



## Job announcement

The Departments of Palaeontology (FU Berlin), Systematic Botany (LMU Munich), Historical Geology – Palaeontology (University Bremen), and the Museum of Natural History (Berlin) invites applications for

### **2 Ph.D. Studentships in Systematics, Evolution and Biogeography of Dinoflagellates**

Salary: approx. € 29,000 gross per annum (employment according to German BAT IIa/2 / E13/2), funded by the Deutsche Forschungsgemeinschaft (DFG, project title: 'Evolution of calcareous dinoflagellates producing benthic cysts', Ref. *KE 322/36-1*)

Duration: 2009–2011 (2 x 36 months)

Starting date: January 1<sup>st</sup>, 2009, or as soon as possible thereafter

#### Essentials

We are looking for two motivated candidates holding a Master's degree (or equivalent) in a relevant subject. One Ph.D. project requires expertise in molecular systematics (DNA extractions, PCR, sequencing, bioinformatics; biochemists are also welcome to apply), and the other project involves research, for which light and electron microscopy (SEM/TEM) skills are essential. Both Ph.D. projects will be located at the Ludwig-Maximilians-University in Munich, and successful candidates will demonstrate interest in the fields of taxonomy and systematics, broader questions in evolutionary biology, and biogeography and molecular clock studies. Good communication skills, the ability to work independently in an interdisciplinary team, and the willingness to conduct fieldwork in Europe and South America are essential. A working knowledge of English, and possibly also Spanish, is desirable.

#### Job duties

The two Ph.D. students will interact closely, combining molecular and morphological approaches to expand the currently fragmentary knowledge about the extant diversity of calcareous dinoflagellates. Such micro algae belonging to the Alveolata are excellently preserved in the fossil record and have received increased attention over the past three decades as regards their use in biostratigraphy, climate, and environmental reconstruction. Supposed 'living fossils' have been described, but not been brought into culture so far. The project will thus include fieldwork to expand the World's largest living culture collection of calcareous dinoflagellates held at Bremen. Detailed morphological and anatomical investigations of the different life cycle stages will result in additional characters for phylogenetic analyses and will provide a deeper understanding of morphology and function of coccoid stages in calcareous dinoflagellates. Multi-gene phylogenetic trees will be set in a temporal context by fossil calibrations or constraints, and you will address questions about the timing and setting of divergence events as well as the association of divergence events with habitat requirements and the establishment of new ecological niches.

Applications should be sent to Prof. Dr. Helmut Keupp, Freie Universität Berlin, Geologische Wissenschaften, Fachrichtung Paläontologie, Malteserstrasse 74-100, D – 122 49 Berlin, and include:

- 1) a cover letter outlining relevant background and work experience,
- 2) a full curriculum vitae, including a list of publications and copies of certificates,
- 3) names and addresses of two referees.

The Freie Universität Berlin supports gender equality and particularly encourages women to apply. Equally qualified, severely handicapped applicants will be given preference.

For informal enquiries, please contact Dr. Marc Gottschling ([gottschling@biologie.uni-muenchen.de](mailto:gottschling@biologie.uni-muenchen.de)).

The deadline for receipt of all applications is December 1<sup>st</sup>, 2008.