

Preface

The papers published in this issue are selected from the contributions presented at the conference

Modelling and Optimization of Distributed Parameter Systems with Applications to Engineering

which took place in Warsaw on July 17-21, 1995. It was organized by the Systems Research Institute of the Polish Academy of Sciences within the series of conferences sponsored by the IFIP Working Group WG 7.2 *Computational Techniques in Distributed Systems*, chaired by Irena Lasiecka.

The organizers are indebted to some institutions and individuals for their help in preparations of the conference. It was supported financially by:

- *European Community on Computational Methods in Applied Sciences,*
- *Fundacja Stefana Batorego,*
- *International Mathematical Union,*
- *Telecomunikacja Polska S.A.*

The following scientists took an active part in preparation of the scientific program of the conference, organizing or helping to organize special sessions:

- E. Casas and I. Lasiecka (*Optimization and Optimal Control*),
- M. Mróz (*Mechanical Applications*),
- M. Niezgódka (*Properties of Solutions to PDEs*),
- L. Pandolfi (*Hamilton and Riccati Equation Approaches to Optimization*),
- K. Sobczyk and J. Zabczyk (*Stochastic Systems*),
- J. Sokołowski and J.-P. Zolésio (*Shape Optimization*),
- J. Waśniewski (*Scientific Computation*).

Altogether, 133 scientists from 22 countries participated in the conference. Ten invited plenary lectures and 103 contributed papers have been delivered.

In the reviewing process about a half of the presented papers was selected for publication. A part of them (41 contributions) was included in the book:

Modelling and Optimization of Distributed Parameter Systems

edited by K. Malanowski, Z. Nahorski, and M. Peszyńska and published by Chapman & Hall, London, in 1996. The other part of the set of selected papers is included in this special issue of *Control and Cybernetics*. The present selection consists of papers devoted to inverse problems and optimal control of distributed parameter systems, as well as to mathematical modelling of physical systems, mostly mechanical ones, and their numerical solutions.

The publication of this issue was possible thanks to the financial support of:

- *International Mathematical Union*, and
- *Komitet Badań Naukowych*.

We would like to express our gratitude to both institutions.

B. Łopuch, K. Malanowski, Z. Nahorski

Warszawa, April 1996.

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