

Computer Aided Optimum Design of Structures VIII

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EIGHTH INTERNATIONAL CONFERENCE
ON COMPUTER AIDED OPTIMUM DESIGN
OF STRUCTURES

OPTI VIII

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PREFACE

OPTI 2003, the eighth in the series of international conferences devoted to Computer Aided Optimum Design of Structures was held in Dearborn, Michigan, (USA), organised by the University of La Coruña, Spain, the Wessex Institute of Technology, U.K., and the Kettering University, USA. The main aim of the conference was to provide a forum for the interchange of ideas amongst the optimisation community on the advances of these techniques and its applications to many scientific and engineering fields.

This book contains most of the papers presented at OPTI 2003. Following the trend of the previous conferences it can be seen that the amount of practical applications of optimisation methods and the range of engineering topics covered by optimisation is continually widening.

The engineering problems discussed in the papers comprise case studies in mechanical and car engineering, considering static, dynamic analysis and fracture mechanics. Manufacturing and structural protection issues are also presented in several contributions as well as papers in emergent application fields such as biomechanics.

Contributions on numerical methods included gradient based numerical optimisation and search techniques as well as genetic algorithms and the classes of problems solved in structural design such as size, shape and topology optimisation.

The editors would like to express their gratitude to the members of the International Scientific Advisory Committee who reviewed the papers efficiently and promptly. Also, they are indebted to all the contributors and delegates coming from many continents whose presence ensured the success of the Conference.

The Editors
May 2003

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