
 - M. Yasuhara
- 4. A new serial Cretaceous planktic foraminifer (Family Heterohelicidae Cushman, 1927) from the Upper Maastrichtian of the equatorial Central Pacific.
 - M. D. Georgescu & S. Abramovich
- $5.\ Dinoflagellate$ cysts from the Upper Triassic (Norian) of northeastern Iran
 - E. Ghasemi-Nejad, M. J. Head & M. Zamani
- 6. Taxonomy and palaeobiogeographical significance for four new species of *Semicytherura* (Ostracoda, Crustacea) from the Early Pleistocene Omma Formation of the Japan Sea coast.
 - H. Ozawa & T. Kamiya
- 7. Late Ordovician (Hirnantian) scolecodont clusters from the Soom Shale Lagerstätte, South Africa.
 - R. Whittle, S. Gabbott, R. Aldridge & J. Theron
- 8. Pliocene ostracods (Crustacea) from the Togakushi area, central Japan; palaeobiogeography of trans-Arctic taxa and Japan Sea endemic species.
 - H. Ozawa, H. Nagamori & T. Tanabe
- 9. Late Quaternary benthonic foraminifera in a bathyal core from the Leeward Islands, Lesser Antilles, NE Caribbean Sea
 - B. Wilson

MICROPALAEONTOLOGICAL NOTEBOOKS

- 1. Pentaspongoreta, nomen novum for the genus Anachoreta O'Dogherty, 1994 (Radiolaria), non Gistel, 1848 (Hymenoptera)
 - L. O'Dogherty & P. De Wever
- $2.\ Riedeliusella,$ a new name for the genus Riedelius De Wever, 1982 (Radiolaria), non Hudec, 1961 (Gastropoda).
 - P. De Wever & L. O'Dogherty

THE FUTURE OF THE JOURNAL.

I have an important announcement to make about the future of the Journal which will place us in a good position to go forward into the 21st century. I have negotiated a new contract with the Geological Society Publishing House (GSPH), which will begin in 2011. This will essentially replace the society's responsibility to fund the Journal with member and library subscriptions, and will return a reasonable yearly surplus to TMS coffers. Furthermore, this will allow the next editor to increase the number of issues per year should they desire, at no cost to the Society.

Other benefits (also at no cost to the Society), which will commence from 2009 and mid-way through 2010, will include online manuscript submission and review (2009), our Journal will be placed online on the Geological Society's Lyell Collection (2010), and if the committee wants it, GSPH will support our application for membership on the GeoScience World site in the first 3 years of the new contract.

Members will continue to get free online access to present and archive pdf copies of the Journal, but at the Lyell Collection rather than the NHM site as at present (with thanks to Andy Henderson for managing this over the last few years). The advantage of this new online presence is that interested researchers other than our members can now easily access abstracts and pdfs of Journal papers, and we will not have to maintain the site.

I hope that these new features, particularly online submissions and a presence on the Lyell Collection will increase quality paper submissions to the Journal, increase paper turnaround, make the editor's job easier, and ultimately improve our citation index values.

Finally, my term ends in 2009, so we need nominations for the Editor's post. With the new developments outlined above, which I will help set up in my final year, the Editor's job will be significantly easier and less time-consuming than it is at present, so can I ask for volunteers to put their names forward.

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 of Micropalaeontology* once their grant has been used. Application forms may be obtained from the Secretary.

<pikej@cardiff.ac.uk>

Deadline for application is 28th February 2009

TMS Student Awards

In order to support the teaching of micropalaeontology at all BSc, MSc and equivalent levels, as well as to encourage and reward student engagement and achievement in this field, The Micropalaeontological Society has established TMS Student Awards. Each award consists of one year's free membership of the Society, including two issues of *Journal of Micropalaeontology* and *Newsletter of Micropalaeontology*, discount on TMS and GSPH publications, discounted registration fees at TMS specialist group meetings, and eligibility for awards and grants-in-aid.

The awards are given annually by tutors of registered micropalaeontology courses. Only one award per year per institution may be given. Nominating tutors must be members of TMS and in order to register a course, they must submit a completed form to TMS Secretary, who will confirm in writing that the given course is approved for the award. The Secretary will keep a list of registered micropalaeontology courses, conferring with the Committee when necessary. Course tutors of registered courses may then give the award at any time of the year on the basis of any criteria to students deemed to have achieved meritorious grades. The tutor reports the name and address of the awardee, as well as a brief statement on the criteria used to select the awardee, to the Secretary, who will collate a list of citations to be tabled each year at the AGM and printed in the Newsletter.

Nine courses are currently registered:

EA2009 Microfossils

(School of Earth and Ocean Sciences, Cardiff University)

500016 Foraminiferen im Schleswig-holsteinischen Wattenmeer (IFM-GEOMAR, Kiel)

Advanced Micropalaeontology

(Department of Geology, University of Leicester)

Microfossils, environments and time

(School of Ocean & Earth Science, University of Southampton)

Mikropaläontologie

(Institut für Geowissenschaften, Eberhard-Karls Universität Tübingen)

Micropalaeontology

(University of Bristol)

Micropalaeontology: Principles and Applications

(Keele University)

16199 Micropalaeontology

(Universidad del País Vasco)

GLY 5102 Marine Micropalaeontology /GLY 5104 Applied Micropalaeontology /GLY 5207 Case Histories in Marine Micropalaeontology / research project involving micropalaeontology

(Environmental and Marine Masters Scheme in the Faculty of Science, University of Plymouth)

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 $\pounds 25$ is suggested; donors or $\pounds 25$ or more will be acknowledged in the Journal and in the Newsletter.

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

Dr Jackie Lees (TMS Treasurer) Department of Earth Sciences University College London, Gower Street, London WC1E 6BT, UK Email: j.lees@ucl.ac.uk

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. TMS Foundation Donors of £25 or more

Ron Austin Alfred Traverse David Lazarus Hiroshi Ujiie Ana Luisa Carreno Gitte Laursen Henk Brinkhuis Chris Denison Henri Oertli Darren Anthonissen Kunihiro Ishizaki Lavinia Trevisan John Murray Pete Green Randall Penny David Haig Silvia Spezzaferri Henning Uffenorde

TMS Foundation - Brady Medal

Support received towards the commissioning of the Brady Medal is gratefully acknowledged from the following:

Alan Lord, David Siveter, John Whittaker, Michal Kucera.

Others who wish to add to Brady Medal funds are welcome to do so.

TMS Advertising Rates

Newsletter of Micropalaeontology
Full page, 1 issue £100
Full page, 2 issues £180
Half page, 1 issue £50
Half page, 2 issues £90
Half page, 2 issues £90
Half page, 2 issues £160

Quarter page, 2 issues £90 Half page, 2 issues £1

Quarter page, 2 issues £40

2008 TMS ANNUAL GENERAL MEETING

University College London, J.Z. Young Lecture Theatre Wednesday 19th November 2008

The President, Prof. Michal Kucera, opened the AGM by welcoming members and guests. Over 100 persons were in attendance, including 59 TMS members.

Reports

The Society's President, Secretary (Dr David Horne), Treasurer (Dr Jackie Lees), and Special Publications Editor (Dr Jeremy Young) reported on the progress since the previous AGM; a report from the Journal Editor (Dr John Gregory) was read by the President. The President thanked all those members who volunteered their time for the Society.

Elections of Committee Members

The members present confirmed Dr David Horne and Daniela Schmidt as the scrutineers. The President explained that since no nominations had been received for the office of Webmaster, the present Webmaster, Dr Andy Henderson, had agreed to continue for one more year; this arrangement was approved by the members present. The President then announced that there was only one nomination each, that of the Committee, for the free office of Secretary and the newly-created office of Industrial Liaison Officer. He then read out the nominations.

Dr Jenny Pike for the office of Secretary. Proposer: Dr K. Darling; Seconder: Prof. A. Lord.

Following the vote, the scrutineers and the President confirmed that Jenny Pike was elected to the post of Secretary by due majority of the members present.

Dr Haydon Bailey for the office of Industrial Liaison Officer.

Proposer: Daniela Schmidt; Seconder: Dr Robert Speijer.

Following the vote, the scrutineers and the

President confirmed that Haydon Bailey was elected to the post of Industrial Liaison Officer by due majority of the members present.

There followed a short presentation by Haydon Bailey, who explained his role as the Society's Industrial Liaison Officer. Drawing attention to the gap created by the recent closure of the Micropalaeontology MSc at University College London, he stressed the need for the Society to be proactive in ensuring the future of micropalaeontological training, in view of the continuing need for micropalaeontologists in industry, and outlined a proposal for a TMS Educational Trust.

Guest Lectures

Following the Society business the audience was entertained and informed by a series of lectures on the theme "Microfossils and Extinction", selected to form a natural precursor to the theme of "Microfossils and Evolution" planned for the AGM in 2009 (Darwin Year). The planned first speaker (Nils Chr. Stenseth) was unable to attend due to illness; his talk was ably presented by his co-author, Lee Hsiang Liow, who showed that marine planktonic species' geographic ranges rise more quickly than they fall and discuss the implications of these findings for macroecological and macroevolutionary studies. Guy Harrington used plant extinctions in the US Gulf Coast region to demonstrate the susceptibility of ancient tropical ecosystems to environmental change during the Palaeocene-Eocene Thermal Maximum. Paul Bown's account of Palaeogene coccoliths documented their remarkable recovery and evolutionary diversification following the almost complete extinction of the group at the K/T boundary. Following a tea break in the North Cloister, Helen Coxall's exposition on planktonic foraminiferal extinction events featured a remarkable animation, the result of collaboration with artist Catherine Watling, visualizing the evolutionary "tree" of a foram lineage. Alan Lord presented new ideas about



Dr Kirsty Edgar receiving the 2008 Charles Downie Award from Prof Michal Kuchera

the enigmatic demise of the Metacopina, an ostracod suborder which survived the Devonian, end-Permian and end-Triassic mass extinctions, only to succumb to the relatively minor early Toarcian Oceanic Anoxic Event. The final lecture, by Sabrina Renaud, compared the fortunes of conodonts through the Late Devonian Frasnian/Fammenian crisis, showing that when specialist genera went extinct, generalists had the flexibility to survive and evolve.

Presentations

Following the scientific sessions, the meeting culminated in two presentations.

