

INTRODUCTION

The present issue of "Control and Cybernetics" contains some of the papers presented at the 2nd Symposium on "Optimal Design and Control of Structures", organized in Jabłonna, June 4-9, 1990. It was sponsored jointly by the Institute of Fundamental Technological Research, the Systems Research Institute, both of the Polish Academy of Sciences, and the Institute of Automatics of the Warsaw Technical University. The aim of this Symposium was to bring together applied mathematicians interested in control theory of distributed parameter systems and researchers in structure and/or machine mechanics interested in problems of optimal design, sensitivity analysis, and control of structures and mechanical systems. This idea of bringing two research communities together proved successful and will hopefully result in a closer interaction. In fact, the same problems are frequently approached from different viewpoints. For instance, shape optimization problems are vigorously investigated by engineers in order to provide effective numerical tools generating optimal shape design for machine or structure elements. The same class of problems is also of great interest to mathematicians working on boundary control of systems governed by variational equations or inequalities. Active control problems were also discussed at the Symposium. It is planned to organize this type of conference every three years.

Symposium Chairmen and Volume Editors

*Professor Jan Sokołowski
Systems Research Institute*

*Professor Zenon Mróz
Institute of Fundamental
Technological Research*

