EDITORIAL

Within the framework of the activities conducted by the Stefan Banach International Mathematical Center in Warsaw an extended workshop (a "minisemester") was organized on Parameter and Shape Optimization. The minisemester took place in Warsaw between March 8th and April 9th of 1993. It was the first one in the series of minisemesters devoted to control and optimization theory, initiated by Professor Czesław Olech.

This special issue of *Control and Cybernetics* contains papers based on some of the lectures presented during the first part of the minisemester (March 8th to 24th).

The idea od this first part of the minisemester was to present and discuss different aspects of parametric optimization and related topics, as well as their applications in numerical methods.

Altogether 53 one–our lectures were delivered by 23 invited speakers coming from ten countries. The lectures presented both the new results and the state–of–the–art reviews. They concerned mainly the following topics:

- perturbation analysis of finite dimensional mathematical programs,
- perturbation analysis in semi–infinite programming,
- perturbation analysis in optimal control for ordinary differential and partial differential equations,
- problems of well–posedness,
- sufficient optimality conditions for nonlinear optimal control,
- convergence analysis of optimization algorithms exploiting stability and sensitivity results,
- numerical methods in optimal control.

It is hoped that the Readers will find this volume interesting and that it will also constitute a tangible contribution to the domain.

Kazimierz Malanowski
Guest Editor
Systems Research Institute
Polish Academy of Sciences