The President first presented the 2008 Charles Downie Award (best paper published in 2007) to Dr Kirsty Edgar (National Oceanography Centre, Southampton) for her publication: Edgar, K. M., Wilson, P. A., Sexton, P. F. & Suganuma, Y. 2007. No extreme bipolar glaciation during the main Eocene calcite compensation shift, *Nature*, 448, 908-911.

The President then presented the highest award of the Society, the Brady Medal, to Katharina von Salis (Switzerland) for her lifelong achievement in research on calcareous nannofossils and her role in encouraging, supporting and facilitating micropalaeontology. Accepting the award, Katharina von Salis thanked the President and the Society for the honour bestowed upon her.

Vote of Thanks

The President formally closed the AGM, thanking the speakers for the high standard of their contributions. The audience then adjourned to the North Cloister for a wine reception, kindly sponsored by Petrostrat Ltd, to whom the President proposed a vote of thanks.

David J. Horne

TMS Secretary d.j.horne@qmul.ac.uk 30/11/08

Is There A Future For Micropalaeontological Training?

Haydon Bailey - Industrial Liaison Officer

THE CURRENT STATE OF AFFAIRS

With the recent closure of the UCL/NHM MSc course in Micropalaeontology, NERC-supported degrees in Micropalaeontology cease to exist. The only possibility to obtain structured training in Micropalaeontology is now through individual courses (Masters and/or Doctoral) which are fragmented across universities, reflecting the speciality of local staff.

There is the Masters by Research (MRes) or the new MSc course in Marine Micropalaeontology at the University of Plymouth and the Masters in Geoscience at UCL with a possible alternative route, with emphasis being placed on micropalaeontology, but these appear to be the only options.

Several major oil and gas companies have given grants to the UCL/NHM Micropalaeontology course over the last few years, but inevitably with the closure of the course these grants will cease. In the current economic climate it seems unlikely that government sources will fund micropalaeontology training.

The implication is that funding will initially have to come from industrial sources, although other financial funding may be available eventually and still have to be explored.

THE ONGOING NEED FOR MICROPALAEONTOLOGISTS

Opportunities for Micropalaeontology graduates have probably never been so great; not since the mid-1980s when there were five UK Masters courses training up to 50 students per year, plus a steady flow of well-trained PhD students, many with a stratigraphic bias to their research, which is becoming a rarity nowadays.

The UK has been the global leader and the major training ground for Micropalaeontologists for the last 40 years, with many US major oil companies in the past recruiting directly from UK universities. The tide has now completely turned and consultancies and oil and gas companies are finding it increasingly difficult to recruit suitable micropalaeontologists with a biostratigraphic background. It's a global problem.

There is an increasing need for micropalaeontologists on hydrocarbon development projects requiring biosteering and there is no obvious sign of a decline in this global demand for staff. With the increasing need for fossil fuels until a viable alternative is found, a decline seems unlikely. Add to this the demographic clock which will continue to remove all those extremely experienced industrial biostratigraphers from the market as they get older and retire and the situation starts to look just a little bleak. Climate change research, essential though it is, is also drawing on the shrinking pool of micropalaeontologists.

So we have:

A number of university departments capable of training micropalaeontology graduates with individual specialisations and suitable jobs for them, once they're trained.

Potentially, there are a growing number of oil companies who recognise the need to fund micropalaeontology training.

Currently, there is no formal procedure or structure capable of a) co-ordinating the training market and b) directing financial resources from potential sponsors to the university courses and graduates.

PROPOSAL – We create our own Micropalaeontological Society Educational Trust for Micropalaeontological Training. This would be a charitable trust with its own Board of Trustees.

It is proposed that the Board of Trustees would comprise:

A Chairman

A Secretary

A Treasurer (probably the Treasurer of The Micropalaeontological Society)

A number of co-opted trustees (?six) most likely from industrial posts, both in consultancies and major oil and gas companies.

The role of the trustees would be:

1. to raise financial support for the Trust through

sponsorship and donation

- 2. to validate and accredit courses and to review and approve research proposals
- 3. to award grants to approved courses or individual students/projects should sufficient funds be raised

TIMETABLE

An approximate timetable for this project would be as follows:

June 2008 - Proposal approved by TMS Committee

November 2008 - Proposal made to AGM Spring 2009 - Co-option of Board of Trustees Summer 2009 - Contact with potential contributors and establishment of Trust Fund Autumn 2009 - Invitation of applications Spring 2010 - Project assessment and awards September 2010 - First sponsored studentships

I have already started to contact potential Trustees for this venture and am in the process of drawing up the documentation which will define and support the Trust. I am convinced there is an ongoing need for well-trained, well-motivated micropalae-ontologists and it strikes me that this society is the most obvious organisation through which this structure can be created. If we don't do it then I don't really see who will.

Please feel free to contact me if you wish to be involved in this venture or if you have any positive comments or suggestions to make. This is still in its embryonic phase so there is plenty of opportunity to help create a structure to provide future micropalaeontologists.

The Charles Downie Award Winner's report

Kirsty Edgar

Testing the middle Eocene bipolar glaciation hypothesis.

Substantial continental ice sheets are thought to have first appeared on Antarctica close to the Eocene/Oligocene boundary around 34 million years ago (Ma). The development of large ice sheets in the Northern Hemisphere occurred much later than on Antarctica, between 5 and 11 Ma. However, this conventional view has been challenged by new geochemical and sedimentological lines of evidence that have been interpreted as representing the (transient) appearance of large ice sheets not just on Antarctica but also in the Northern Hemisphere at 41 Ma – approximately 30 million years earlier than previously thought.

In this paper, we tested this hypothesis of extreme middle Eocene bipolar glaciation by analysing stable isotopes of fossil shells of foraminifera and sediments from the deep-sea to generate a record of climate variability and estimate potential global ice volumes in the Eocene. These new records, from the tropical Atlantic Ocean, suggest that if ice sheets did exist around 41 Ma they were likely to have been small and easily accommodated on Antarctica, with no need to invoke significant Northern Hemisphere glaciation. This result is

more in keeping with other geological records and climate model results suggesting that the threshold for ice sheet inception would have been crossed earlier in the Southern Hemisphere than in the Northern Hemisphere because the South Pole has a continent sitting over it (Antarctica) while the North Pole has an ocean (the Arctic).

Our new records also reveal a short-lived (\sim 40 thousand year long) event immediately preceding the controversial interval during which ocean temperatures briefly increased and the deep ocean became more acidic during an interval of carbon cycle perturbation. This is the first such event reported outside of the early Eocene and its famous transient extreme warming events, which includes the Palaeocene-Eocene thermal maximum, and provides a focus for future work aimed at better understanding climate-carbon cycle feedbacks.

For further details about the work summarised above please see "No extreme bipolar glaciation during the main Eocene calcite compensation shift" by K. M. Edgar, P. A. Wilson, P. F. Sexton and Y. Suganuma in *Nature* 448, 908-911 (2007).

Officers of the Society

Prof. Michal Kucera (President) Institut für Geowissenschaften Universität Tübingen Sigwartstrasse 10 72076 Tübingen, Germany Tel: +49 (0)7071 2974674 michal.kucera@uni-tuebingen.de



Dr Jeremy R. Young (Special Publications Editor) Department of Palaeontology Natural History Museum Cromwell Road London SW7 5BD, UK Tel: +44 (0)207 942 5286 j.young@nhm.ac.uk



Jennifer Pike (Secretary) School of Earth and Ocean Sciences. University Main Building, Park Place Cardiff University, Cardiff CF10.3YE Tel. +44 (0)29 2087 5181 pikei@cardiff.ac.uk



Dr Ian J. Slipper (Newsletter Editor) School of Science. University of Greenwich Chatham Maritime. Kent ME4 4TB, UK Tel: +44 (0)20 8331 9824 i.i.slipper@gre.ac.uk



Dr Jackie Lees (Treasurer) Department of Earth Sciences University College London Gower Street London WC1E 6BT, UK Tel: +44 (0)20 7679 2424 i.lees@ucl.ac.uk



Dr Mark Williams (Publicity Officer)

Department of Geology University of Leicester Leicester LE1 7RH, UK Tel: +44 (0)116 2523642 mri@le.ac.uk



Clive Jones (Membership Treasurer) Department of Palaeontology Natural History Museum Cromwell Road London SW7 5BD, UK

Tel: +44 (0)207 942 5580 clive.jones@nhm.ac.uk





Dr F. John Gregory (Journal Editor)

PetroStrat Ltd (& The Natural History Museum, London) 33 Royston Road, St Albans Hertfordshire AL1 5NF. UK Tel: +44 (0)1727 843056 iohn@igregorv.demon.co.uk



a.henderson@nhm.ac.uk



Dr Daniela Schmidt

(Special Publications Editor) Department of Earth Sciences University of Bristol Wills Memorial Building Bristol BS8 1RJ, UK Tel: +44 (0)117 954 5414 d.schmidt@bristol.ac.uk



Richard Hodgkinson (Archivist) Department of Palaeontologu Natural History Museum Cromwell Road, London SW7 5BD, UK



Foraminifera Group

Dr Kate Darling (Chair) School of GeoSciences, Grant Institute of Earth Science University of Edinburgh West Mains Road Edinburgh EH9 3JW, UK Tel: +44 (0)131 650 4913 Kate.Darling@ed.ac.uk



Dr Robert P. Speijer (Secretary)
Department of Earth and
Environmental Sciences
K.U.Leuven
Celestijnenlaan 200E
B-3001 Leuven, Belgium
Tel: +32 16 326404
Robert.Speijer@ees.kuleuven.be



Microvertebrate Group

Dr Howard Armstrong (Chair)
Department of
Geological, Sciences
University of Durham
South Road
Durham DH1 3LE, UK
Tel: +44 (0)191 3744780
h.a.armstrong@durham.ac.uk



Robert Raine (Secretary) The Lapworth Museum University of Birmingham Edgbaston Birmingham B15 2TT, UK rjr873@bham.ac.uk



Nannofossil Group

Dr Karl-Heinz Baumann (Chair) FB Geowissenschaften, Universitat Bremen Postfach 330440 D-28334 Bremen, Germany baumann@uni-bremen.de



