

# PROCEEDINGS M2D'2006

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**5<sup>th</sup> INTERNATIONAL CONFERENCE ON  
MECHANICS AND MATERIALS IN DESIGN**

Faculty of Engineering, University of Porto  
Portugal, 24-26 July 2006

**Edited by**

**J.F. Silva Gomes & Shaker A. Meguid**

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PORTO-PORTUGAL, 24-26 JULY 2006

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Co-Chairs:  
J.F. Silva Gomes  
Shaker A. Meguid

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# INTRODUCTION

**5th International Conference on Mechanics and Materials in Design**  
**Faculty of Engineering, University of Porto**  
**24-26 July 2006**

**M<sup>2</sup>D'2006** is the fifth international gathering of scientists and engineers interested in the fields of engineering mechanics, design and materials engineering planned for July 24-26, 2006 in the beautiful city of Porto, Portugal. This is a well-established meeting with followers from some 36 nations.

The first conference of this series was held in Toronto in 1996 and attracted over 150 delegates. The second was organized by Professors J.B. Hull and R. Gentle in Nottingham in 1998. The third was organized by Professor S.A. Meguid in Orlando in 2000. The fourth was organized by Dr. T. Mori and Professor H. Fujii in Nagoya, Japan in June 2002. These meetings resulted from the belief that of those disciplines associated with advanced product design and manufacture, engineering mechanics and materials engineering have made the most significant advance in recent years. Important and dramatic improvements in component design can be made by the use of the latest advances in mechanics and materials. Indeed, as a result of the activities in these three important fields: Mechanics, Materials and Design, the International Journal of Mechanics and Materials in Design was established in 2004. With Professor J.F. Silva Gomes being an important member of the Editorial Board and Professor Shaker A. Meguid being its Editor-in-Chief.

It is with this in mind that the *Fifth International Conference on Mechanics and Materials in Design* is organized. The purpose is to bring together scientists and engineers from the mechanics and materials communities to present their latest results and discuss new advances over a broad range of topics dealing with analytical, numerical and experimental techniques in mechanics and advances in materials' technology as well as case studies. We have done our best to provide the delegates with an environment conducive to exchange of knowledge, networking and making new friends.

We take this to thank our colleagues who contributed considerably to the event by organizing topical symposia and by helping us to launch this important meeting. We are truly grateful for their efforts. We also wish our overseas friends to have a great time in Portugal. We wish you all a happy and successful stay in Porto.

Faculty of Engineering, University of Porto, July 2006.

*Shaker A. Meguid*  
*J.F. Silva Gomes*

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5th International Conference on Mechanics and Materials in Design

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