## **PREFACE**

his volume is a proceeding of intriguing presentations given within the framework of the 15th Hungarian and 3rd Hungarian Croatian Geomathematical Convent hosted by the city of Mórahalom (Hungary) in May 2011.

Geomathematical Convents in Hungary have a long-standing history of roughly 25 years. The year 2007 was a true highlight in this success story, when the Division of Geomathematics of the Croatian Geological Society agreed to organize joint meetings with its Hungarian counterpart for the first time.

The meeting organized during the summer of 2011 hosted 21 oral, 8 poster presentations in four thematical sessions in addition to the 12 student presentations given by members of the IAMG Student Chapter, Szeged. Given time and space constraints, this volume hosts a selection of 13 presentations touching upon various topics ranging from theoretical geostatistics through reservoir modelling and multivariate approaches used in earth science research, as well as the most recent innovations of geoinformatical investigations. Authors listed range from employees of major oil industries of both countries (MOL Hungarian Oil and Gas Public Limited Company and INA Industrija Nafte, Croatia), as well as universities (Loránd Eötvös University of Budapest, University of Szeged, University of Zagreb)

and National Geological Surveys. The studies presented embrace a variety of basic and applied research in geosciences using similarly versatile mathematical methods.

Hopefully, this volume will not only help popularize the use of mathematical, statistical approaches among geoscientists of the region but will promote further fruitful collaboration as well.

Finally, we would like to express our gratitude to those persons and institutes who contributed to the editing and publishing of this work. First of all to all reviewers for their conscientious, selfless help. Angelika Sóla was responsible for all correspondence between the Editorial Board, the publisher and reviewers as well as authors. Her work is kindly acknowledged here. The outstanding presentation of the volume is thanks to the tedious, meticulous work of the publisher GeoLitera Publishing House for which we all are indebted. Finally, the kind financial support of the Institute of Geosciences, University of Szeged and MOL Hungarian Oil and Gas Public Limited Company is also acknowledged.

> János Geiger Elemér Pál-Molnár Tomislav Malvić