Tom Dunkley Jones (Secretary) 28c Cranfield Road London SE4 1UG, UK Tel: +44 (0)208 469 0886 Mobile: 07977 563 927 ucfbtdu@ucl.ac.uk



Ostracod Group

Dr Giles Miller (Chair)
Department of Palaeontology
The Natural History Museum
Cromwell Road,
London SW7 5BD, UK
Tel: +44 (0)207 942 5415
g.miller@nhm.ac.uk



Dr John Whittaker (Secretary) Department of Palaeontology The Natural History Museum Cromwell Road London SW7 5BD, UK Tel: +44 (0)207 942 5132 i.whittaker@nhm.ac.uk



Palynology Group

Dr Ian C. Harding (Chair) School of Ocean & Earth Science University of Southampton National Oceanographic Centre European Way Southampton SO14 3ZH, UK Tel: +44(0)23 80592071 ich@noc.soton.ac.uk



Dr Duncan McLean (Secretary) MB Stratigraphy Limited 11 Clement Street Sheffield S9 5EA, UK d.mclean@mbstratigraphy.co.uk



Silicofossil Group

Dr David Lazarus (Chair) Museum für Naturkunde Humboldt Universität zu Berlin Invalidenstrasse 43 10115 Berlin, Germany Tel: +49 (0)30 2093 8579 david.lazarus@rz.hu-berlin.de



Dr Richard Pearce (Secretary) School of Ocean & Earth Science University of Southampton National Oceanographic Centre European Way, Southampton SO14 3ZH, UK rp1@noc.soton.ac.uk



Specialist Group News

Nannofossil Group Report

Tom Dunkley Jones and Karl-Heinz Baumann

It has been a busy summer and productive summer for many in the nannofossil community, centred around the 12th biennial meeting of the International Nannoplankton Association, INA12. Hosted by the University of Lyon from the 7-13 September 2008 and attended by 118 research and industrial micropalaeontologists from 28 countries, this meeting was a resounding success. Gathering on Sunday night from literally all corners of the globe, old friends and familiar faces mixed with a healthy number of new students and researchers to partake in a champagne and canapé reception at the University (this was France after all...). Whilst a scattering of posters were already being unfurled, some took advantage of a guided tour through the remarkable geology collections of the University Museum, including a long and fascinating digression about sexual dimorphism in the jawbones of Australopithicenes... As the night progressed, convivial groups dispersed through the city to find hotel rooms (and briefly, bars), rest and prepare for the intense week ahead.

Monday morning started with a series of highprofile internationally renowned speakers tackling perhaps **the** issue of current nannoplankton research - the response of coccolithophores to high CO₂ worlds, past and future. The Micropalaeontology Society had kindly sponsored one of the invited keynote speakers of this session, Dr Ros Rickaby of Oxford University. Ros presented some intriguing results from her and her colleagues' latest culture experiments on species-specific responses to changing carbonate chemistry. Both she and the organisers of INA 12 greatly thanked the TMS for their support. A packed three-day schedule of talks and posters continued with varied sessions on paleoceanography, biostratigraphy, physiology, genetics and evolution. One fascinating presentation during the "business" session seemed to sum up the feeling of this and other INA and TMS meetings

of the past few years. Mario Cachao, the INA "bibliographer", who has been trying to keep track of all the nannoplankton publications over the last few decades, showed us some of the (much-hated/much-loved) "metrics" for our discipline. The good news is that there doesn't appear to be too much of a decline in the output of the community, which is clear in the numbers of young and enthusiastic students from across the globe. However, there is a clear and obvious trend away from publications in biostratigraphy and fundamental taxonomy and towards more applied research such as paleoceanography. Although these applied disciplines are some of the most lively, interesting and engaging aspects of micropaleontology, one also suspects that the constraints of current research funding policies, and those same "metrics", may be actively hampering the underlying taxonomic knowledge base of all the science that we do.

Our taxonomic hope is not, however, entirely lost. A "workshop", squeezed in to the final hours of the conference on Wednesday afternoon, picked up on a theme identified at the previous INA conference in Lincoln, Nebraska, that of "taxonomic consistency". Two year on and this concern, which was at first identified by industrial biostratigraphers working in the Gulf of Mexico, was now also being raised by the International Subcommision on Paleogene Stratigraphy (ISPS) who had appointed Simonetta Monechi, of the University of Firenze, to bring together a working group to produce some consensus view on the taxonomy of Paleogene calcareous nannofossils. These two groups had independently determined the urgent need for collaboration and dialogue between senior micropaleontologists with years of hard-won taxonomic expertise, whilst engaging with and training younger micropaleontologists. One critical development, though, now makes this collaboration seem possible - the creation



Smiles all round as nanno-worker is offered up for sacrifices

of an online, community-led taxonomic database of Cenozoic nannofossils http://nannotax. org. Here, as is often the case, great thanks must go to Jeremy Young of the Natural History Museum for researching and implementing this exciting and crucial new initiative. As a result of this workshop at INA 12, and of a subsequent meeting of the newly created INA -ISPS Working Group on Paleogene Calcareous Nannofossils, there is a clear plan and timescale for the "populating" of Paleogene taxa within the nannotax database (and you can watch it happening on line!) and eventually the production of a taxonomic atlas of Paleogene nannofossils. Hopefully this will act as a template for future work in both the Neogene and Cretaceous. For more information about the working group please contact Paul Bown (p.bown@ucl.ac.uk) or Simonetta Monechi (monechi@unifi.it).

Before INA 12 business ended there was the small matter of electing a new INA president and we're delighted to say that UCL's **Paul Bown** (an excellent taxonomist!) will lead INA over the coming years. After some hard,

Olympic-bid-style, selling the assembled mass chose Yamagata, Japan to host INA 13, which will be our first meeting in Asia. The meeting closed with a genteel and restrained mayoral reception at the splendid Town Hall in Villeurbanne – perhaps a result of the wonderful conference dinner the preceding evening, followed by a long night and early morning of dancing on the Rhone... Three days of fieldtrip in the stunning Vocontian basin began to clear heads enough for some serious discussion of oceanic anoxic events, French structural geology and the mass death of ammonites. The meeting ended with a perfect blending of geology, wine and assembled micropalaeontologists in the vineyards and wine cellars of Beaumes de Venise. Our most heartfelt thanks to our hosts. Emanuela Mattioli and Fabienne Giraud and their team, to the INA committee and to the TMS for their support of this conference. We're now looking forward to the TMS foram & nanno group meeting in Zurich next June. which, for the international community of nannofossil workers, is becoming an essential complement to our own INA meetings.

Palynology Group Report

Ian Harding

After the successful Palynology Group meeting in Birmingham in May this year (hosted by **Guy Harrington**), **Susanne Feist-Burkhardt** has kindly offered to act as local co-ordinator for the next meeting in May 2009 at the Natural History Museum.

Many members of the Group attended the combined 12th International Palynological Congress and 8th International Organisation of Palaeobotany Conference in Bonn in August (a report about which appears elsewhere in this Newsletter), which had a total registrant list of some 850 people! I represented TMS at the International Federation of Palynological Societies Committee Meeting, and amongst other Palynology Group members of TMS also on the Federation Council representing other societies, Charlie Wellman was elected as Secretary-Treasurer. Charlie and the new Chairman. Thomas Servais, have the express intention to make the Federation's workings more visible to members. and with more communication from Society representatives to their members. To this end, when I can get my email distribution lists working in Outlook (we have only recently been converted to this system at Southampton!). I will be conveying IFPS news items directly to Palynology Group members as they arise. Buenos Aires was proposed as host for the next IPC. but as the combined conference sessions (with a single registration) were deemed to have been so successful, Tokyo was confirmed as the host for the next venue for the 13th IPC/9th IOPC meeting in 2012.

At the Board meeting of the American Association of Stratigraphic Palynologists, **John Marshall** and I delivered a presentation which secured the final approval for Southampton hosting the Annual Meeting of the said society in 2011, which we hope to hold in conjunction with TMS Palynology Group and the Linnean Society Palynology Special Interest Group. This will take place in late August/early September and will be immediately followed by DINO9,



Opening address at the 12th IPC, Bonn

the 4-yearly international dinoflagellate conference which was secured by **Fabienne Marret** (and her co-organiser **Jane Lewis**) for the University of Liverpool. Thus there will be two very important international palynological conferences held on UK soil in 2011.

In the lead up to these events, we are still in discussion with **Cathy Stickley** in Norway as regards the next joint Palynology-Silicofossil Groups meeting, which was held over due to potential conflicts with meetings of interest to members of both groups this year. It is our hope that this meeting could be slotted into 2010.

Future meetings of interest:

North American Paleontological Convention (NAPC 2009), 21st-26th, June 2009, at the University of Cincinnati. http://napc2009.org/arnold.miller@uc.edu

AASP 42nd Annual Meeting, 27th-30th September, 2009: Meadowview Convention Center, Tennessee. Organizer: Michael Zavada.

Linnean Society Palynology Specilist Group Meeting, 29th October 2009, Burlington House. London.

Foraminifera Group Report

Robert Speijer

Dear colleagues,

We would like to draw your attention to The Micropalaeontological Society's forthcoming Foraminifera and Nannofossil Groups' Spring Meeting 2009: Integrated Studies of evolution, taxonomy, ecology and geochemistry

Thursday 4th & Friday 5th June, 2009 ETH Zürich, Switzerland.

The growing tradition of lively and exciting joint Foraminifera and Nannofossil Groups' meetings will continue this year with a meeting hosted by ETH Zürich, one of the major centres of micropalaeontological research. The 2009 meeting will focus on "Integrated Studies" that combine knowledge from across ecological, taxonomic, evolutionary, geochemical and stratigraphic analyses to understand an organism or its environment in the past, present or future. Micropalaeontology is being enhanced by the 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 microorgansims' response to changing environmental conditions and their role in ecosystem functioning today, in the geological record and into the future. We encourage contributions that demonstrate the advantages of integrated studies as applied to foraminifera and coccolithophores/nannofossils. Whilst we strongly encourage people to consider this broad theme in their submissions, 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

Einsiedeln on Saturday, 6th June, into the Einsiedler Schuppenzone, including nice Molasse, Flysch and lots of Nummulites. The plan is to include a visit to the monastery in Einsiedeln. The concept is a work meeting and therefore it is especially of interest for PhD Students and PostDocs to present the status of their research for discussion and exchange of ideas with an international audience of both, peers and senior researchers. Both oral presentations and posters are welcome. The meeting will include extended poster sessions. Additional meeting information (abstract submission, deadlines, costs, schedule etc.) will be available soon 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 Karl-Heinz Baumann by the end of February 2009 (baumann@uni-bremen.de; Message subject: "TMS-FG&NG PRESENTATION"). Also please indicate whether you are planning to participate in the field excursion.

