

## Preface

The Fourth International Congress on Computational and Applied Mathematics was held at the University of Leuven (Belgium) on July 23–28, 1990.

The scientific programme consisted of 5 invited talks and 57 talks on contributed papers. The social programme included visits to Brussels, the city hall of Leuven and a local brewery.

Parallel sessions had to be organized on topics such as:

- numerical quadrature and extrapolation,
- methods for solving ordinary, partial, differential and integral equations,
- optimization techniques,
- approximation and interpolation,
- numerical linear algebra,
- methods for finding zeros of functions.

This volume represents the Proceedings of the Congress. It contains the text of 3 invited lectures and of 22 contributed papers. We thank the referees who helped us in doing the editorial work. Their efforts and suggestions made it possible to publish highly qualified scientific papers.

We appreciate the support of the Scientific Committee of the Congress:

O. Axelsson, C.T.H. Baker, C. Brezinski, H. Brunner, H. Bühlmann, L. Collatz, C.W. Cryer, B. Davies, C.W. Gear, C.C. Grosjean, M.H. Gutknecht, A. Hadjidimos, R. Jeltsch, D.K. Kahaner, D.P. Laurie, F.G. Lether, T.-T. Li, T. Lyche, J. Meinguet, M. Mori, J. Olinger, N. Papamichael, L. Reichel, O.G. Ruehr, I.H. Sloan, M.N. Spijker, F. Stummel, A. Sydow, K. Tanabe, L.N. Trefethen, P. Van Dooren, R.-H. Wang, T. Yamamoto.

The Congress was possible thanks to the financial help of our sponsors: NFWO (Belgian National Science Foundation), IBM Belgium, Sabena and Generale Bank.

We also thank the University of Leuven for their hospitality. The administrative help of Barbara Torfs and Margot Peters was very much appreciated.

The support of Ir. F. van Drunen of Elsevier Science Publisher B.V. (North-Holland) and his staff is gratefully acknowledged. Last but not least we wish to express our gratitude to all participants for their contribution and for making the Congress to an interesting and pleasant event. The success of the meeting encourages us to create further possibilities for contact between scientists, to exchange ideas and to report on the results of their work.

*The Directors*

F. Broeckx, M.J. Goovaerts,  
R. Piessens, L. Wuytack.