

High Performance Structures and Materials II

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High Performance Structures and Materials

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The series encompasses the following topics:

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Design Innovation	Material Technology
Smart Structures	Dynamic Control of Materials
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Preface

The success of the previous conference series on Computer Aided Design in Composite Materials Technology (CADCOMP) that began in 1988, and the evolution of the use of new materials in structural design, led to the launching of a new conference series on High Performance Structures and Materials (HPSM). The first meeting took place in Seville in 2002.

This book contains the edited version of papers presented at the Second International Conference on High Performance Structures and Materials held in Ancona, Italy in June 2004. As can be seen, the use of new, or rather novel, materials and new structural concepts is not restricted to highly technical areas like aerospace, aeronautical applications or the automotive industry, but nowadays also affects fields such as civil engineering and architecture.

The contributions presented during the meeting reflect these new ideas and were grouped in the following sections.

- Composite materials and structures
- Damage and fracture mechanics
- Material characterisation
- Emerging technologies
- High performance materials
- High performance concrete
- Natural fibre composites
- Optimal design
- Structural dynamics
- Structural characterisation

The Editors would like to thank the contributors to this volume for their efforts in being concise but clear and particularly for pointing out that there is a future for innovation even in some of the oldest technologies: building, construction and civil engineering design.

Also our thanks to all the Members of the International Scientific Advisory Committee for reviewing the papers and thus ensuring the high quality standards of the Conference.

The Editors
April 2004

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Special session organised by T. Katayama

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