



International Geoscience Programme Project 591 - Closing Meeting 'The Early to Mid Palaeozoic Revolution' Ghent University

jointly with: The International Subcommittee on Cambrian Stratigraphy (ISCS)
The International Subcommittee on Ordovician Stratigraphy (ISOS)
The International Subcommittee on Silurian Stratigraphy (ISSS)
The International Subcommittee on Devonian Stratigraphy (ISDS)
IGCPs 596 and 653

Ghent, Belgium, 6-9 July 2016

Third circular. This third circular provides an update of our plans for the closing meeting of IGCP 591, at Ghent University (Ghent, Belgium). It contains the full programme (scientific and social), and all the practical information you will need. We invite you to check our website regularly for news, and last minute programme updates: www.IGCP591.ugent.be

Summary schedule

10 June 2016	Registration closes: please register by this date. Registration online after this date will still be possible up to a couple of days prior to the meeting, but we will not be able to guarantee spaces for social events or workshops after June 10 th .
5 July 2016	GCM modelling workshop, Dept. of Geology, UGent (included in registration)
6-9 July 2016	Closing meeting IGCP591 scientific sessions at 'het Pand', UGent
8 July 2016	Mid-meeting workshops at 'het Pand', UGent (included in registration)
10-15 July 2016	Welsh Basin (UK) Field Trip " <i>Revolutions that made the Palaeozoic world - Revealed in the ancient strata of Wales</i> " (<u>fully booked</u>)

Upper Ordovician sponge spicules from Gondwana: New data from Peru and Libya

Gutiérrez-Marco, J.C.^{1*}, Carrera, M.G.², Ghienne, J.-F.³ and Chacaltana, C.A.⁴

¹Instituto de Geociencias (CSIC, UCM) and Departamento de Paleontología, Fac. CC. Geológicas, José Antonio Novais 12, 28040 Madrid, Spain.

²CICTERRA-CONICET Universidad Nacional de Córdoba, Fac. Cs. Exactas Físicas y Naturales Av. Velez Sarfield 1611 Ciudad Universitaria, Córdoba, Argentina.

³Institut de Physique du Globe de Strasbourg (EOST), Terre UMR 7516 CNRS/Université de Strasbourg, 1 rue Blessig, F-67084 Strasbourg Cedex, France

⁴INGEMMET, Avenida Canadá 1470, Lima, Perú.

*Corresponding author: jcgrapto@ucm.es

The record of Middle to Upper Ordovician sponges outside Laurentia and north-Gondwana (=Australia) is too sparse that any new record significantly contribute to the global diversity and biogeographic knowledge of the group (Muir *et al.* 2013). Conspicuous spicule assemblages and a partially complete sponge have been recorded from Peru and Libya, from where isolated occurrences of Ordovician sponge spicules have been previously reported without any morphological or stratigraphic detail.

The spicule association recorded from Peru comes from Sandbian beds on the lower part of the Calapuja Formation west of Lake Titicaca. It consists of isolated hexactins, pentactins and ropes or divergent tufts of elongate, large monaxons in subparallel orientation. Some of these monaxon groupings are clavate masses of slightly divergent, mainly smooth monaxons and some of them are ornamented. These forms resemble the genus *Pyritonema* McCoy (= *Hyalostelia* Hinde), commonly misinterpreted until the recent review by Botting (2005). Other spicule assemblages are related to root-tufts of hexactinellids with long monaxons including anchoring terminations.

The spicules from the Upper Ordovician of Libya come from the basal horizon of the Melaz Shuqran Formation in the Tihemboka High, west of the Murzuq Basin. The assemblage consists of simple hexactines, hexactine-based stauracts and pentacts and some isolated large monaxons. Different size or rank of hexactines occurred; some of them in an apparent original arrangement. This association agrees with the characteristics of the protospongioid reticulosans.

References:

Botting, J.P. 2005. Exceptionally-preserved Middle Ordovician sponges from the Llandegley Rocks Lagerstätte, central Wales. *Palaeontology* 48, 577–617.

Muir, L.A., Botting, J.P., Carrera, M.G., Beresi, M. 2013. Cambrian, Ordovician and Silurian non-stromatoporoid Porifera. In Harper, D.A.T. & Servais, T. (eds), *Early Palaeozoic Biogeography and Palaeobiogeography*. Geological Society, London, Memoirs 38, 81–95.