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Preface

This book contains the edited papers presented at the Third International Conference on High Performance Structures and Materials, held in Ostende, Belgium in 2006.

The Conference was dedicated to honouring the distinguished career of Professor Patrick De Wilde, from the Free University of Brussels, Belgium, on the occasion of his retirement.

The Conference addressed issues involving advanced types of structures, particularly those based on new concepts or new types of materials. This responds to the need to develop a generation of new materials that are suitable for high performance structures which can easily resist a wide range of external stimuli and react in a non-conventional manner.

Professor De Wilde, whose achievements are summarised in the following pages, was the originator and driving force behind this Conference series since it started.

The Editor
Ostende, 2006

Dedication

Professor W. Patrick De Wilde



This book is in homage to the long and distinguished career of my friend and colleague Professor Patrick De Wilde from the Vrije Universiteit Brussel (VUB).

I was fortunate enough to meet Patrick for the first time many years ago when we were both young researchers. This was on the occasion of the Seminar on Finite Elements that I organised in Southampton in 1970. He was then a Research Assistant at the Department of Applied Continuum Mechanics of VUB and I had just been appointed a lecturer at the Department of Civil Engineering at the

University of Southampton. Since then we kept in constant contact and this led me to a better appreciation of his outstanding scientific career and the depth of his knowledge and imagination. Patrick always brought a new and fresh perspective to the most challenging engineering and scientific problems.

His academic career has been centred at VUB where he obtained his PhD in Applied Sciences in 1976, rising from lecturer to Head of the Laboratory of Structural Analysis and to full Professor in 1984. He also served with distinction as Chairman of the Research Council and Vice Rector of VUB, and is now about to retire from the position of Head of the Department of Mechanics of Materials and Constructions.

Patrick has always been characteristically generous with his knowledge, lecturing part time at many institutions in Belgium and abroad. An appointment that reflects his range of interests was as a Professor at the Higher Institute of Architecture Victor Horta, the link between architecture and engineering being always close to his heart. He also contributed substantially to the enhancement of training and research capabilities in South American and African countries to mention but a few of his international activities.

Always prepared to share his time, he headed up and motivated several generations of young researchers at VUB as well as contributing to the development of many institutions around the world, including our own Wessex Institute of Technology where he has served on the Board of Directors since its beginning.

Patrick's written contributions comprise many papers in learned journals and conference meetings in the field of Computer Aided Engineering, finite element methods; composite materials, mechanics of materials and structures. He has participated in many scientific committees and in the advisory board of different publications and international conferences. He is permanent Co-chairman of the international conference on High Performance Materials and Structures as well as one of the most active members of the Scientific Committee of the Conference on Structural Repairs and Maintenance of Historical Buildings.

In spite of his substantial research activities he has not neglected to collaborate with industrial partners and as a result has carried out consulting work for different companies and is currently Chairman of the Technical Board of SECO (Civil Engineering Certification Company).

It has been a privilege for me as well as for many other colleagues around the world to be associated with Patrick all the years he has been working at VUB. Soon his teaching days will be over and we hope this will herald the beginning of a new period for him: concentrating on unfinished research and original work which was interrupted by the demands of university duties.

Carlos A. Brebbia
The New Forest, 2006

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