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## Editorial

This volume contains the proceedings of the 12<sup>th</sup> International Conference on Damage Assessment of Structures, DAMAS 2017, Kitakyushu, Japan, 10-12, July 2017. DAMAS has a long history of almost 22 years. The first DAMAS conference took place in 1995 (Pescara, Italy), followed by a biannual meeting in 1997 (Sheffield, UK), 1999 (Dublin, Ireland), 2001 (Cardiff, UK), 2003 (Southampton, UK), 2005 (Gdansk, Poland), 2007 (Torino, Italy), 2009 (Beijing, China), 2011 (Oxford, UK), 2013 (Dublin, Ireland) and 2015 (Ghent, Belgium). The twelfth edition of DAMAS conference series, DAMAS 2017, is hosted by Kyushu Institute of Technology, Japan, and is held at in the West Japan Industry and Trade Convention Association, located in the town centre of Kitakyushu city.

The conference is established as a major international forum for research topics relevant to damage assessment of engineering structures and systems including numerical simulations, signal processing of sensor measurements and theoretical techniques as well as experimental case studies. The presentations of DAMAS 2017 are divided into 4 main sessions, namely 1) Structural Health and Condition Monitoring, 2) Damage in Civil Engineering, 3) Damage in Machineries and 4) Damage in Composite Materials.

The organising committee is grateful to keynote speakers; Prof Kunitomo Sugiura, Department of Civil and Earth Resources Engineering, Kyoto University, Japan, for his keynote lecture entitled 'Damage Assessment of Orthotropic Steel Bridge Decks', Prof Kikuo Kishimoto, Department of Transdisciplinary Science and Engineering, School of Environment and Society, Tokyo Institute of Technology, Japan, for his keynote lecture entitled 'Interfacial Mechanics for Multi-Material Structures' and Prof Stéphane Bordas, Faculté des Sciences, de la Technologie et de la Communication, Université du Luxembourg, for his keynote lecture entitled 'Multi-scale fracture simulations: model and discretisation error control'.

Special thanks go to members of the Scientific Committee of DAMAS 2017 for reviewing the articles published in this volume and for judging their scientific merits. Based on the comments of reviewers and the scientific merits of the submitted manuscripts, the articles were accepted for publication in the conference proceedings and for presentation at the conference venue. The accepted papers are of a very high scientific quality and contribute to advancement of knowledge in all research topics relevant to DAMAS conference.

Finally, the organising committee would like to thank all authors, who have contributed to this volume and presented their research work at DAMAS 2017.

## **Professor Magd Abdel Wahab**

Chairman of DAMAS 2017