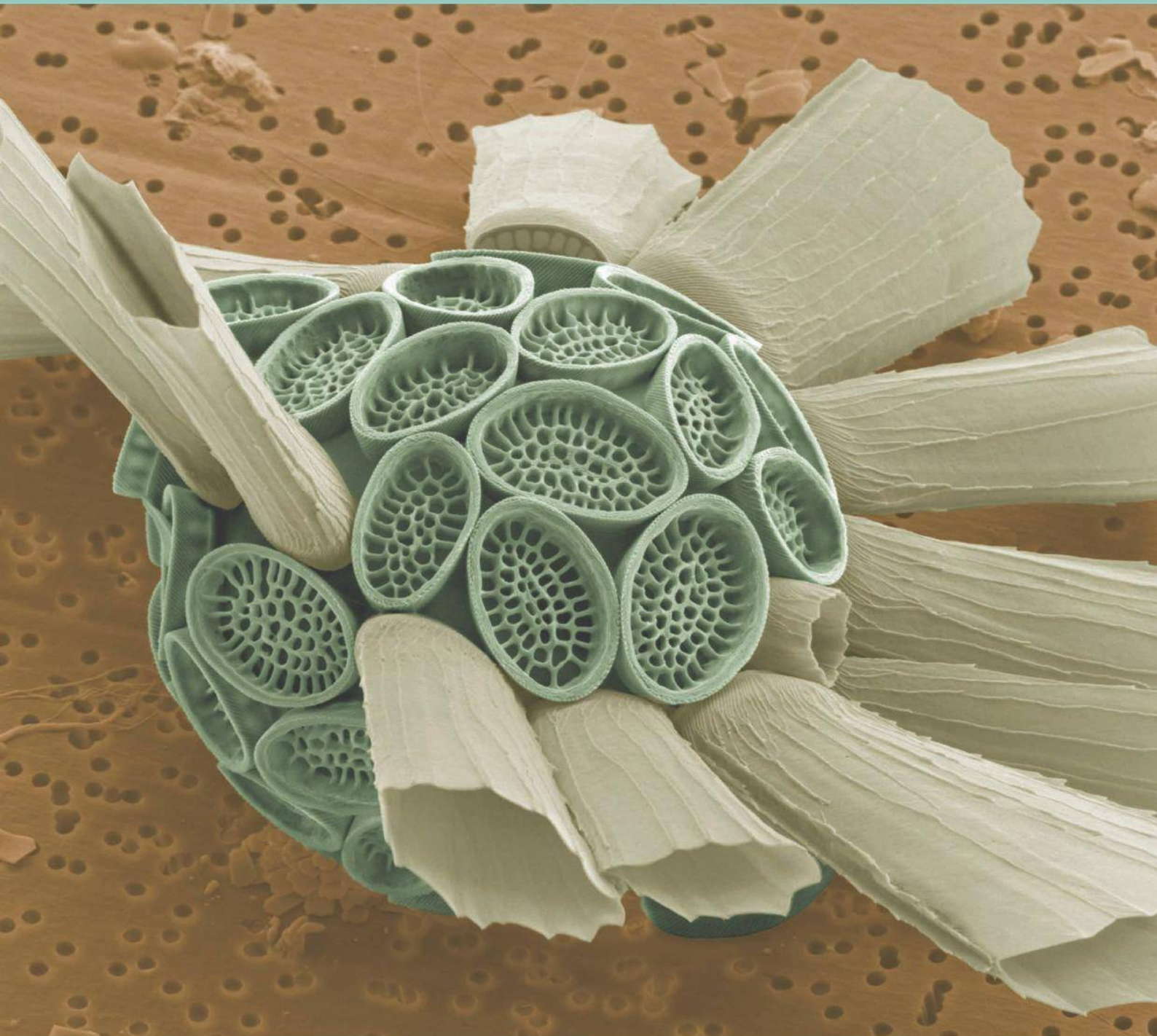


Newsletter of Micropaleontology

Number 91, January 2015

www.tmsoc.org



**The
Micropalaeontological
Society**

ISSN 0140-6730
Registered Charity No. 284013

Specialist Group News

Nanno News - updates from the TMS Nannofossil Group and the International Nannoplankton Association

Cherry Newsam & Jeremy Young

TMS Nannofossil Group changes

There has been some restructuring in the committee positions of the Nannofossil Working Group. Simon Cole has taken over as Chair of the group from Matt Hampton, whom we would like to thank for his contributions towards this group during his time in this position. Cherry Newsam has taken the place as secretary of this group; a PhD student at UCL, working on exceptionally preserved Paleogene nannofossils from the North Atlantic.

TMS Foram/Nanno Group Meeting – 14-18th June, Plymouth, UK

The next meeting will be hosted by Malcolm Hart in Plymouth. Initial details are available on the TMS website and further information will be available soon. There will be two days of presentations and

posters followed by a day field trip to a local site. Attached to this meeting we are proposing to hold a *Discoaster* taxonomy workshop (probably Thursday 18th June but TBC). This will hopefully include short presentations by 3, 4 or more guest speakers with discussions proceeding each presentation. We would like to extend an invitation to anyone who wishes to present on *Discoaster* taxonomy at this workshop to get in touch with either Simon or Cherry within the next month (and definitely by the end of February). As demonstrated by the *Reticulofenestra* workshop earlier in 2014, these meetings are a great opportunity for nannoplankton workers to get together and present their work.



