



**Important Dates / Activities**

**The GeoBio-Center<sup>LMU</sup> was founded on August, 5th 2002.**

**The approach:** The GeoBio-Center<sup>LMU</sup> is a Munich-/Bavaria-based working group organisation of researchers, reflecting the fact that the understanding of the interactive System Earth demands a transdisciplinary approach. Shared focus of the research and educational activities is the analysis and understanding of mutual interactions of the geosphere and the biosphere. As evolution of the geosphere has shaped and controlled biodiversity patterns through time, the biological evolution has likewise changed and controlled the shape and pattern of the geosphere, and this interaction still continues including the global activities of mankind. Important biological controls on the planet include geochemical cycles (C, O, P, N, S etc.), climatic control and change, as well as reshaping of the lithosphere (carbonate platforms, reefs, microbial limestones, sedimentary iron deposits, coal and hydrocarbon-generating rocks and so forth). The understanding of the past, present and future of our planet's biodiversity state demands analysis and better understanding of its geobiological controls.

**The founding group of the GeoBio-Center<sup>LMU</sup> on August 5th, 2002**



from left to right: **Prof. W Heckl** (biogenic-abiogenic nanostructures), **Prof. R. Leinfelder** (geobiology of reefs; steering member, speaker), **Mrs. U. Bommhardt** (secretary), **Dr. U. Struck** (biogenic fluxes, scientific secretary), **Prof. B. Reichenbacher** (terrestrial ecosystems), **Prof. A. Altenbach** (oceanic biogenic fluxes, microorganismic proxies), **Prof. G. Haszprunar** (systematics, phylogeny and

biology of marine invertebrates, steering member), **Prof. R. Agerer** (microbiological processes in soils and marine substrates), **Prof. J. Grau** (systematics, phylogeny and geocology of plants and algae; steering member), **Prof. G. Grupe** (physical anthropology)

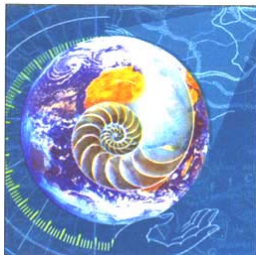
Not on photograph: Prof. J. Peters (palaeoanatomy), Prof. G. Heubl, Prof. H. J. Tillich (systematic botany).

August: **GeoBio-Center<sup>LMU</sup>** represented by R. Leinfelder as advisor for BMBF-project System Earth Working group for production of geoscience school material, Deutsches Museum

September: **GeoBio-Center<sup>LMU</sup>** presented on Poster at Systematics Conference at Zoology Collection

September 2002 first paper of **GeoBio-Center<sup>LMU</sup>**: Ulrich Struck, Alexander V. Altenbach, Maren Gaulke, Frank Glow: Tracing the diet of the monitor lizard *Varanus mabitang* by stable isotope analyses ( $\delta^{15}\text{N}$ ,  $\delta^{13}\text{C}$ ) *Naturwissenschaften* (2002) 89: 470-473

October: **GeoBio-Center<sup>LMU</sup>** research presented at Geo2002 conference, Würzburg „ Evolution of coral reefs - the positive role of stress? by Leinfelder, R.R., Nose, N., Werner, W., Schmid, D.U., Struck, U., Saric, B., März, K. Radio interview on reef issues after talk.



October: **GeoBio-Center<sup>LMU</sup>** research presented at Wissenschaftstage LMU (2 Posters, 2 oral Presentation (Reinhold Leinfelder, Wolfgang Heckl), Reef Exhibition for schools at display, information material, short information on GeoBio-Center by the Rektor of the LMU, Prof. Huber and the executive organizer of the Wissenschaftstage, Prof. Daumer)

October: 2nd Globec Open Science Meeting, invited lecture about **GeoBio-Center<sup>LMU</sup>** research in upwelling sediments of Namibia held by Uli Struck. Qingdao, P.R. China



Figure: Globec Logo ([www.globec.org](http://www.globec.org)); Sardine scales

October 24th: Invited **GeoBio-Center<sup>LMU</sup>** edutainment talk on reefs and climate by R. Leinfelder at a meeting of IT-/automobile logistics specialists, wsw-software.



Photo, R. Leinfelder

November 1st: new layout of homepage [www.geobio-center.de](http://www.geobio-center.de) available.

October / November: GeoBio-Center participation in educational websites of Palaeontology Munich: [www.palaeo.de/edu](http://www.palaeo.de/edu) and [www.palaeo.tv](http://www.palaeo.tv), with online lecture manuscripts on geobiological isotope study (by U. Struck) and online versions of public talks by Reinhold Leinfelder

November 6th: Meeting of Head of GeoBio-Center:

### **New Members:**

Dr. habil. Wladyslaw Altermann, Centre Biophysique Moleculaire (CBM), Orleans, France, Precambrian evolution.

