
Advances in Cambrian studies: A meeting in the Andes VI field meeting of the Subcommittee on Cambrian Stratigraphy, Argentina 2000 (IUGS – UNESCO)

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The Cambrian Period is one of the most attractive times in the history of life. Many of the most important evolutionary processes took place within these 40 million years. The first clearly recordable explosion of biodiversity on the Earth took place during this period.

The papers presented in this monographic number of *Geologica Acta* are some of the contributions to the VI field trip of the International Subcommittee on Cambrian Stratigraphy (IUGS-UNESCO). The meeting was held during the second week of August 2000 in the San Juan and Salta provinces of northwestern Argentina, and included a field trip to the Cambrian sequences of the Precordillera and Eastern Cordillera geological provinces. Two different scenarios were set for the meeting. These two were the carbonate para-autochthonous-allochthonous sequences of the Precordillera terrane and the typical perigondwanan autochthonous siliciclastic sequences of the Eastern Cordillera. The participants in the field trip were able to have a glimpse at the two very different “Cambrian realities” of Argentina and to compare them with other sequences around the world.

The diffusion of the current knowledge of the Lower Paleozoic successions in the Andean Margin of South America is scarce compared to other regions of the world. Therefore, the contributions to this monographic issue fulfill a major aim, since they represent a varied combination of single case contributions and more synthetic approaches which update, improve and summarize the knowledge of the Cambrian in Argenti-

na, and fit some new pieces into the jigsaw of the Cambrian record.

In this volume, after the preliminary forewords and synthetic contribution of the Chairman and the Secretary of the Subcommittee (J. Shergold and G. Geyer), a first group of three papers provides an updated overview of the knowledge of the Cambrian sequences in Argentina. These papers (by O. Bordonaro, G.F. Aceñolaza, D. Poiré, L. Spalletti and A. del Valle) deal with the overall stratigraphy, palaeobiological record and regional framework of the successions which crop out in the Precordillera, Eastern Cordillera and the Tandilia System.

A second group of contributions in this volume, with twelve additional authors, include nine original papers that focus on different aspects of the Cambrian record around the world and introduce new advances that will help towards a better understanding of the biostratigraphy and chronostratigraphy of the System. The geographical distribution of these contributions is wide but not uniform. Four of the nine papers concentrate on Argentina, three of them give an insight into the Cambrian record of the Iberian Peninsula, and two significant contributions from Scandinavia and China emphasize the importance of the Cambrian record in these regions.

Biostratigraphy, Chronostratigraphy and Sedimentology are the main scope of this second group of papers. F. Tortello analyzes the biostratigraphy of the agnostoid trilobites from the latest Cambrian – earliest Ordovician in

NW Argentina, while M. Beresi deals with the description of an association of Cambrian sponge spicules and chancelloriids from the Argentine Precordillera. S. Esteban provides a comprehensive analysis of the sedimentary processes recorded in the Cambrian – Ordovician mudrocks of the Famatina System of western Argentina, while Aceñolaza and Tortello introduce a new locality with trace fossils of the Precambrian-Cambrian Puncoviscana Formation of northwestern Argentina. R. Gozalo and others give a general overview of the Cambrian System of the Iberian Peninsula and D. García Bellido presents the first occurrence of the demosponge *Leptomitus* in the Middle Cambrian of Spain. To complete this approach to the Cambrian record in the Iberian Peninsula, R. Gozalo and others analyze the occurrence of the genus *Tonkinella* in northern Spain and its palaeobiogeographic implications. Finally, P. Ahlberg presents a clear insight into the Upper Cambrian trilobites of Scandinavia and their intercontinental correlation, while S. Peng gives an overview

of the chronostratigraphic subdivision of the Cambrian in China and proposes some general correlations.

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