With best regards,

Kate Darling, Kalle Baumann, Robert Speijer, and Tom Dunkley-Jones (Chairs & Secretaries, TMS Foram. Group, TMS Nanno. Group) Hans R. Thierstein, Ursi Brubacher, et al. (organising committee in Zürich)

Robert Speijer

(Professor of paleontology) Department of Earth and Environmental Sciences K.U.Leuven Celestijnenlaan 200E B-3001 Leuven Belgium Tel: +32 16 326404 Fax: +32 16 322980



TMS (founded 1970)



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:



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) Department of Palaeontology, Natural History Museum Cromwell Road, London SW7 5BD, UK

Tel: +44 (0)207 942 5580 Fax: +44 (0)207 942 5546 Email: clive.jones@nhm.ac.uk











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 2009 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 be category of : | | er of The Micropa Ordinary | alaeontological Society in the Retired |
| NAME ADDRESS | | | |
| | to normal memi | | also like to become a TMS |
| I would be intere | ested in receiving | g details of the fo | ollowing specialist groups Palyn Silicofoss r the sum of |
| \equiv | | | e) Total sum |
| Name on card Credit card Numbe | | 6 digits, Debit card | s 16+ digits) |
| Type of card (NB American Exp Security code (las | oress not accepted | d) — — r | ate / |
| Issue Number (De | ebit cards only) | | |
| Signed | | Date. | |
| Student's supervis | sor | | |
| Supervisor's institu | ute | | |

Centrefold pull-out

Please pass this form to a colleague and recruit a new member to TMS

Silicofossil Group Report

David Lazarus

Silicofossil group membership

Examination of the most recently updated version of the TMS membership database provides encouraging news. Compared to 2006, the fall 2008 membership list shows:

| Silicofossil interest | 2006 | 2008 |
|-----------------------|------|------|
| Primary | 6 | 11 |
| Secondary | 6 | 15 |
| Totals | 12 | 26 |

In 2008 ten members were outside Britain (Japan, Germany and USA @ 2). Although improvements in list management may play some role, it appears that there has been a substantial increase in silicofossil group membership. A survey was recently sent out to better understand the diverse range of interests of individual members. A sincere thank you to all those who have replied! And please, those of you who have not yet done so, do send information about your interests to either myself (david. lazarus@rz.hu-berlin.de) or group secretary **Richard Pearce** (rp1@noc.soton.ac.uk).

Meetings

As indicated in the prior newsletter, a group meeting is being planned for early 2009. Although still tentative, we are thinking of holding a silicofossil group specific meeting hosted at the Natural History Museum, London around March-April, with sessions of interest both to stratigraphic/industry and academic/paleoenvironment workers. All members are encouraged to attend and to present/discuss their work (particularly students!). Details will be announced via email and/or the TMS website soon (ca. January). Please email us with any suggestions on what you'd like to have as part of the meeting, or what you might be interested in presenting, either as a talk or as a poster.

In addition to the group meeting above, a special session, co-sponsored by the TMS, will be

held at the upcoming Interrad XII meeting, September, 2009 in Nanjing:

The First Century: the taxonomic legacy of the first 100 years of radiolarian research

Organisers: David Lazarus, Noritoshi Suzuki, Yoshiaki Aita, Kaoru Ogane.

This symposium will review the taxonomy that prominent radiolarian specialists have left to posterity, covering the time interval from the first publications on radiolarians in the 1830s to the last of the major monographic works in the 1930s associated with the age of ocean exploration. Problems that this taxonomy still presents to us today will be reviewed and current projects designed to address these problems will be presented, including retypification efforts; scanning of older publications and relevant aspects of taxonomic database efforts. Several speakers have already been lined up, and more details will be developed over the next months in cooperation with Interrad president Dr Hui Luo and the Interrad XII organising committee.

Publications

The Interrad XI volumes mentioned in the previous newsletter have now appeared as special issues of *Micropaleontology* and *Stratigraphy*. A total of 12 papers (including two by TMS members) covering various aspects of radiolarian research from water-column studies to early Jurassic stratigraphy are presented.

The proceedings volume of the 19th International Diatom Symposium, which includes several papers on fossil forms, is also now available see http://www.isdr.org/ for details.

Ostracod Group Report

Giles Miller & John Whittaker

The Ostracod Group will hold its Spring Meeting in 2009 (Darwin Year) at Down House in Kent, the former home of Charles Darwin which re-opens to the public in February following extensive conservation and restoration work. The meeting, on the theme "Ostracods and Evolution", will take place on Saturday 25th and Sunday 26th April. The organisers are **Dave Horne** (Queen Mary University of London) and **John Whittaker** (The Natural History Museum). The provisional schedule is as follows:

Saturday 25th April:

10.00. Meet at Down House.

10.15 - 12.15. Multimedia tour of the house and gardens (public access).

12.15 - 13.00. Light lunch in the Tea Room at Down House.

13.00 - 17.00. Private meeting in the Board Room of Down House: talks on the theme of "Ostracods and Evolution".

Sunday 26th April:

Field trip to Lower Thames interglacial sites, with a focus on the theme of "Ostracods and Human Evolution", considering the occupation of Britain by hominins (*Homo heidelbergensis*, *H. neanderthalensis* and *H. sapiens*) and what

ostracods tell us about the environments and climates in which they lived. The main site will be the SSSI in Greenlands Pit at Purfleet (MIS 9), featured in a new multi-proxy study (Bridgland et al. in press) but may include visits to other key sites such as Swanscombe (MIS 11) and Aveley (MIS 7).

Accommodation will be arranged at a convenient location, with the option of (1) Friday and Saturday night or (2) Saturday night only; further details will be circulated to those who have expressed interest in the meeting and will also be posted on TMS website.

Due to the small size of the Board Room and its hire cost the meeting will be limited to a maximum of 25 participants and a registration fee of £10 per person will be charged (but this includes the multimedia tour, for which the normal charge for an adult is £9). Expressions of interest and offers of talks (with a title and a short abstract) should be submitted as soon as possible to **Dave Horne**

d.j.horne@qmul.ac.uk

This is a fantastic opportunity to participate in a scientific meeting at a unique venue!

Ostracod Group Meeting - 26th September 2008

report by Matt Wakefield

The meeting was organised and hosted by **Giles Miller** in the Board Room of the Natural History Museum. So, in front of the portrait of Richard Owen, we sat down to an enthralling afternoon of talks.

Giles started off proceedings with an update on his current & future web databasing and curatorial work with the micropalaeontological collections at the NHM. The ostracod type & figured collection has now been physically reorganised stratigraphically and has been supplemented with additional specimen and assemblage slides. This collection should be added onto the NHM web database within the next few years. The major ostracod collections from the University of Hull (7,000 slides), the BP Collection and the University of Aberystwyth (56,000 slides, 197 M.Sc. & Ph.D. theses) will gradually be databased on the web. Giles also aims to merge the Recent material from both the Palaeontology & Zoology Departments at the NHM into a single database on the web. Giles will place a message on Ostracon when this is available. Eventually these separate databases will be merged.

Ian Slipper, in true Sherlock Holmes mode, though suffering the after-effects of his 50th birthday bash, showed the detective taxonomic value of collections such as those housed at the NHM, in his talk on marine Cretaceous ostracods. Cuthereis bekumensis Triebel 1940, was reassigned to Rehacythereis by John Neale in the "Stratigraphical Index of British Ostracoda" and was used as a nominate zonal fossil by Mitchell & Underwood (1999) in the Aptian (the zone is within the forbesi ammonite zone), which extended the taxons range into older rocks. However, Ian's review of the type material from the Senkenberg Museum, access arranged by Alan Lord, revealed the British 'bekumensis' to be quite different. Ian has now reassigned the British specimens to Rehacythere vexilla and renamed the Mitchell & Underwood zone. The second detective story revolved around Protocythere nodigera Triebel 1941. By studying type & figured material from Germany and Britain Ian illustrated the sub-specific variation in the strength and variation in reticulation and noding of forms with similar temporal ranges. The examples Ian showed clearly demonstrated that relying on old light photographs or line drawings is no substitute for access to the actual fossil material!

Caroline Maybury, standing in for Robin Whatley, who was unable to attend the meeting, presented Robin's work on non-marine ostracoda from the Deccan Traps, India (very latest Maastrichtian in age covering a 3-4My time span). Caroline illustrated some of the 105 species from 35 genera described from 23 localities around the edge of the traps that were dominated by limnocytherids, darwinulids, cytherids and cyprids. Cypridopsis with 14 species was the most diverse genus. Siliceous preservation in chert nodules varied from poor to excellent with some possible soft parts illustrated. Although there appeared to be eight geographical groups of sample locations this was not reflected in the species distributions, as no species were unique to a single site. This largely endemic fauna is more diverse than in other co-eval localities worldwide with only two sub-species of Frambocythere being recorded elsewhere. Work in progress revealed that numbers of species and genera decrease rapidly with distance from India in the Late Maastrichtian. This seems to fit with the classic model of species migrating down diversity gradients. However, more work is still required to prove the "Out of India" dispersal theory indicated by DNA work on frogs, birds, lizards and plants.

We were all pleased to hear that Robin is doing well and is still enjoying the country life as much, and as often as possible, in addition to his continued research. Robin – Caroline gave a very good talk!!!

Dave Horne discussed recent work undertaken by himself and co-workers Catherine Cherry. Ian Slipper and John Whittaker on 'The palaeoclimate of the Thames-Medway area during the Purfleet interglacial (MIS 9)'. The work was based around Catherine's final year B.Sc. project that looked at the Thames terrace sediments from the SSSI at Purfleet. Population age structures indicate tranquil conditions with minimal tidal influence suggested by noded forms of Cuprideis torosa. John Whittaker recorded a similar fauna from Allhallows on the Medway. Ilyocypris sp. A of that study, now assigned to Ilyocypris salebrosa, appears to be a bioevent marker for MIS 9 in Europe. I. salebrosa, although known from 30-40 locations in the northern hemisphere, is currently absent from Britain. Its presence appears to be tied to a sustained maximum summer temperature of at least 24°C. Dave therefore wondered if its future reappearance in Britain would act as a sentinel for global warming.

