

## 6th International Conference on Fracture Fatigue and Wear

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# Proceedings of 6th International Conference on Fracture Fatigue and Wear FFW 2017, Porto, Portugal, 26-27 July 2017

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## **Editorial**

This volume contains the proceedings of the 6<sup>th</sup> International Conference on Fracture Fatigue and Wear FFW 2017, Porto, Portugal, 26-27 July 2017. Fracture Fatigue and Wear 2017 is the 6<sup>th</sup> FFW conference. Previous conferences were celebrated in Jinan (China, 2010), Kitakyushu (Japan, 2013), Kitakyushu (Japan, 2014), Gent (Belgium, 2015) and Kitakyushu (Japan, 2016).

The sixth international conference on Fracture, Fatigue and Wear will be held in the city of Porto, Portugal. The overall objective of the conference is to bring together international scientists and engineers in academia and industry in fields related to Fracture Mechanics, Fatigue of Materials, Tribology and Wear of Materials. The conference covers industrial engineering applications of the above topics including theoretical and analytical methods, numerical simulations and experimental techniques. One of the aims of conference is to promote cooperation between international scientists and engineers from a large number of disciplines, who are involved in research related to Fracture, Fatigue and Wear. The presentations of FFW 2017 are divided into 3 main sessions, namely 1) Fracture, 2) Fatigue and 3) Wear.

The organising committee is grateful to keynote speakers; Professor Hong Liang, Mechanical Engineering, Texas A & M University, for her keynote lecture entitled ‘Direct and in situ Observation of Initiation of Wear ‘ and Professor Xudong Qian, Department of Civil and Environmental Engineering, National University of Singapore, for his keynote lecture entitled ‘Ductile Fracture Assessment and Representation in Large-Scale Structures’.

Special thanks go to members of the Scientific Committee of FFW 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 FFW conference.

Finally, the organising committee would like to thank all authors, who have contributed to this volume and presented their research work at the conference venue in Porto.

## **Professor Magd Abdel Wahab**

Chairman of FFW 2017