FOREWORD

In order to communicate the recent advances in heat-flow studies and to identify important new problems in geothermics, the Geophysical Institute of the Czechoslovak Academy of Sciences called the *Third International Workshop on Terrestrial Heat Flow and Lithosphere Structure*, and convened the meeting at the Castle of Bechyně in South Bohemia from September 2 to September 7, 1991. The meeting was sponsored by the International Heat Flow Commission of the International Association of Seismology and Physics of the Earth Interior. As the third meeting of its kind held in Czechoslovakia, it reflected the benefit of the emerging tradition to meet once in four-five years in a relatively small group, and in the friendly milieu of the castle to discuss new achievements as well as to formulate the needs of further international cooperation. The meeting was attended by sixty scientists from twenty-six countries of the world, and as such represented a sizeable part of the relatively small international heat-flow community.

The major topics of the meeting included the geophysical aspects of geothermal modelling, such as downward extrapolation of near-surface temperatures and their interpretation in terms of crustal and upper-mantle structures, the correlation between heat flow and other geoparameters, case studies, and current reviews of new heat-flow data. In all twenty papers were submitted to the proceedings volume of the workshop which, however, due to the rather limited capacity of the single issue, had to be subdivided into two sets. Eleven selected papers, which address basic problems of contemporary heat-flow studies, will appear as a special issue of Tectonophysics (Vol. XXX), and another nine papers, generally covering the regionally oriented interpretations of heat-flow data, were submitted to Studia geophysica et geodaetica. This volume thus includes eight papers and one more paper will appear in a subsequent issue. Here, the first contribution by F. W. Jones and F. Pascal addresses the measurements of thermal conductivity of rocks. It is followed by contributions on regional aspects of the interpretation of the heat-flow patterns and corresponding geothermal modelling for the territories of Italy (F. Mongelli and G. Zito), former Yugoslavia (M. G. Milivojević), Portugal (M. R. Duque and L. A. Mendes-Victor), Albania (A. Frasheri) and Egypt (E. M. Abdelrahman et al.). The issue concludes with a paper by M. Muñoz and V. M. Hamza on Heat Flow and Temperature Gradients in Chile. Finally, D. Majcin's contribution on Thermal State of the West Carpathians Lithosphere, along with a paper on magneto-telluric deep-crustal study in Portugal (Correia et al.) will be included in the forthcoming issue of Studia geophysica et geodaetica.

The organization of the workshop at Bechyně and the preparation of this volume were projects of the International Heat Flow Commission. The editor is indebted to both former Presidents of the IHFC, to Prof. A. E. Beck and Prof. S. Uyeda, for their continuous support. Sincere thanks are due to many colleagues for their assistance in reviewing the individual contributions. Their comments and suggestions were most helpful in improving this special issue.

Praha, April 1993

Vladimír Čermák Guest Editor