By examining the Purfleet ostracod fauna and those from several other localities (Hackney, Barling & Allhallows) application of the Mutual Ostracod Temperature Range methodology (MOTR) indicates that MIS 9 winters were colder than today (-3 to $+3^{\circ}$ C), with a mean summer temperature of 17-21°C and a maximum of at least 24°C to account for the presence of *I. salebrosa*.

Adrian Wood disctussed the temporal biogeographical distribution of six North Atlantic and Arctic cold-water shallow marine ostracod species. Adrian mapped the distribution of the ostracods, mostly in the Pliocene to recent interval but occasionally into older successions, showing southerly migrations during glacials and northerly retreats in interglacials, e.g. *Celtia c. quadridentata quadridentata* has a more restricted and more northerly distribution today than in the Pliocene.

Robertsonites tuberculatus, which has been recorded in the Pacific from c.17Ma and maybe as far back as the Eocene (34Ma), migrated into the arctic enabling dating of the opening of the Bering Strait to c.4.91Ma. There was a brief discussion on the asymmetry of migration through the Bering Straits, with more taxa heading into the arctic from the Pacific than in the opposite direction. This appears to be controlled by strength and direction of prevailing currents.

Dave Horne returned with a short slide show of his visit to Walcott's quarry in British Columbia. Unfortunately he didn't manage to find any ostracods in this world-famous Cambrian Lagerstatte.

John Whittaker gave a short update on the status of the Ostracod Group's magnum opus Ostracods in British Stratigraphy. This is now with the Geological Society Publishing House and should be available shortly. All attendees thanked John and his co-editors for their Herculean efforts over the past months in finally putting this 'mythical white whale' of a publication 'to bed'.

All in all this was an excellent meeting as much for the gathering of friends as for the quality of the individual talks. Giles did a great job organising the meeting; the biscuits were excellent!!!!



Checking his mail earlier this year, **Dave Horne** was pleased to receive a reprint of an excellent paper (Sohar, K. & Kalm, V. 2008. A 12.8-ka-long palaeoenvironmental record revealed by subfossil ostracod data from lacustrine freshwater tufa in Lake Sinijärv, northern Estonia. *Journal of Paleolimnology*, 40, 809-821) and was intrigued by the stamp on the envelope (pictured above), which shows a carapace (in dorsal view) of the distinctive freshwater ostracod *Metacypris cordata* Brady & Robertson, 1870. The first author, **Kadri Sohar** (a PhD student at the University of Tartu, Estonia), writes: "...it is a personalised stamp. In Estonia, we have the opportunity to design our own stamps. Thus, I found my ostracod pictures quite 'artistic' and created my own stamps. The press run is quite limited, and when those cordata-stamps are used, I will make new ones...".

Conference Announcements

11th International Paleolimnology Symposium

Guadalajara, Jalisco, Mexico - June 26th-29th 2009

The organizing committee of the 11th International Paleolimnology Symposium is now circulating the second circular and is pleased to inform that on-line registration is now available. We encourage all the paleolimnology community to check the symposum's web page

http://www.geofisica.unam.mx/paleolimnologia/

for further information in relation with special sessions, registration fees and deadlines, abstract format, hotel reservation and visa requirements into Mexico.

Early registration: \$375 before 20th of March 2009.

Late registration: \$425 between 21st of March and 20th of May 2009.

In site registration: \$500 after 20th of May 2009.

The registration fee includes the ice-breaker, all lunches and the mid-congress field trip to Guachimontones archaeological site. All prices are in U.S. dollars.

16th International Symposium on Ostracoda

IRGO – International Research Group on Ostracoda University of Brasília, Brazil - July 26th-30th, 2009

Every 4 years, the International Symposium on Ostracoda (ISO) gathers together scientists and students from all over the world whose research interests are somehow related to the Ostracoda, an abundant group of aquatic microcrustaceans with an exceptionally rich fossil record. Currently in its 16th version, the ISO will, for the first time, be held in South America, more specifically in Brasília, the capital of Brazil.

It is with great honour that Brazilian ostracodologists invite colleagues from all around the world to attend this meeting. Scientists from all ostracod related disciplines are welcome to present their scientific contribution in order to discuss, exchange ideas and arrange future cooperation.

Emphasis will be given to some of the earliest applications of Ostracoda, namely Biostratigraphy and Applied Ecology. However, any contribution regarding their biology and use within the scientific and educational fields is strongly encouraged and will be much appreciated.

So far, talks with the following invited speakers have been confirmed:

Koen Martens (Zoogeography of limnic ostracods)

Dermeval A. do Carmo (Biostratigraphy of limnic Mesozoic ostracodes)

 $\textbf{Silvie Crasquin} \; (\textit{Biotic crisis: the Permian/Triassic case})$

Robin Whatley (Biotic crisis: the Cretaceous/Paleogene case)

A post symposium course on micropaleontologic curatorship is also confirmed with Giles Miller.

For further information, please, check our webpage or send your questions to the symposium secretary.

Symposium webpage: http://www.finatec.org.br/eventos/ostracoda

Symposium secretary: xviiso@unb.br

It will be a pleasure to welcome you all to Brasília.

Progressive Palaeontology

School of Geography, University of Birmingham - 27th-29th May 2009

Progressive Palaeontology is an annual conference for postgraduate students who wish to present their results at any stage of their research. Presentations on all aspects of palaeontology are welcome.

The itinerary will include evening icebreaker reception in the Lapworth Museum of Geology, one day of oral and poster presentations, the annual dinner, and a field trip to a fossil locality.

Further information can be found at http://www.palass.org.

Helen Hughes, Phil Jardine, Sarah King, Andy Rees, Lil Stevens and Adrew Storey.

13th Congress - Regional Committee on Mediterranean Neogene Stratigraphy

Naples, Italy - 2nd-6th September 2009

Earth System Evolution and the Mediterranean Area from 23MA to the present

Registration fees (in Euros) until 30-05-2009 after 30-05-2009

| Adults | 200 | 250 |
|---------------------|-----|-----|
| Student | 100 | 150 |
| Accompanying Person | 100 | 100 |

For details visit the new RCMNS homepage:

http://www.geomare.na.cnr.it/RCMNS.html

Silvia Iaccarino, Bruno D'Argenio, Fabrizio Lirer

8th International Symposium on the Cretaceous System

University of Plymouth - 6th-12th September 2009

The four-yearly meeting on the Cretaceous will be held at the University of Plymouth, 6th - 12th September 2009. There will be five days of meetings, lectures, poster sessions and mid-conference field excursions. There are also a range of post-conference excursions. With the help of colleagues in industry a number of sessions on the Cretaceous of the North West European Continental Shelf will be arranged with other sessions of topics such as sequence stratigraphy, sea level change, biostratigraphy, stage and system boundaries, micropalaeontology, palaeoclimates, palaeogeography, stable isotopes, etc.

Conference Reports

The Eighth International Workshop on Agglutinated Foraminifera, Cluj-Napoca, Romania, Sept 7–13, 2008

Mike Kaminski

The Eighth International Workshop on Agglutinated Foraminifera was held in the sunny city of Cluj-Napoca, Romania, September 7–13, 2008, with over 40 participants in attendance. The workshop consisted of two days of oral presentations, a day of microscope sessions, short courses and committee meetings, followed by a three-day field excursion to the Romanian Carpathians. The meeting was held at the Geology Department of the Babeş-Bolyai University, a beautiful 19th century building in the center of Cluj-Napoca.

The Workshop was opened by Sorin Filipescu. who welcomed everyone to Transulvania and to the 8th meeting in the series. The first session was dedicated to the memory of Brian O'Neil, a long-time IWAF participant who was looking forward to attending the meeting, but succumbed to a long-term illness in June 2008. The first presentation was given by Felix Gradstein, who discussed recent updates to the Geological Time Scale and showed how RASC can be used to construct regional biozonation using agglutinated foraminifera. Other memorable talks that day included the presentations of Miroslav Bubik on the applutinated foraminifera from marine red beds in Iran; Claudia Cetean on the agglutinated foraminifers from the Contessa Section in Italy: Malcolm Hart on his work with terminal Maastrichtian in Brazos River and Stevns Klint: Silvia Hess on the marine Triassic of Spitsbergen; and Jeno Nagy on the Paleocene to Eocene record in Spitsbergen. George Popescu and Theodor Neagu gave a richly illustrated presentation on the upper Eocene agglutinated foraminifera from the southern Carpathians. Look out for some new species here! The technical session on Monday was followed by a richly catered poster session. which doubled as a welcoming reception. We admired the posters and sampled some of the local cuisine at the same time.

The second day of the conference had a more taxonomical nature, and several talks were dedicated to the revision of various applutinated foraminiferal genera, such as Entzia (the Transylvanian genus) and Arthrodendron (until now called "Aschemocella"), and the larger agglutinated protozoans. The revision of the foraminiferal genus Arthrodendron will be published in the next issue of the Journal of Micropalaeontology. Johann Hohenegger presented his ideas on the nature of suprageneric classification. The session ended with the presentation of the "Grzubowski Award", which is the lifetime achievement award given by the Grzybowski Foundation. Felix Gradstein was the recipient of this year's award, in recognition of his numerous contributions to the study of agglutinated foraminifera, and the fact that he helped organise the very first workshop back in 1981. Finally the venue of the next workshop was agreed – the 9th meeting will be held at the University of Zaragoza in September, 2012.

On Wednesday, workshop participants had the choice of an open microscope session, a very popular short course on RASC given by Felix Gradstein, or attending the annual meeting of the "International Working Group on Foraminiferal Classification". The latter is a committee chaired by Mike Kaminski and Alla Mikhalevich that examines the validity of the agglutinated foraminiferal genera, with an aim to produce a revised update to the "Loeblich & Tappan (1987)" book. A number of issues were discussed, including the proposed inclusion of the Xenophyophorea into the group of agglutinated foraminifera in light of recent molecular work. Two applutinated genera were synonymised, and it is apparent that some new genera will need to be described. The working



Participants of the 8th International Workshop on Agglutinated Foraminifera at the Babeş-Bolyai University, Cluj-Napoca, Romania.

group reviewed progress on the "Catalogue of Agglutinated Foraminiferal Genera", a project organised through the Grzybowski Foundation.

