

**Hesemann, Michael (A5 Poster – Presentation)**

## **Concept for a foraminiferal database**

Michael Hesemann, Hamburg, Germany, [www.foraminifera.eu](http://www.foraminifera.eu) project  
(email: [michael@foraminifera.eu](mailto:michael@foraminifera.eu))

Foraminiferal research has produced numerous catalogues, atlases, books and articles dealing with the same data elements derived from taxonomical, stratigraphical, faunal and environmental classifications plus accompanying illustrations. This basic information on foraminifera though is scattered, main sources such as Loeblich and Tappan, 1987 are outdated, out of print and accessible only at well equipped libraries. A comprehensive database with a multi-criteria search query has not been established yet though via internet accessible databases have become very popular and easy to handle. Ellis and Messina catalogues as the most comprehensive catalogue does not offer a multi-criteria search. Encyclopedia of Life and similar internet-projects are based on the one-dimensional Tree of Life structure. Prints are fixed in structure and cross searches may be time-consuming if not impossible at all.

With [www.foraminifera.eu](http://www.foraminifera.eu) we have established a freely accessible foraminiferal database with an online multi-criteria search query based on high quality SEM and optical images and some drawings. So far 1900+ entries on a genus/species-level are searchable on 15 data-criteria with 700+ defined values. Five of the criteria are taxonomical, two morphological, three geographical, three stratigraphical and two source-related. A key to genera offers for about 250 genera a multi-criteria search query on 7 criteria with about 100 defined values. If connected well to the internet any query results within seconds in a plate like presentation of images accompanied by information on genus, species and geological time. Each entry has a single webpage with a bigger image and accompanying information.

With 80 visitors and 1 email/day the project seems to be of help especially for young scientists, scientists from less developed countries, hobby-naturalists and schools. A community-like structure has been established with the inner circle of the AG Mikropaläontologie of the Naturwissenschaftlicher Verein Hamburg and about 60 permanent contributors. Established in December 2007 as a means to show off my collection as a hobby-foraminiferologist and to get samples in return for images the concept of the project has been revised twice towards a link between scientists and naturalists in the study and awareness on foraminifera.

In 2010 it has reached a level where more professional scientists need to be involved in order to assure the data quality and enlarge the data-coverage. Professional scientists are invited to join in with their expertise and material such as images, drawings and samples. In return their scientific work will be recognized by the 25.000+ visitors of [foraminifera.eu](http://www.foraminifera.eu) per year.

### References:

Ellis and Messina catalogues, New York: Micropaleontology Press, AMNH.  
Available from [http://www.micropress.org/e\\_m.html](http://www.micropress.org/e_m.html)

Encyclopedia of Life. Available from <http://www.eol.org>

Loeblich, A.R., Jr., and Tappan, H., 1987, Foraminiferal genera and their classification. Van Nostrand, Reinhold Co. New York.