

# PREFACE

This volume constitutes the proceedings of the eighth in a series of biennial international conferences on Damage Assessment of Structures (DAMAS 2009). The primary aim of the conference is to bring together the expertise of scientists and engineers in academia and industry in the field of damage assessment, structural health monitoring (SHM) and non-destructive evaluation (NDE) and to exchange information with a particular emphasis on scientific and technical development. The themes of the conference reflect current interests in a wider field of damage assessment. It is interesting to observe the rise in popularity of system diagnostics and prognosis, reflected by the increasing number of papers in this area. A significant proportion of the conference is dedicated to damage assessment and condition monitoring.

The DAMAS series of conferences is now established as a major forum for discussion and dissemination of recent advances in damage detection, assessment and quantification, following the seven previous conferences in Pescara (1995), Sheffield (1997), Dublin (1999), Cardiff (2001), Southampton (2003), Gdansk (2005) and Torino(2007).

The proceedings covers activities relevant to damage assessment of engineering structures and systems including signal processing of sensor measurement and analytical techniques as well as experimental case studies. The conference themes are as follows:

- Damage location and quantification
- Developments in signal processing and algorithms
- Damage assessment
- Condition monitoring
- System diagnostics and prognosis
- Damage mechanisms
- Fatigue damage
- Structural integrity and damage assessment
- Advanced methods of NDT

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