Thursday saw us piling into a bus and taking off for the field. The first stop was a Miocene locality in the Transylvanian Basin, followed by a visit to a newly re-opened wooden monastery. The Monasteries in northern Romania are famous for their architecture and paintings, and are experiencing a rebirth after the fall of communism. During the trip we visited four such monasteries, giving the IWAF participants the opportunity to learn something about Romanian history and culture, as well as the chance to stock up on souvenirs and handicrafts. On the second and third days, we visited some exposures in the Carpathians that had been recently uncovered by the destructive floods that took place in July this year. We sampled some Upper Cretaceous to Paleocene turbidites of the Hangu Formation just above the Putna monastery, which houses the tomb of Stefan the Great, one of Romania's most famous rulers. The colourful printed Field Guide book was very helpful.

The last night of the field excursion, we were treated to an excellent dinner at a hotel in the

Carpathians, which was followed by the customary singing in various languages. The atmosphere was extremely cordial, and a good time was had by all. On the drive back to Cluj, we "stopped in for a bite" at Dracula's Castle, a local tourist attraction. Unfortunately, some of us suffered from "Dracula's Revenge" afterwards.

We have to thank **Sorin Filipescu** for organising such an excellent meeting, as well as Ph.D. students **Lóránd Silye**, **Claudia Cetean**, and **Claudia Beldean**, who ensured that the meeting ran smoothly. We also thank **Carlo Aroldi** for helping lead the field excursion. Finally, we would like to thank our major sponsors: the research projects of the organizers from the Babeş-Bolyai University, the Grzybowski Foundation, the TMS, and Chevron.

The abstract volume of the conference is a handsome 66-page edition published by the Grzybowski Foundation as their Special Publication nr. 14, and thoroughly summarizes the current state of research on Agglutinated Foraminifera. The abstract volume can be freely downloaded from the Grzybowski Foundation's website.

Workshop "Methods in Ostracodology", Graz, Austria July 14-17, 2008

Benjamin Sames

Universität Wien (Austria) and Freie Universität Berlin (Germany), benjamin.sames@univie.ac.a

A summer week with very changeable weather in the beautiful historic city of Graz (Styria, Austria) saw the first (self-contained, i.e. not within the scope of a conference) workshop in ostracod methodology taking place at the University of Graz, Institute of Earth Sciences, Division of Geology and Palaeontology. The workshop had been organized by Prof. Dr Dan L. Danielopol (Austrian Academy of Sciences). Dr Martin Gross (Landesmuseum Joanneum, Graz) and Prof. Dr Werner E. Piller (University of Graz) and in cooperation with the invited lecturers: Angel Baltanás (Autonomous University of Madrid, Spain), Ian Boomer (University of Birmingham, UK), Anne-Marie Bodergat (Université Claude Bernard Lyon 1), Walter Neubauer (University of Salzburg), and Christine Latal (Graz University of Technology). It was supported by the University of Graz, the Landesmuseum Joanneum and the Commission for the Palaeontological and Stratigraphical Research (CPSA) of the Austrian Academy of Sciences (ÖAW).

The emphasis of this workshop was on:

- 1) Geometric Morphometrics in ostracods theoretical background, methods, programs, and range of applications combined with exercises using MORPHOMATICA;
- The application of stable isotopes in ostracod research: theory, methods, technology and practice; and
- 3) Techniques for high-resolution sampling using examples from the clay pit at Mataschen, presented on a field excursion by **Martin Gross**.

Lectures and exercises related to these topics were complemented by additional talks about several topics (refer to the workshop's website as given below). Several demonstrators (**Klaus Minati**, **Adriana Danielopol** and **Walter**

Neubauer) skillfully coached and advised the participants during the exercises.

The topics attracted seventeen participants from eleven countries and three continents.

Thanks to the organizers, lecturers, demonstrators and hosts in Graz, this event has been a great success as well as a good opportunity to comprehensively discuss ostracod-related (and other) topics. Having been scheduled for four days, there was even much time to deal with specific questions of interest and participants even had the opportunity to give short presentations of their own selected topics combined with discussions and perspectives.

A website has been posted online featuring the pdf-files of the Program and Abstracts, a brief report, the special volume of the workshop Contribution to Geometric Morphometrics being dedicated to the famous ostracodologist Roger L. Kaesler, as well as some selected presentations.

http://palstrat.uni-graz.at/methods % 20 in % 20 ostracodology/workshop.htm

During the final discussion, born from the positive impressions and enthusiasm of both participants and lecturers, it was proposed that a series of such workshops be formally recognized by the International Research Group on Ostracoda (IRGO), and many potential topics for future workshops were put together by the participants (see the pdf "Brief Report" on the website).

A joint evening dinner, a guided tour through downtown Graz and a welcome buffet at the Landesmuseum Joanneum put the finishing touch to this exciting event. One point to favourably look upon is that this has been a very instructive, encouraging experience to all participants, regardless of the field or degree of experience in ostracodology!

The combined 12th International Palynological Congress and 8th International Organisation of Palaeobotany Conference, Bonn, 30th Aug - 5th Sept, 2008

Ian Harding

What a gathering! If numbers were anything to go by, then the vast congregation of 801 (don't forget the one!) palynologists and palaeobotanists that registered for the first combined 12th International Palynological Congress and 8th International Organisation of Palaeobotany Conference was positive proof that these subjects are alive and flourishing. However, this ambitious dual meeting had everyone wondering how the logistics of such a huge the meeting would work. However, we soon discovered that we need not have been concerned, as from opening to closing ceremonies the mega-conference proceeded without a noticeable hitch. Thomas Litt (Chair of IPC-XII and outgoing President of IFPS), Hans Kerp (Chair of IOPC-VIII) and Carole Gee (Secretary, Symposium Coordinator and Program Coordinator), the whole of the Organizing Committee of this joint conference session, and the invaluable student helpers are to be heartily congratulated on a superb job of handling such a daunting undertaking. These individuals ensured delegates were treated to a seamless series of events over a period of some five days - and they have now created a formidable precedent for these 4-yearly meetings.

These two conferences have historically been held in fairly close succession in the same host country but at different cities – until their last iterations when there was a somewhat unfortunate parting of the ways, with the IOPC being held in Argentina and the IPC in Spain. This year the

ambitious plan was to hold both meetings concurrently at the same venue: the main building of the Rheinische Friedrich-Wilhelms-Universität of Bonn. There could have been no grander venue for this enterprise, which took place within the neoclassical confines of the former residential palace (Kurfürstliches Schloss) of the Prince-Elector of Cologne, built between 1697and 1705.

The Opening Ceremony in the vast Main Auditorium was opened with welcoming presentations by conference organisers Thomas Litt (also as President of IFPS) and Hans Kerp (Chair of IOPC VIII), who were followed by Margaret Collinson as President of IOP. The next somewhat unexpected event was that Thomas came back to the stage – this time at the piano to deliver a rendition of Summertime by George Gershwin in a duet with **Thomas Heck** (saxophone) - definitely above and beyond the call of duty as a conference organiser! Two plenary lectures by Jonathan Overpeck (University of Arizona: Palunology. palaeobotany, and key research unknowns: post IPCC 4th assessment reflections), who shared the 2007 Nobel Prize as a Coordinating Lead Author for the IPCC 4th Assessment report. It was particularly apt that the other plenary lecture was delivered by **Peter Crane** (University of Chicago, with co-workers: Fossils and angiosperm evolution: Lessons from Fagales and prospects for the future), as it was thirty years since he'd organized the first ever IOPC in Reading! These presenta-



tions were then followed by the Icebreaker Party, held *al fresco* in the early evening sunshine at the Botanical Garden of the Universität. The event set the tone for the excellent conference to come, reuniting friends and colleagues around the pools, herbaceous borders and greenhouses of the gardens. The event lasted well into the evening, drawing to a close in the floodlit grounds to an accompaniment of live music from the steps of one of the neoclassical palaces.

The main body of the meeting then followed, with the Monday and Wednesday to Friday comprising four days of talks during which some 536 oral presentations were organized into over 48 symposia, and complimented by 238 posters! The only negative comment expressed by any of the delegates centred around the fact that with some eight parallel sessions being held throughout the meeting, there were regrettably too many talks of interest that clashed in the same time slots to ensure that delegates could attend all of the sessions of interest to them - perhaps inevitable given the size of the meeting. However, that said, the purpose of holding both meetings concurrently succeeded admirably in its aim, of allowing palynologists and palaeobotanists the rare opportunity to gather at one time (with only one subscription fee!) and be able to attend talks covering both of these complimentary areas of research. The standard of talks was universally high, with very commendable presentations being given by participants from some 52 (yes, fifty-two!) countries. It was very gratifying to see that the attendance of a great number of delegates had been made possible by generous support of several organizations: the International Federation of Palynological Societies supported 16 registrants, the Deutsche Forschungsgemeinschaft made awards to 10 registrants, and the Palaeontological Association, London to 25 registrants. As a further indication of the health of the world of palynology, there were several oil company representatives actively head-hunting for vacant positons during the meeting.

There were so many talks that it would be invidious to highlight individual presentations, but the entire programme and abstract volume can still be downloaded from the conference website (http://www.paleontology.uni-bonn.de/congress08/index.htm). Most of the symposia were fronted

by a keynote lecture, and there were also three additional evening plenary lectures run after the main conference sessions were completed. These entertaining presentations were given by **Conrad Labandeira** (A brief history of insect herbivory on land and why it is important), **Edith Taylor** (Life at polar latitudes: Permian and Triassic peat floras from the central Transantarctic Mountains, Antarctica) and **Rémy Petit** et al. (Palaeoecology meets genetics: Deciphering past vegetational dynamics).

The Tuesday was given over to a very successful range of fieldtrips to such world famous sites as Messel (so popular it was run twice!) and the Quaternary maar lakes, whilst during the conference there delegates were also able to visit the Goldfuss Museum which was running an exhibition entitled *Devonian Plant Life of the Rhenish Massif*, show-casing Early-Late Devonian German plants, including holotypes and recent discoveries of new taxa currently under scientific investigation. Many of the palaeobotanists were clearly wow-ed by some of the stunning specimens on display!

