

This volume will draw the attention of everyone interested in the fascinating diversity of ancient ecosystems such as reefs and shell accumulations in the Palaeozoic, whose difficulty of study rests primarily on its multidisciplinary position crossing numerous geological disciplines. Their facies characterization is, like many other biosedimentary structures, a process that requires the acquisition and integration of a wide and multi-scale diversity of observations, which include field (global geometries), sample (fabrics), and thin-section (textures) scales.

One of the messages of this collection of papers is the wide diversity of sedimentary geometries and facies displayed by Palaeozoic reefs, shell accumulations, and transitional composite deposits. We have touched on some of the major issues at this stage of development in the field: the major climatic, environmental and evolutionary factors that controlled the Palaeozoic development of shell accumulations and reefs.

**Emmanuelle Vennin** is professor at the Université de Bourgogne (France) and is carbonate sedimentologist. She is currently investigating the development of ancient (Ordovician to Miocene) reef deposits in term of geometry, biosedimentary processes, stratigraphy and paleoclimatology.

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**Frédéric Boulvain** graduated from the Brussels and Paris-XI universities, and obtained a Doctorat en Sciences from Brussels after five years research on Frasnian mud mounds. He is now Professor at the University of Liège (Belgium) and Head of the Department of Geology. His main research interests are in sedimentology of Palaeozoic reefs and mounds and use of magnetic susceptibility in sedimentary dynamics reconstructions.

**Axel Munnecke** is assistant professor at the Institute of Palaeontology in Erlangen (Germany), and is currently investigating the development of the Ordovician and Silurian climate by means of analysis of stable C/O-isotopes from brachiopod shells. In addition, he is working on the origin and diagenesis of limestone-marl alternations, and on the development of Palaeozoic calcareous micro- and nanofossils.

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