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Advances in Smart Technologies in Structural Engineering

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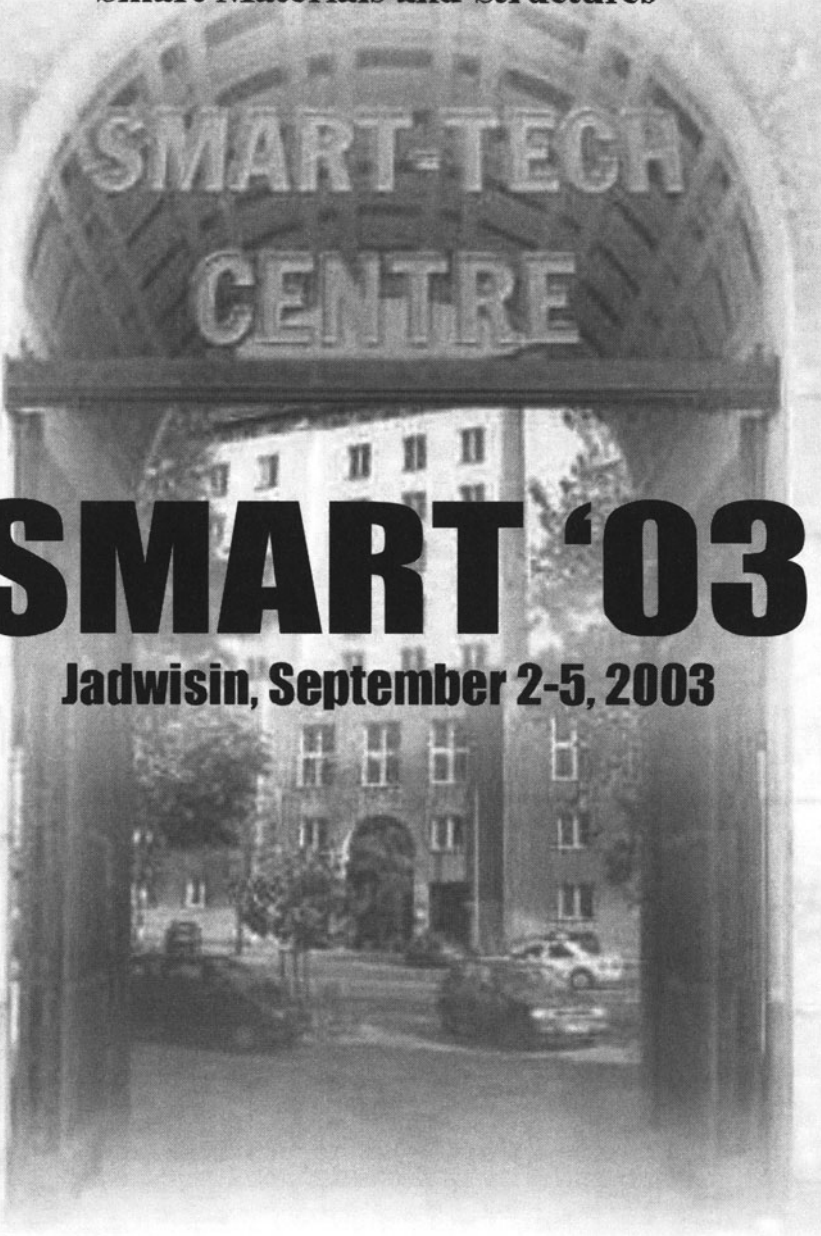
AMAS/ECOMAS/STC Workshop on

Smart Materials and Structures



SMART '03

Jadwisin, September 2-5, 2003

Foreword

This book collects invited lectures presented and discussed on the AMAS & ECCOMAS Workshop/Thematic Conference SMART'03. The SMART'03 Conference on Smart Materials and Structures was held in a 19th century palace in Jadwisin near Warsaw, 2-5 September 2003, Poland .It was organized by the Advanced Materials and Structures (AMAS) Centre of Excellence at the Institute of Fundamental Technological Research (IFTR) in Warsaw, ECCOMAS – European Community on Computational Methods in Applied Sciences and SMART-TECH Centre at IFTR. The idea of the workshop was to bring together and consolidate the community of Smart Materials and Structures in Europe. The workshop was attended by 66 participants from 11 European countries (Austria, Belgium, Finland, France, Germany, Italy, Poland, Portugal, Spain, U.K., Ukraine), 1 participant from Israel and 1 participant from the USA.

The workshop program was grouped into the following major topics:

- 4 sessions on **Structural Control** (18 presentations),
- 3 sessions on **Vibration Controland Dynamics** (14 presentations),
- 2 sessions on **Damage Identification** (10 presentations),
- 2 sessions on **Smart Materials** (9 presentations).

Each session was composed of an invited lecture and some contributed papers. Every paper scheduled in the program was presented, so altogether 51 presentations were given. No sessions were run in parallel. The workshop was attended not only by researchers but also by people closely related to the industry. There were interesting discussions on scientific merits of the presented papers as well as on future development of the field and its possible industrial applications.

Apart from the sessions there was also a one-afternoon exhibition on smart materials and devices prepared by commercial companies working in the field, i.e. LORD Corp. (USA), CEDRAT (France) and by the Wroclaw University of Technology (Poland). Commercial and academic applications of smart materials (magneto-rheological, piezo-electric, magneto-strictive) and software tools relevant for the field were demonstrated.

Jan Holnicki-Szulc
Carlos Mota-Soares
Co-Chairmen

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