The city of Bonn provided many excellent informal venues for an enormous number of societies' business meetings and annual dinners, including the local hostelry adjacent to Beethoven's birthplace which hosted the AASP annual dinner, at which **Francine MacCarthy** took over the ceremonial gavel as President.

The conference was wound up on Friday evening with a series of closing talks and a presentation by **Harufumi Nishida**, who presented details of Japan's successful bid to continue the precedent of holding these meetings concurrently in Tokyo in 2012 – just make sure you remember that you can't walk the streets of Tokyo with a sword on your belt! I would like to wish Haru and the Tokyo Organising Committee the best for the 13th IPC/9th IOPC – Bonn will be a hard act to follow, but I'm sure you will be equal to it!

As a parting shot, what could have been more appropriate for a (palaeo-)botanically-orientated Conference Dinner than our Rhine cruise ship being passed by a barge named *Azolla*, as the sun set on Wednesday evening?! I don't think I've ever seen so many people showing so much interest in a cargo barge before!

Letters

MSc Micropalaeontology at UCL

Mike Kaminski, University College, London

In August 2008, the final group of M.Sc. Micropalaeontologists finished their course at UCL, following the unilateral decision by the Head of Earth Sciences Department to terminate the course with immediate effect. This year's group of course participants hailed from places as far away as Malaysia, Saudi Arabia, Romania, Cyprus, and Italy, as well as from the UK (England and Scotland). In fact, the 2007-8 MSc class in Micropalaeontology was the largest and most diverse group ever, with 12 students in the course. Thus, three years after the MSc course was revamped and relaunched as a joint MSc course in Micropalaeontology in collaboration with the NHM, our MSc course came to an unceremonious end after nearly 40 years.

This ends the era of NERC-sponsored MSc courses in Micropalaeontology in the UK. In autumn 2008, our MSc course room was in the process of being converted into a research room for postgraduate students – fortunately our library and collections are still intact.

The closure of the MSc course comes at a time when well-trained Micropalaeontologists are in high demand. In addition to our NERC-sponsored students, individual students in the course were sponsored by BP, the BG Group, Saudi Aramco, and Shell, and many of the students were offered employment as Micropalaeontologists (or were offered Ph.D. positions) well before finishing the course.

Although there is no longer an MSc degree course called "Micropalaeontology" at UCL, we still offer a generic one-year MSc degree called "Geosciences" that covers all aspects of the field. A student can register for this degree, and do a thesis project in the subject of Micropalaeontology. We have been able to preserve some taught elements of the former

MSc course in Micropalaeontology as taught course options within the "Geosciences" MSc degree, and students are able to register for micropalaeontological short courses on Ostracods, Diatoms, and Pollen & Spores that are offered by the UCL Geography Department.

By putting together a selection of micropalaeontological and palaeontological course options at UCL as well as an optional short course in benthic foraminifera at the University of Urbino, Italy, we have now set up a "Micropalaeontological Stream" within the Geosciences MSc degree program. This year, two students have selected to follow the "Micropalaeontological Stream", and learn the subject by doing research. It is important to mention here that we still have a grant from the Dennis Curry Foundation (the Dennis Curry Scholarship) that is available to help defray the costs of studying at UCL. These Geosciences (Micropalaeontological Stream) students have access to our micropalaeontological collections and the material that was taught on the Micropalaeontology MSc course.

Our research links with the NHM and industrial work placement links are still in place; students can also do a Socrates placement at a European university, and will be able to do an industrial work placement between the second and third terms. From the student's perspective, this new Micropalaeontological option is attractive, because teaching is done in small groups, by tutorials, and there is more time to concentrate on a research project. Micropalaeontological teaching is still alive at UCL, albeit under a different banner!

For further information regarding the MSc Geosciences degree, please contact Dr Ian Wood at UCL.

2nd International Course on Benthic Foraminifera University of Urbino "Carlo Bo"



Urbino, 20-25 APRIL, 2009

Dr. Michael A. Kaminski Department of Earth Sciences, UCL



The Course on Benthic Foraminifera is designed to provide an overview of the Taxonomy, Ecology, Biodiversity, and Geological History of Benthic Foraminifera. This intensive course is intended for students, academic and industrial staff interested in Micropalaeontology, Palaeoceanography, Palaecology, and Climate History. We review the current classification schemes of the foraminifera, discuss Ecology and Life History, and use case studies to investigate the geological history of the group. Microscope lab sessions provide the opportunity for participants to learn the foraminiferal genera, and view Cretaceous to Neogene foraminiferal assemblages from Petroleum Exploration areas and ODP sites.

Teaching format

The course consists of lectures and practical classes covering the taxonomy, distribution, and ecology of foraminifera. Microscope lab sessions provide the opportunity for participants to learn the foraminiferal genera, and view Cretaceous to Neogene foraminifera assemblages from Petroleum Exploration areas and ODP sites as well as Quaternary and modern assemblages. Course materials include numerous reprints of classic papers, distributed on CD-Rom. We will also demonstrate a pre-release version of the new "Catalogue of Agglutinated Foraminiferal Genera".

Registration and payment deadline: February 1, 2009

Early registration (application sent before December 15th, 2008)
PhD/MSc students: €250 - Academic/Industrial staff: €400
Late registration (application sent after December 15th, 2008):
PhD/MSc students: €300 - Academic/Industrial staff: €500
The fee includes:



- lectures and lecture notes
- refreshment
- two field excursions Gubbio (Contessa Highway and Quarry, and Bottaccione section), the Massignano GSSP for the Eocene-Oligocene boundary and the K-T boundary at Monte Conero
- Quantitative Methods for Applied Microfossil Biostratigraphy Prof. Felix Gradstein-Ranking and Scaling (RASC) and Constrained Optimization (CONOP) methods (North Sea wells).

Correspondence and information:

Dr. Frontalini Fabrizio Dipartimento di Scienze dell'Uomo, dell'Ambiente e della Natura Università degli Studi di Urbino "Carlo Bo" Campus Scientifico, Localita' Crocicchia, 61029 Urbino (Italy) fabrizio, frontalini@uniurb.it Tel: (+39) 0722 304254 Fax: (+39) 0722 304220

Organisers and lecturers:

Dr. Michael A. Kaminski, Department of Earth Sciences, University College London Prof. Rodolfo Coccioni, DiSUAN, Università degli Studi di Urbino "Carlo Bo" Prof. Felix M. Gradstein, Geological Museum, University of Oslo Dr. Fabrizio Frontalini, DiSUAN, Università degli Studi di Urbino "Carlo Bo"





BÖTEFÜR H. J., 2008, Die benthischen Foraminiferen aus dem Oligozän von Malliss (Wanzeberg, Norddeutschland). (246 pages, 10 text-figures, 2 tables, 45 plates), text in German with large abstract and descriptions of new species in English. Price: 63,60 € (p&p is extra), orders through: www.palaeontos.be (see: order form)

Abstract: The studied area is part of the German – Polish basinal area, in which sediments have been accumulating nearly continuously since the Permian. Halotectonic movements are the main reason why Oligocene sediments, which normally occur at a depth of several hundred metres in this area, can now be observed and studied in some outcrop sections. Moreover ice-tectonic

disturbed the Oligocene deposits. This study of the foraminiferal assemblages of the different "tectonic blocks" forms an appropriate helping tool. The observed species have systematically been treated following Cushman (1948), Loeblich & Tappan (1964, 1985, 1988) and Jones (1994). In total 440 taxa, belonging to 156 genera, have been recognised and described. Two species of the Malliß collection are new to science (*Cushmanina malissensis* and *Gyroidina clodiusi*). The planktonic foraminifera (*Globigerinaceae*) are much rarer in the Malliß samples. Indeed, the strongly enclosed "Rupelian Sea" of NW Europe was to a large extent a shallow epicontinental sea (generally less than 200m deep, except for the area of the present North Sea area, where bathymetry could reach up to some 600m). The only continuously existing connection of this North Sea Basin was that with the North Atlantic, thus north of the Shetland Islands. Although intermittently some southern connections did exist via the Rhinethal Graben, the planktonic foraminifera of this NW European "Rupelian Sea" exclusively consisted of those coming from the north.

NEW from the Grzybowski Foundation:



Proceedings of the Seventh International Workshop on Agglutinated Foraminifera (Urbino, Italy, October 3-9, 2005)

Edited by:

M.A. Kaminski & R. Coccioni

Grzybowski Foundation Special Publication no. 13, 2008

This Atlas-format hard cover book presents the scientific results of the IWAF-7. The 17 contributions (265 pp.) provide an up-to-date synthesis of current research topics dealing with the taxonomy, biostratigraphy, and (paleo)environmental significance of agglutinated foraminifera. To reserve your copy at this price please email Mike Kaminski <m.kaminski@ucl.ac.uk>.

Libraries: £ 39.00 (\$79.00) Sale Price (Individuals): £ 35.00 (\$69.00)

Announcements

Professor Patrick De Deckker from the Re-

search School of Earth Sciences has been awarded the Christoffel Plantin Medal. This is offered annually to a Belgian citizen living abroad whose cultural, artistic or scientific activities contribute to the prestige of Belgium. The prize comes with a med-



al bearing the effigy of C. Plantin, the 16th century Belgian humanist and printer, and 10,000 Euros. The award was presented in Antwerp on October 13, 2008.

Ostracods in the Japanese Media

After **Horst Janz** and **Robin Smith** published a paper on Lake Biwa candonids in *Journal of Natural History*, the Lake Biwa Museum distributed a press release about the 11 new species discovered in Lake Biwa. Robin tells us "This story was quite successful in the Japanese press. It got mentioned on local TV news, local radio and made it into six newspapers, some of which are national." One of the news items is reproduced below. Well done to Horst and Robin for capturing the imagination of popular media.

Success and congratulations!

In the Newsletter of Micropalaeontology (no. 78, p. 40) the TMS archivist refers to a previous notice of 1977 in which "Lonely female Schuleridea thoerenensis seeks male".

Success: This male [holotype] was born in Frankfurt on December 31st 1938 and is going to celebrate its 70th anniversary at the end of the year.