Plymouth and Bohol - our next two meeting venues

INA15 The Philippines, March 2015

As we go to press we are getting ready for our next big Nannofossil conference. This promises to be a spectacular meeting with a beautiful beachfront location on the island of Bohol, and some alluring excursions. It also should be an excellent scientific meeting with special sessions on Advances in Nannofossil Biostratigraphy and New Imaging and Morphometric Methods and a chance to meet colleagues from across SW Asia. There will be a full report on the meeting in the next newsletter.

Coccolithophores 2014 - Crete INA Workshop on Extant Coccolithophores

In October about 50 specialists on extant coccolithophores converged on Crete for a specialist workshop. This was an excellent turnout

and said much for the first class work of Stella Psarros and Maria Triantaphylou in organising a workshop at very reasonable cost in a lovely location. It also, however, reflects the fact that environmental concerns such as ocean acidification and biotic response to global change have pushed into a more prominent role in plankton and biogeochemical research. As a result the meeting although primarily intended to concentrate on taxonomic and biogeographic aspects did attract a wider range of participants. This was reflected in the topics of the meeting:

- 1 Coccolithophore biocalcification and Ocean Acidification
- 2 The paleontological agenda for extant coccolithophore research

- 3 Coccolithophore phylogeny, species-concepts and molecular genetics
- 4 Coccolithophore life-cycles, ecology and biogeography

To address these topics we took a slightly unconventional format with one and half days of open talks followed by an afternoon excursion. Then we had one day of training workshops focussed on methods - or how you go from coccolithophores floating in the ocean to respectively - assemblage count data, laboratory cultures or molecular genetic sequence data. Ian Probert (Roscoff Marine Lab.), Kyoko Hagino (now

at Shikoku University) and Mehdi Bendif (currently at the MBA Plymouth) played major roles in leading these. For the last day we directly addressed the topics with panels of 'volunteered' experts giving overview of progress in the four topics and leading discussions on them. This proved a rewarding format enabling us both to present our research to each other and spend a lot of time discussing it. Finally we ended with a remarkably good meal in the unique setting of the CretAquarium.



Happy workshop goes in the October sun

Nannoplankton in the News

Sebastian Meier and colleagues described a new species *Pileolosphæra longistripes* in the September issue of the Journal of Nannoplankton Research. This would not normally make the news but it was found in the Kiel Estuary and its coccoliths resemble papal skull caps - hence the name (*Pileolus* is the correct latin name for these hats). So that was enough for Kiel University to put out a press release and it got extensive coverage in german newsmedia.

The pope, his hat, the coccosphere and how they appeared on German TV. Apparently Sebastian is now looking for a holococcolith shaped like a cardinal's hat.



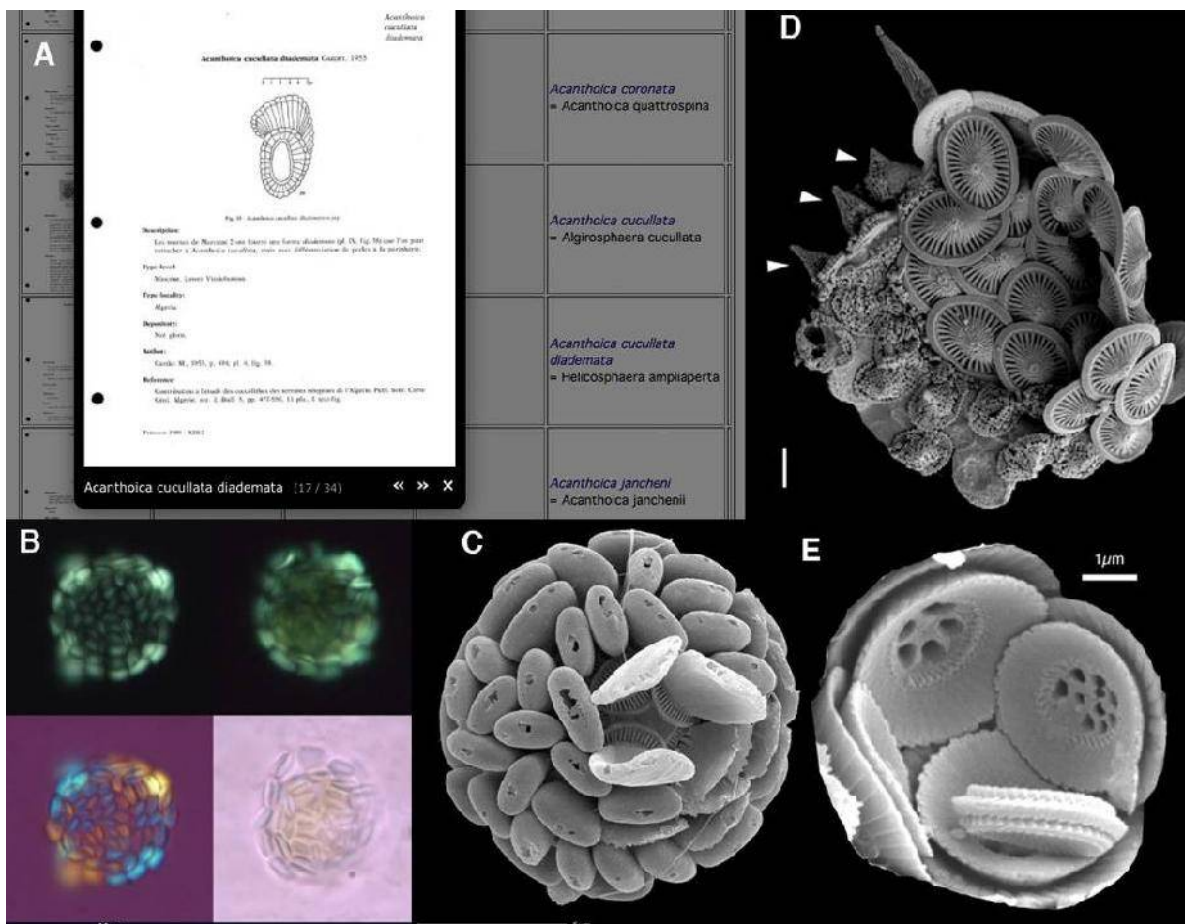
Nannotax (ina.tmsoc.org/Nannotax3)

