

Preface

This is the 18th volume including the proceedings of the series of the International Conference on Fracture and Damage Mechanics (FDM). The volume is a collection of edited papers presented at the 18th International Conference on Fracture and Damage Mechanics (FDM 2019), held in Rodos Palace Hotel, Rhodes, Greece.

Previous meetings were held in London, UK(1999), Milan, Italy (2001), Paderborn, Germany (2003), Mallorca, Spain (2005), Harbin, China (2006), Madeira, Portugal (2007), Seoul, Korea (2008), St. Julian's Bay, Malta (2009), Nagasaki, Japan (2010), Dubrovnik, Croatia (2011), Xian, China (2012), Sardinia, Italy (2013), Azores, Portugal (2014), Budva, Montenegro (2015), Alicante, Spain (2016), Florence, Italy (2017) and Seville, Spain (2018).

The success of the FDM conference series has established it as a key event in the area. FDM2019 provides a forum to promote and exchange latest theoretical, computation and experimental research works on fracture, damage mechanics, structural integrity and durability. The high quality of presented papers from internationally acknowledged experts in the field has established the publication of a dedicated peer reviewed proceedings volume.

The papers presented in this volume cover a wide range of topics, related to Fracture and Damage Mechanics. Studies on Failure analysis, Fracture Mechanics, Composites, Micromechanics, Multiscale Modelling as well as Probabilistic Aspects, Computer Modelling Methods and Non-linear problems are presented for a wide range of structural materials, both monolithic and composite. Studies include Fatigue, Corrosion, Creep, Dynamic Fracture and Durability together with Damage Tolerance aspects. Selected Papers on Multiscale and multifunctional composites have been presented together with works on Structural Health monitoring, Remaining Life assessment methodologies and predictive modelling.

The work of the reviewers who guaranteed the high scientific level of this edited volume is also greatly acknowledged.

Finally, the Editors would like to thank the members of the Steering Committee and International Scientific Committee for their help and support that were essential to the success of the conference.

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A.S. Paipetis and Ferri Aliabadi

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Professor A. S. Paipetis
Dept. of Materials Science & Engineering
University of Ioannina
45110 Ioannina, Greece
paipetis@cc.uoi.gr

Professor Ferri Aliabadi
Department of Aeronautics
Imperial College, London
Prince Consort Road, South Kensington
London, SW7 2BY
M.H.Aliabadi@imperial.ac.uk

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