Dr. Frank Glaw, Bavarian State Collection of Zoology, herpethology.

Dr. Axel Hausmann, Bavarian State Collection of Zoology, entomology, lepidopterans

Dr. habil. Manfred Krautter, Uni. Stuttgart, modern and ancient hexactinellid sponges and Dr. Helmut Lehnert, Thetis-IBN GmbH Hamburg, modern and fossil sponges  
sponge reefs.

Dr. Martin Nose, Bavarian State Collection of Paleontology and Geology, Devonian and Jurassic reefs

Dr. habil. Roland Melzer, Bavarian State Collection of Zoology, phylogeny and sensory structures of arthropods

Prof. Nikolai Petersen, Geophysics, LMU, magnetotactic-bacteria.

Dr. Bernhard Ruthensteiner, Bavarian State Collection of Zoology, molluscs, gastropods, marine invertebrates

Dr. Michael Schrödl, Bavarian State Collection of Zoology, molluscs, gastropods

Dr. Mike Schweissing, Anthropology State Collection, stable isotopes in anthropology.

Dr. Andreas Segerer, Bavarian State Collection of Zoology, entomology, lepidopterans

Dr. Florian Siegert, Dept. Biology II, LMU, Carbon Cycling.

Dr. Dieter Schmid, Paleontology, LMU, 3D-reconstruction of mega-foraminifera

Dr. Ralph Tollrian, Dept. Biology II, LMU, mediterranean and tropical coral reefs

Dr. Winfried Werner, Bavarian State Collection of Paleontology and Geology, Jurassic reefs and bivalves

### **Press impact:**

MuM, MünchnerUniMagazin, 03/2002

**GeoBio-Center in München**, GMIT, Geowissenschaftliche Mitteilungen 9/2002

GeoBio in München, **biologen**heute - Mitteilungen des Verbandes Deutscher Biologen und biowissenschaftlicher Fachgesellschaften e.V. # 463 / 5\_2002

Süddeutsche Zeitung, on new developments in Geosciences Munich, with short description of GeoBio-Center, Süddeutsche Zeitung Nr. 239, Mittwoch 16. Oktober 2002, Seite 44

see articles in the media section of [www.geobio-center.de](http://www.geobio-center.de)

### **University lectures on GeoBio-topics (examples) at LMU, Winter Semester 02/03:**

Geobiology of Reefs and Carbonate Platforms (Leinfelder)  
Current topics of geobiology and palaeontology (Leinfelder and others)  
Practical course on marine algae (Grau)  
Lecture and Course: Theorie und Praxis der Computer-Kladistik (Haszprunar)  
Lecture and Course: Phylogenetische Systematik der Metazoa (Haszprunar) / Baupläne der Tiere (Haszprunar, Melzer, Schönitzer)  
Stable Isotopes in Paleo-Ecology, Struck

First continuing education article:

Leinfelder, R. (2002): Die Entwicklung der Biodiversität – Das Beispiel der Riffe.-, Lebendige Erde - Skriptum zu den Vorträgen, Geo- und Biowissenschaften in Forschung und Praxis p. 24-46, Munich (VdBiol.)  
See also online articles at [www.geobio-center.de](http://www.geobio-center.de), [www.palaeo.de/edu](http://www.palaeo.de/edu) and [www.palaeo.tv](http://www.palaeo.tv)

### **Projects in preparation:**

Ecology and control mechanisms of coral reefs from Almirante Bay, Caribbean, Panamá,  
Leaders: Leinfelder, Tollrian  
Meteor M57-3 Namibia Upwelling Ecosystem, Leaders: Altenbach, Struck  
Genesis of Black Shales through time, Leader: Altenbach.  
High-latitude ‚tropical’ reefs from the Jurassic (Leinfelder/Krautter)  
Diversity and geobiological interactions of benthic freshwater communities in Bavarian Lakes (Leinfelder, Struck, Grau, Haszprunar, Tollrian)  
What else?

### **Projects in progress:**

KLINAM, climate related changes in the Namibian upwelling ecosystem (Altenbach).  
3D-reconstruction of enigmatic microencrusts and organismic structures (Leinfelder/Schmid)  
Comparison of Palaeozoic and Jurassic Reefal and nonreefal benthic communities (Leinfelder/Nose)  
Local, Regional and Global Control of Jurassic Reef Growth (Leinfelder, Werner, Nose, Schmid)What else?

### **Editorial notes:**

Members of the **GeoBio-Center<sup>LMU</sup>** are free to post interesting news in research, educational affairs or questions in the upcoming issues of the NewsFlash. Any GeoBio-related contribution is welcome! Send your papers to Uli Struck ([u.struck@lrz.uni-muenchen](mailto:u.struck@lrz.uni-muenchen)). NewsFlash issues will be distributed among members, sent to press departments of the LMU, other selected addresses. It will also be posted on the Webpage of the GeoBio-Center