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IN ENGINEERING

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PREFACE

This book contains most of the papers presented at OPTI 2007, the tenth international conference in the series of scientific and technical meetings dedicated to Optimum Design in Engineering. The conference was held in Myrtle Beach, USA, organised by the Wessex Institute of Technology and the University of La Coruña, Spain.

Previous conferences have been held in Southampton, UK (1989); Boston, USA (1991); Zaragoza, Spain (1993); Miami, USA (1995); Rome, Italy (1997); Orlando, USA (1999); Bologna, Italy (2001); Detroit, USA (2003) and Skiathos, Greece (2005).

Engineering design is greatly enhanced by adding optimisation methods and their influence cannot be over-emphasised. The resulting solutions provide an efficient way of dealing with some of the most difficult challenges in engineering practice today.

The papers published in this book place particular emphasis on computational methods to model, construct and manage new structural solutions and material types. The integration of their design together with optimisation technologies is nowadays evident in all aspects of industry and research.

The papers contained in this book cover a series of topics, namely:

- Algorithmic and topology optimisation
- Shape optimisation
- Applications in construction engineering
- Applications in mechanical and aircraft engineering
- Applications to process optimisation

This volume constitutes a valuable addition to current literature on design optimisation.

The Editors are grateful to all authors for their contributions as well as those members of the International Scientific Advisory Committee who helped to ensure the quality of the material contained in this book.

The Editors
Myrtle Beach, USA
2007

Contents

Section 1: Algorithmic and topology optimisation

Numerical experiences with parallel clusters for generating Pareto surfaces: application in structural topology optimization <i>S. Wuppalapati, A. D. Belegundu, A. Aziz & V. Agarwala</i>	3
Global versus local statement of stress constraints in topology optimization of continuum structures <i>J. Paris, F. Navarrina, I. Colominas & M. Casteleiro</i>	13
Block aggregation of stress constraints in topology optimization of structures <i>J. Paris, F. Navarrina, I. Colominas & M. Casteleiro</i>	25
Design of experiments and optimization of composite structures using solid-shell elements <i>M. Hannachi, H. Naceur, J. L. Batoz & S. Belouettar</i>	35
Evaluation of extended Stochastic Schemata Exploiter <i>T. Maruyama & E. Kita</i>	45

Section 2: Shape optimisation

Shape optimization of composites based on minimum potential energy <i>P. Procházka</i>	57
Optimization of geometry for the lateral buckling process of a cantilever beam <i>R. Drazumeric, F. Kosel & T. Kosel</i>	67
Geometric optimization of shells <i>P. Brož</i>	77

Genetic algorithms and finite element coupling for mechanical optimization
G. Corriveau, R. Guilbault & A. Tahan.....87

Towards the optimization of photoacoustic sensors
B. Kost, B. Baumann, M. Wolff & H. Groninga.....97

Section 3: Applications in construction engineering

MINLP cost optimization of industrial steel building
S. Kravanja & T. Žula.....109

Parametric optimization of steel floor system cost using Evolver
B. S. Platt & P. V. Mtenga119

Selection of optimum structural systems and materials
O. S. Al Shamrani & G. G. Schierle.....129

Threshold accepting optimization of road vaults and rectangular hollow bridge piers
A. Carbonell, F. Martinez, V. Yepes, A. Hospitaler & F. Gonzalez-Vidosa.....141

VTOP – an improved software for design optimization of prestressed concrete beams
S. Hernandez, D. Marcos, A. N. Fontan & J. Diaz.....151

Section 4: Applications in mechanical and aircraft engineering

Optimal design of fatigue loaded heavy-duty machine spring elements
H. Martikka & I. Pöllänen167

Non-parametric shape optimization method for thin-walled structures under strength criterion
M. Shimoda, J. Tsuji & H. Azegami.....179

A study on torsional stiffness of the competition go-kart frame
C.-C. Liang, C.-H. Yu & C.-C. Wu.....189

Active vibration suppression of a flexible link manipulator using piezoelectric actuator
H. Salmasi, R. Fotouhi & P. N. Nikiforuk.....199

Aerodynamic optimization of a biplane configuration using differential evolution <i>R. W. Derksen & A. G. Kraj</i>	209
Design optimization application in accordance with product and process requirements <i>A. Del Prete, D. Mazzotta & A. Anglani</i>	219
 Section 5: Applications to process optimisation	
Evaluation of optimum landfill design: Mid Auchencarroch experimental landfill emissions <i>T. C. Koliopoulos & G. Koliopoulou</i>	231
Optimization of surface utilization using heuristic approaches <i>Y. Langer, M. Bay, Y. Crama, F. Bair, J. D. Caprace & Ph. Rigo</i>	241
 Author Index	251