Congratulations and all best wishes for your birthday from all of the Lower Cretaceous ostracod community, e.g. **Heinz Malz**

Dr Les Riley of Riley Geoscience Ltd., Walsall is the first UK "bug man" to become an AAPG Certified Petroleum Geologist. He says "...one to wave the flag for the rapidly aging downhole bug pickers (*Moreorlessia ballparkii* gen. & sp. nov.)... this might encourage others in the commercial world 'to seek certification' and perhaps more recognition in the geological community and spreading of the gospel."

So if you want increased credibility and recognition for your work and are interested in registering, the Division for Professional Affairs (DPA) has further details and downloadble forms on their website. http://dpa.aapg.org.



Obituaries

Neriman Doruk (1945 - 2008)

Dr Neriman Doruk died on 12th August 2008, aged 63, after a cerebral haemorrhage. We all felt a desire to honour Dr Doruk for her personal and professional contributions. Neriman Doruk began her academic career as a research assistant in 1967 at the Aegean University, Yzmir-Turkey. In 1969, she was able to complete her Masters degree in Palaeontology. In the same year, she earned a scholarship supported by NATO and went to Leicester University, England for her Ph.D., where she had focused on 'Neogene Ostracoda and Biostratigraphy'. After her successful advanced scientific life in England, she came back home to Turkey and began to work at the Department of Biology at the Aegean University in 1982. Between 1984 and 1994, Dr Doruk also worked at the Natural History Museum of the University as a Vice-President. This is the place where she spent rest of the life as a researcher, educator, colleague, and friend. Dr Doruk can be remembered by her contributions to *A Stereo Atlas of Ostracod Shells*, in which she was able to publish 48 articles from 1973 to 1981. For the last eight years, she had been working on a book called 'Evolution and History of Life'. Dr Doruk was a member of a variety of professional societies such as the European Paleontological Association, International Palaeontological Association and Union of Chambers of Geology Engineers. We thank her for everything that she had done for her family, students, friends, and forscience. Particularly, her contribution to ostracodology. Her presence will be sorely missed.

Okan Külköylüoðlu,

Roseline H. Weiss (1937 – 2008)

The palaeontologist Dr Roseline H. Weiss died on December 8, 2008 in Düsseldorf. She had suffered during the last two years from an incurable illness. Roseline had managed to live life quite normally during these two long years. In the previous year she was still able to work on the last book that she intended to release, maintaining contact with her colleagues. Up to the end she had enjoyed life, preserved her optimism, was interested in each and everyone, had participated in many activities and had always tried to make the best of this hopeless condition. Roseline fought the illness with much bravery and persistence; she maintained a high standard of morals and died full of self-respect and satisfied with her fulfilled life.

Dr Roseline Huguette Weiss was born April 25, 1937, in Galati, Romania, to parents who were active in the Romanian petroleum industry in the second generation. Her grandfather was director of an important petroleum refinery in Ploiesti before the Second World War; later her father led the chemical laboratory in the same refinery. After being qualified as a geologist (B. Eng.), intending to follow the family tradition, she studied at a Technical University in Bucharest, receiving her diploma (M. Eng) as a petroleum mining engineer in 1962; she practised this profession up to her departure for Germany in 1974.



In the meantime, in 1964 she married Mr Aby Weiss, a mechanical engineer (M. Eng).

In Germany, Mrs. Roseline Weiss had to rearrange her professional activity, since at that time there were no opportunities in the petroleum industry for women with her skills and qualifications. For a short time, therefore, she worked with the Hessian State Museum in Darmstadt as a geologist.

1975 the family Weiss moved to Düsseldorf where her husband had found a job. She decided to introduce herself to the University of Cologne, and following an examination before a committee of the Natural Science Faculty, she was admitted to

carry out her doctorate in geology and to work as a scientific assistant within the Geological Institute.

She obtained her academic degree - doctor of the sciences (Dr. rer. nat.) in 1981 with a much appreciated dissertation on Oligocene Marine Ostracoda, published 1983 in Palaeontographica, Stuttgart.

The research of Dr Weiss concentrated mainly on micropalaeontology. During the first years in Cologne she worked on Ostracoda, contributing a series of publications to A Stereo-Atlas of Ostracod Shells. Among others she described the new genus Kempfidea (1997). After 1987 Roseline dedicated her work principally to palynology with priority on the continent of Gondwana. She studied mostly the palynoflora of the Late Palaeozoic of Tanzania. Aiming to facilitate researchers' work, Roseline designed an enhanced filtering device, which improved the preparation of micropalaeontological samples. Her scientific activity was cemented in more than 25 publications which appeared between 1983 and 2001.

One of the most appreciated publications was that issued in 1995 - "Bibliography of Gondwana Palynology" with 3200 references covering the time from 1869 to 1995. After 1995 Roseline gath-

ered more than 3800 further citations of articles on Palaeopalynology of Gondwana, with which she planned to publish in a second volume of the Bibliography. Unfortunately this purpose remains unachieved, as does the "Cologne Database of Palynomorphs" with alphabetical and chronological indexes of genera, intended to make international and inter-regional correlation easier.

Dr Roseline H. Weiss distinguished herself as an editor also, publishing two voluminous books containing valuable contributions of scientists from around the globe. In particular the "Contributions to Geology and Palaeontology of Gondwana", Köln, 2001, was greatly appreciated.

She participated actively at countless geological congresses and collaborated intensively with scientists worldwide. She was an active member of the American Association of Stratigraphic Palynologists Foundation (AASP), the International Committee on Palaeozoic Palynology (C.I.M.P.), the International Subcommission on Permian Stratigraphy (SPS), the International Research Group on Ostracoda (IRGO), the Association of French Speaking Palynologists (APLF), the German Palaeontological Association (PG) and the Palaeobotanical Palynological Working Group (APP).

Aby Weiss



BiotecMicroslides
Little Lower Ease, Cuckfield Road

Ansty, West Sussex, RH17 5AL Tel/Fax: +44 (0)1444 452 282

sales@biotecmicroslides.co.uk www.biotecmicroslides.co.uk

emall:

New email & Web page

Biotec manufactures multicelled, single and 4-celled slides for the storage of microfossils and small zoological or botanical specimens.

All slides available in cardboard with aluminum holder and glass coverslide. Black or white cell backgrounds.

Slide dimensions 3"x 1" (76mm x 27mm)

Slides may be purchased complete or without glass cover slides to minimise air freight costs (brochure and price list available on request)

 Inexpensive cardboard storage boxes 317mm x 92mm x 56mm with internal divisions to hold 120 slides. Available in three colours.
 Pine storage cabinets (28 drawers) with or without glazed door

Pine storage cabinets (28 drawers) with or without glazed door
 Picking trays 3% x 3% (97x84mm)

· 00 and 000 picking brushes in synthetic or sable

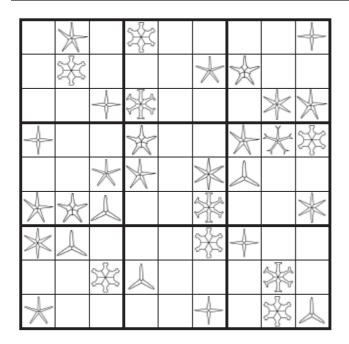
Micro-Art

The second in the series of Micro-Art from **Dave York** and **Dinah Smith**of Leicester University,
UK.

A microfossil, an SEM, a copy of Adobe Photoshop and some imagination - result, magic! See what you can do and send it to the editor.



Microdoku - #1 Discoasters



Here's a teaser for you - the first in a series of brand new and unique Microdoku puzzles. The first features 9 distinctive discoasters.

This is rated at easy, but drawing takes a little longer so the target time (mine) is 20 minutes - just enough for a cup of coffee.

Images redrawn from Young (1998 - "Neogene" in Bown P.R. (ed) Calcareous Nannofossil Biostratigraphy).

Micropalaeontology Diary

| 2009 | | |
|------|----------------|---|
| | Feb 28 | Deadline for Grant-in-Aid applications |
| | April 25-26 | Ostracod Group Meeting - Down House, Kent |
| | May 27-29 | Progressive Palaeo - Geography, University of Birmingham |
| | June 4-5 | Foram & Nannofossil groups' meeting - Zürich |
| | June 21-26 | 9th North American Paleontological Convention - Cincinnati |
| | June 26-29 | 11th International Palaeolimnology Symposium - Guadalajara |
| | July 1 | Copy date for Newsletter of Micropalaeontology |
| | July 26-30 | 16th International Symposium on Ostracoda - Brasilia |
| | Sept 6-12 | 8th International Cretaceous Symposium - Plymouth |
| | Sept 13-18 | Interrad 12 - Nanjing, China |
| | Sept 27-30 | AASP 42nd Annual Meeting - Tennessee |
| | Oct 29 | Lin Soc. Palynology Specialist Group Meeting - Burlington House |
| | | |
| 2010 | | |
| | June 28-July 3 | 3rd International Palaeontology Congress - London |

Don't forget - every sale you make with Amazon earns money for TMS if you click through the link on our home page - it really works!

www.tmsoc.org



Disclaimer

The views expressed by the authors of any article in *Newsletter of Micropalaeontology* are their own and do not necessarily represent those of The Micropalaeontological Society.

Taxonomic/nomenclature disclaimer

Newsletter of Micropalaeontology is not deemed to be valid for taxonomical or nomenclatural purposes - see International Codes of Botanical and Zoological Nomenclature

Palytech Processing Ltd

PROCESSING & SUPPLIES

2 Lorn Street, Birkenhead, Wirral, CH41 6AR, UK Tel: 00 44 (0)151 666 8406 Fax: 00 44 (0)151 647 3641

Email: palylab@aol.com

- High quality processing in our fully dedicated laboratory, with separate washing, crushing and slide making facilities
- Processing specific to your requirements
- Notification of sample receipt, progress and dispatch
- Friendly, helpful and reliable service
- Confidentiality assured
- Highly competitive prices
- Any project size undertaken
- Free trial sample processing on request
- Processing for spore colour, vitrinite reflectance, geochemistry, etc
- Overseas enquiries most welcome

We also offer competitive prices on nylon/polyester mesh, mesh holders and metal sieves for washing cuttings, top sieving. micropalaeo, etc.

A range of laboratory services, equipment, training and mobile labs on request.

Your Requirements are our Priority