

| | | | |
|--------------------------------------|----------------|--|-----------|
| Ber. Inst. Erdwiss. K.-F.-Univ. Graz | ISSN 1608-8166 | Band 14 | Graz 2009 |
| <i>Paleozoic Seas Symposium</i> | | Graz, 14-18 th September 2009 | |

Silurian to Devonian microfossils from the Saser Brangsa and Aq Tash formations, Eastern Karakoram, India

JUYAL, K.P.¹, SUTTNER T.J.² & HUBMANN, B.³

(1) 76-A, Dharampur, Dehradun-248001, Uttarakhand, India

(2) Austrian Academy of Sciences (CPSA) c/o University of Graz, Institute of Earth Sciences (Geology and Palaeontology), Heinrichstrasse 26, A-8010 Graz, Austria; thomas.suttner@uni-graz.at

(3) University of Graz, Institute of Earth Sciences (Geology and Palaeontology), Heinrichstrasse 26, A-8010 Graz, Austria; bernhard.hubmann@uni-graz.at

Calcareous microfossils (suggesting Silurian to Devonian age) are recorded for the first time from the Saser Brangsa and Aq Tash formations, which are exposed in the eastern Karakoram region. The Karakoram occupies an intermediate position between several lithospheric blocks/ micro plates north of the Indus Suture Zone. The eastern Karakoram lies in the north-western part of Ladakh, India. Geological knowledge of the Karakoram Block, especially of its eastern part, is poorly known because the area is not easily accessible due to high altitude and hostile weather. Due to its unique geographical position, eastern Karakoram is a very potential region for palaeontological studies. In stratigraphic order the sequence can be discriminated into following units: Pangong Tso, Saser Brangsa, Aq Tash, Chhongtash, Morgo, Burtza formations (marine) and the overlying Qazil Langher Formation (non-marine).

Taxonomic studies on the organic content of both formations have started just recently. Microfossil plates prepared from thin sections of samples derived from the sequence of the upper Shyok area were communicated to several specialists. Although this work is in progress we assume that the oldest sedimentary unit, namely the Saser Brangsa Formation, has yielded a microfauna consisting mainly of calcimicrobes whereas the overlying Aq Tash Formation has yielded additionally to the calcimicrobes, cyanobacteria, foraminifers, gastropods, ?trilobites, brachiopods, ostracodes and other indeterminable filaments.

According to PREMOLI-SILVA (personal communication 2007 to the first author) following fossils are observed: *Tubiphytes* sp., *Parathuramminids*, *Pachythurammina* VACHARD, ?*Biorbis* sp., *Irregularina lobata* BYKOVA, *Cribrosphaeroides* REYTLIGER, ?*Neoarchaesphaera* sp. PRONINA and others.

Comparing these two formations the Aq Tash Fm seems to have a more diverse flora and fauna (e.g., types of calcimicrobes similar to *Garwoodia*, *Eugonophyllum*, *Tubiphytes* ("Shamovella"), *Renalcis*).

Knowledge of the biotic composition will be of great importance concerning the faunal/floral relations and the position of the Karakoram Block within the Paleotethyan Ocean.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Berichte des Institutes für Geologie und Paläontologie der Karl-Franzens-Universität Graz](#)

Jahr/Year: 2009

Band/Volume: [14](#)

Autor(en)/Author(s): Juyal K.P., Suttner Thomas, Hubmann Bernhard

Artikel/Article: [Silurian to Devonian microfossils from the Saser Brangsa and Aq Tash formations, Eastern Karakoram, India. 40](#)