ADVANCES IN FINITE ELEMENT TECHNOLOGY

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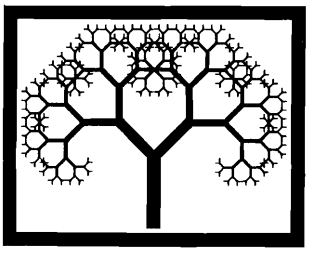
Edited by
B.H.V. Topping



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❖PREFACE❖

This volume contains a selection of papers presented at *The Third International Conference in Computational Structures Technology*, held in Budapest from 21st August-23rd August 1996. The papers in this volume include the following topics: Mesh Generation and Geometric Representation; Adaptivity and Error Estimators; Element Technology; Finite Element Analysis of Plate and Shell Structures; Solution of Large Scale Problems; Finite Element Modelling of Geotechnical and Geomechanic Problems; Materials Modelling; Finite Element Studies for Analysis, Design and Maintenance; and Visualisation of the Finite Element Method. Other papers from the conference are published in:

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- Advances in Optimization for Structural Engineering
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I should like to thank all the authors for their contributions and in particular those who presented their papers in Budapest. I must also thank the members of the Conference Editorial Board who helped in many ways before and during the conference. The members of the Editorial Board for Computational Structures Technology Conference 1996, were: Professor H. Adeli, USA, Professor N. Akkas, Turkey, Professor E. Alarcon, Spain, Professor J. Argyris, Germany, Professor O. Axelsson, The Netherlands, Professor K.J. Bathe, USA, Dr L. Berke, USA, Professor H.J.C. Barbosa, Brazil, Professor J.W. Baugh, USA, Professor T. Belytschko, USA, Professor P.G. Bergan, Norway, Professor D. Beskos, Greece, Professor P. Bettes, UK, Professor N. Bicanic, UK, Professor R.I. Borja, USA, Professor F. Brezzi, Italy, Dr John W. Bull, UK, Professor C. Cinquini, Italy, Dr. A.H.C. Chan, UK, Professor I. St Doltsinis, Germany, Professor I.S. Duff, UK and France, Dr L. Dunai, Hungary, Professor A. Eriksson, Sweden, Professor D. Frangopol, USA, Professor J.A. Teixeira de Freitas, Portugal, Professor F. Frey, Switzerland, Professor R. Fruchter, USA, Professor M.B. Fuchs, Israel, Professor G. Gambolati, Italy, Professor M. Geradin, Belgium, Professor D.E. Grierson, Canada, Professor D. Hartmann, Germany, Professor P. Hajela, USA, Professor E. Hinton, UK, Professor M.A. Hogge, Belgium, Professor T.J.R. Hughes, USA, Professor M. Ivanyi, Hungary, Professor W.M. Jenkins, UK, Dr P.K. Jimack, UK, Professor S. Kaliszky, Hungary, Professor D.I. Karabalis, USA, Professor A. Kaveh, Iran, T. Kenny, UK, Dr A.I. Khan, Australia, Professor N. Kikuchi, USA, Professor U. Kirsch, Israel, Professor Dr M. Kleiber, Poland, Professor V.K. Koumousis, Greece, Professor W.B. Kratzig, Germany, Professor P. Ladeveze, France, Professor K.L. Lawrence, USA, Dr. S.H. Lee, USA, Professor P. Leger, Canada, Professor A.Y.T. Leung, Hong Kong, Dr. R. Levy, Israel, Professor A. Liolios, Greece, Professor W.K. Liu, USA, J. Mackerle, Sweden, Professor G. Maier, Italy, Professor J. Mandel, USA, Professor H.A. Mang, Austria, Professor I.M. May, UK, Dr J.J. McKeown, UK, Professor J.L. Meek, Australia, Dr H.P. Mlejnek, Germany, Professor G. Molnarka, Hungary, Professor C.A. Mota Soares, Portugal, Dr D.T. Nguyen, USA, Professor A. K. Noor, USA, Professor R. Ohayon, France, Professor E. Onate, Spain, Dr K. Orsborn, Sweden, Professor D.R.J. Owen, UK, Professor M. Papadrakakis, Greece, Professor P.Y. Papalambros, USA, Professor K.C. Park, USA, Professor D. Parsons, USA, Dr. M.N. Pavlovic, UK, Professor M.S. Pereira, Portugal, Dr V.K. Peshkam, UK, Professor E. Ramm, Germany, Professor F. Rammerstorfer, Austria, Professor G. De Roeck, Belgium, Professor A. Samartin, Spain, Professor B. Schrefler, Italy, Professor K. Sweitzerhof, Germany, Dr. G.M. Seed, UK, Professor N. Schiraishi, Japan, Dr. H.D. Simon, USA, Professor G.S. Springer, USA, Dr. I. Sobieski, USA, Professor K.S. Surana, USA, Professor C.A. Syrmakezis, Greece, Professor B.A. Szabo, USA, Professor R. Szilard, USA, Professor G Thierauf, Germany, Dr G. Turvey, UK, Professor Y. Ueda, Japan, Dr G. Vanderplaats, USA, Dr V.B. Venkayya, USA, Professor K.S. Virdi, UK, Professor Z. Waszczyszyn, Poland, Professor N.P. Weatherill, UK, Professor N-E Wiberg, Sweden, Professor J.P. Wolf, Switzerland, Professor W. Wunderlich, Germany, Professor Yong Bin Yang, Taiwan, and Dr. Th. Zimmermann, Switzerland.

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