

## PREFACE

Among all the geological periods of the Earth's history, the Ordovician displays some of the most striking peculiarities, starting with an almost unique paleogeography, warm climates, high sea levels, the largest tropical shelf area of the Phanerozoic, kilometer-sized asteroid impacts, one of the two most significant biodiversification events on the planet, and the first of the "Big Five" mass extinctions, this one linked to a dramatic sea-level fall caused by the end-Ordovician glaciation.

The Iberian Peninsula comprises the most extensive outcrops of Ordovician rocks in Europe. They are mainly situated within the Iberian Massif and in its eastern extension in the Iberian Cordillera, as part of the Variscan Belt, and also in the Palaeozoic massifs of the Catalanian Coastal Ranges, the Pyrenees and the Betic Cordilleras, which have later been involved in the Alpine tectonic evolution. The celebration of an Ordovician meeting in Spain brings the opportunity to experience first hand the particular rocks and fossils representative of a special high-paleolatitudinal domain related to the southern polar margin of Gondwana, mainly represented by siliciclastic facies and with an interesting tectono-magmatic activity mostly linked with the opening of the Rheic ocean.

The present book, *Ordovician of the World*, is the proceedings volume for the 11<sup>th</sup> Symposium on the Ordovician System, sponsored by the Subcommittee on Ordovician Stratigraphy of the International Union of Geological Sciences. It contains 100 contributions, most of which in the form of short papers, which were delivered as oral presentations or posters in the symposium program. This volume represents a wealth of cutting-edge research on Ordovician rocks from around the world, and accommodate contributions from 228 authors and coauthors from 23 countries of four continents.

The book follows the trend of previous volumes devoted exclusively to the Ordovician. Most of them came after symposia arranged by the Ordovician Subcommittee, such as *The Ordovician System* (Birmingham, 1976), *Aspects of the Ordovician System* (Oslo, 1984), *Advances in Ordovician Geology* (St. John's, Newfoundland, 1988), *Global Perspectives on Ordovician Geology* (Sydney, 1992), *Ordovician Odyssey* (Las Vegas, 1995), *Quo vadis Ordovician?* (Prague, 1999) and *Ordovician of the Andes* (San Juan, Argentina, 2003). Other recent books like *The Great Ordovician Biodiversification Event* (Columbia University Press, 2004) and *The Ordovician Earth System* (The Geological Society of America, 2010) bear witness to a renewed interest for the Ordovician geology.

Starting from the 7<sup>th</sup> ISOS in Nevada, the proceedings volumes for the last five Ordovician symposia were distributed at the time of their respective meetings, and this book is not an exception. But *Ordovician of the World* could not have been ready for the Spanish symposium without the combined efforts of the authors of these high-quality works, the referees of the papers, and of the three editors that are research scientists at the Spanish Geological Survey (IGME, a veteran institution founded back in 1849) and from the Spanish Research Council (CSIC). Acknowledgement is also due to all institutions and private sponsors of the meeting, especially to the Spanish Ministry of Science and Innovation and to the members of the Portuguese Geological Survey, and the Spanish and Portuguese universities that made possible its organization in due time.

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