Work has proceeded consistently with the Nannotax database. Since the last newsletter the big event in the nannoplankton world's calendar was the Crete workshop on extant calcareous nannoplankton and this was also a useful benchmark to present progress on the project. In preparation for the workshop a major effort was made to improve the coverage of extant nannoplankton. This focussed on preparation of 1000 more images of modern coccolithophores and uploading them to the site (the uploading process is essentially automatic but image preparation and data compilation takes longer). These new images included a mix of high quality unpublished SEMs, an index collection of cut out SEM images covering nearly every known extant species, and a large number of colour light microscope images, mostly miniplates of 4 images of the same coccosphere in different illumination. Having uploaded the images we then revised all the higher taxon pages which include extant species to make full use of the new images and especially the index images. Also as part of this

preparation a new module was added to the system covering calcareous dinoflagellates and other non-haptophyte nannoplankton that we find in our preps. This is in an earlier state of completion than the main parts of the site but hopefully will be a useful extension of it.

Shortly before the workshop a regular issue of the JNR came out including several papers with new taxa and one with taxonomic changes resulting from the Nannotax work. The workshop also saw publication of a special issue of the JNR with more short papers on extant coccolithophores. All the new taxa and taxonomic images from both issues have now been included in the system including numerous images of fossil coccospheres from the JNR paper by Bown et al.

More recently a major effort has been put into improving the consistency and completeness of links to the bibliography and to the Farinacci catalog of type descriptions. The Farinacci catalog pages have also been



Some of the new stuff now in Nannotax. A The Farinacci catalog of original descriptions showing how current identifications are now shown, including this bizarre case of a *Helicosphaera* species originally described as an *Acanthoica*. B. An example colour miniplate of *Algirosphaera robusta* and C. an SEM index image of the same species. D. A spectacular combination coccosphere of *Acanthoica quattropsina* holococcolith and heterococcolith stages - from a JNR paper by Luka Supraha. E. A fossil *Toweius subpertusus*, coccosphere with a developing coccolith inside, from JNR paper by Bown et al.

changed so that it is now much clearer which taxa have accepted modern identities.

Finally, in December we were pleased to be designated the 2014 golden trilobite award winner by the Palaeontological Association. Almost at the same time we suffered our first cyber attack as the site nearly ground to a halt as a result of an “SQL sleep injection”. These are usually used to obtain credit card details or personal data from websites, or to disrupt films about Korean dictators, so I am not sure what the toe-rags thought they would get from the nannofossil database.



The Golden Trilobite award - sadly we don't get an actual solid gold medal but the picture looks good on the website

Palynology Group Report

Luke Mander

It is with sadness that the Palynology Group notes the death of the palynologist Jens Jørgen Lund, who passed away on the 20th of December 2014 in Celle, Lower Saxony, Germany.



Biostratigraphy in context

Integrate your biostratigraphic data against high resolution, globally consistent standards for greater confidence in your correlation.

The Neflex Biostratigraphy Module:

- Incorporates over 230,000 individual bioevents
- Contains over 4,300 calibrated biostratigraphic schemes
- Calibrated against our unique global sequence stratigraphic model
- Provides a robust global framework for better integration of exploration datasets

Website: www.neftex.com

Email: enquiries@neftex.com

Tel: +44 (0)1235 442699

Facebook: www.facebook.com/neftex

Neflex • 97 Jubilee Avenue • OX14 4RW • UK

Now Explore



Visit our website www.tmsoc.org



**The
Micropalaeontological
Society**

ISSN 0140-6730
Registered Charity No. 284013