



Engineering Integrity Society Fatigue 2020

Downing College, Cambridge, UK 29 June - 1 July 2020





















Rolls Royce PLC is pleased to support the Fatigue 2020 conférence



Fatigue 2020

As engineering modelling and simulation tools become ever more powerful and sophisticated there still remains the challenge of correlating the virtual world with both idealised laboratory testing and the wide, and potentially unexpected, range of service conditions experienced by machines and structures. These challenges are compounded by the advent of new materials, new ways of manufacturing components, new applications and new test and measurement techniques.

At Fatigue 2020 we will seek to explore not only the latest developments in engineering modelling and simulation, advances in test and measurement techniques, innovations in manufacturing, and developments in materials science, but also the complex interrelations between all these topics that give rise to improvements in fatigue performance, durability and structural integrity.



Scientific Topics

Topics covered during the conference will include: basic science of fatigue, advanced manufacturing, high performance materials, multiaxiality, thermomechanical response, corrosive environments, notches, welds and joints, designing against failure and tools for structural integrity assessment. Presentations will include innovative modelling and simulation, new experimental techniques and novel assessment methods.

Programme

The full programme will be published on www.fatigue2020.com as soon as it becomes available.

Venue

The conference will take place at Downing College, University of Cambridge. Cambridge is one of the most important and picturesque cities in East Anglia. It is the county town of Cambridgeshire and the seat of one of the oldest universities in the British Isles.

Downing College was founded in 1800 through a bequest made by Sir George Downing. The College's beautiful neo-classical buildings are set in spacious and peaceful gardens in the centre of Cambridge.

Exhibition

There will be an accompanying exhibition of material testing systems, durability software tools and engineering services where delegates will have the opportunity to discuss the latest developments in the field of fatigue and durability.

Timelines

11 October 2019 Submission of full papers and registration including payment (conditional for publication of paper)

January 2020 Publication of final programme

1 June 2020 Submission of PowerPoint presentations

29 June - 1 July 2020, Fatigue 2020, Cambridge, UK



A Special Issue of extended papers selected from the conference will be published in the international peer reviewed journal Fatigue and Fracture of Engineering Materials and Structures.

A further collection of extended papers will be published in Frattura ed Integrità Strutturale (Fracture and Structural Integrity).

A selection of conference papers, including those of the Peter Watson Prize winners, will be published in Engineering Integrity, the Journal of the EIS. Fatigue and Fracture of Engineering Materials and Structures, Frattura ed Integrità Strutturale and Engineering Integrity are all fully abstracted and indexed journals.

Proceedings

The proceedings will be published in CD-ROM format and will be available at the conference.

Accommodation

En-suite accommodation is available at Downing College subject to availability. Please select the accommodation option on the booking form. Prices include bed and breakfast.

Travelling Information

The nearest airports are Stansted and Luton. Cambridge is easily reached by train. Downing College is located about ¾ mile from the railway station and is served by regular buses and taxis.

Liability

EIS as organiser is not liable for any changes in the programme due to circumstances beyond their control. The organisers are not liable for any losses, accidents or injuries to persons or damage to property of any kind. Participants must arrange their own insurance if considered necessary.

Visa

Visa applications must be applied for in your country of origin.

Registration

The booking form should be completed and emailed to the conference secretariat, Sara Atkin: info@e-i-s.org.uk

Registration for the conference is mandatory for the presentation of a lecture and the publication of the manuscript in the proceedings.

All payments must be made in Sterling by bank transfer or a cheque drawn on a UK bank account.

Convenor John Yates (UK)

International Scientific Committee

André Galtier (France)

Andrea Carpinteri (Italy)

Martin Bache (UK)

Christophe Pinna (UK)

Filippo Berto (Norway)

Francesco Iacoviello (Italy)

Hossein Farrahi (Iran)

Youshi Hong (China)

Jie Tong (UK)

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Luca Susmel (UK)

Liviu Marsavina - (Romania)

Marc Geers (The Netherlands)

Matteo Luca Facchinetti (France)

Muhsin J Jweeg (Iraq)

Alfredo Navarro (Spain)

Phil Irving (UK)

Robert Akid (UK)

Michael Sangid (USA)

Shahrum Abdullah (Malaysia)

Thierry Palin-Luc (France)

Yee Han Tai (UK)

Keynote Lectures

Professor Roderick Smith - Imperial College, London

Professor Robert Ritchie - University of California Dr. Tommaso Ghidini - European Space Agency Professor Youshi Hong - Chinese Academy of Sciences

Conference Dinner Address

Dame Julia King, The Baroness Brown of Cambridge DBE FREng FRS





Registration Fees

| | 3 Day | 2 Day | 1 Day |
|--|---------------|--------------|--------------|
| Presenting Authors (Registration and payment by 11 October 2019) | £465 +VAT | - | - |
| EIS Members (Registration and payment by 20 December 2019) | £515 + VAT | £390 +VAT | £215 +VAT |
| Non-Members and Registrations and payments after 20 December 2019 | £620 +VAT | £500 +VAT | £260 +VAT |
| Students and Retired Members (limited places available) | £330 +VAT | - | - |

Please find all the latest information relating to the conference and details of how to book your place on the Fatigue 2020 website.

www.fatigue2020.com

We look forward to welcoming you to Cambridge.

Registered Address: Engineering Integrity Society, c/o Hollis & Co., 35 Wilkinson Street, Sheffield, S10 2GB

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