



Palaeontological Institute and Museum

Open Postdoctoral position

Thalattosauriform reptiles in Triassic marine ecosystems

The Evolutionary Morphology and Palaeobiology of Vertebrates group at the Palaeontological Institute of the University of Zürich invites applications for a Postdoc position (a total of 3 years funding are available, salary range: 80.000-90.000 CHF p.a. depending on experience). The successful candidate will work in a Swiss National Science Foundation supported research project in the team of Dr. Torsten Scheyer (<https://www.scheyer.net/>; <http://www.pim.uzh.ch/>).

The offered Postdoc position is embedded in a larger study focussing on the cranial form and function of thalattosauriform reptiles, a lineage of Mesozoic marine reptiles restricted to the Triassic. In contrast to a generalized body plan, which does not vary strongly, these animals display considerable cranial disparity. The aim of the postdoctoral work is to conduct analytical research on retro-deformed datasets of skulls and lower jaws, using finite element analysis (FEA) and multibody dynamics analysis (MDA) approaches.

The successful candidate is highly motivated, with a background in Life- or Earth Sciences, and equipped with the following skills set:

- excellent writing skills in English as shown by publications in international, peer-reviewed journals
- profound knowledge on fossil vertebrate/reptile anatomy and statistics
- experience in biomechanical analysis and respective software (e.g. Hypermesh, Abaqus, Strand, Ansys or similar)
- Proficiency in working with digital data sets and processing software
- experience with 3D modelling software such as Blender or Maya is desirable but not essential

The University of Zurich is one of the top comprehensive institutions in Europe, and the city, in close proximity to the Alps, offers the conditions for an excellent quality of life. With a critical mass of researchers in Palaeontology and Evolutionary Biology, the University of Zurich offers an exceptional academic environment for research and study. The Palaeontological Institute and Museum further offers state-of-the-art research facilities in an international and stimulating academic environment.

To apply, please send a letter of motivation (incl. information of previous scientific work and publications), a CV, contact details of two referees, and an electronic copy of your Doctoral thesis to Dr. Torsten Scheyer (tscheyer@pim.uzh.ch). Please ensure that all those parts are combined into a single PDF-file!

Applications will be considered until the position is filled.

STARTING DATE OF PROJECT: Fall 2019 (negotiable).