Annual International Workshop on Dynamic Behaviour of Structures and Materials, Interaction and Friction Across the Strain Rates 2015

PETER 2015

26–28 August 2015

Institute of Physics, London, UK

Organised by the IOP Shockwaves and Extreme Conditions Group

http://peter2015.iopconfs.org

The goal of this workshop is to present and discuss different modelling approaches in the field of the dynamic behaviour of materials and structures. An important objective is to consider original analytical models that are suitable for Finite Element codes to simulate dynamic engineering applications and original experiments, allowing for a better understanding. This is the first common annual international workshop organised since 2007. Selected papers will be published in Engineering Transactions journal.

This conference is part of the PETER (Pressure, Energy, Temperature and Extreme Rates) conference series. It is jointly organised and cochained by the Shock Waves and Extreme Conditions (SWEC) group of the Institute of Physics and the National Engineering School of Metz (ENIM).

Themes

The workshop will cover both theoretical modelling of the mechanical behaviour of materials and structures under dynamic loading and all aspects related to friction and contact. There will be eight main themes:

- constitutive relations and modelling,
- numerical simulations,
- perforation and impact,
- crashworthiness,
- experiments and inverse methods,
- friction and interaction,
- surface and contact,
- shock and blast loading.

International scientific committee

- Professor A. Rusinek (National Engineering School of Metz ENIM) Chairman,
- Professor P. Lipinski (National Engineering School of Metz ENIM),
- Professor Z. Azari (National Engineering School of Metz ENIM),
- Professor R. Zaera (UC3M, Madrid),
- Dr A. Arias (UC3M, Madrid),
- Professor H. MIGUELEZ (UC3M, Madrid),
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- Professor A. GLEMA (PUT, Poznan),
- Dr W. KAKOL (PUT, Poznan),
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- Dr W. Sumelka (PUT, Poznan),
- Professor R.B. PECHERSKI (IPPT, Warsaw),
- Dr Z. Nowak (IPPT, Warsaw),
- Dr B. Wang (University of Brunel),
- Professor R. Vignjevic (Brunel University, Brunel),
- Dr W. Proud (Imperial College London) Chairman,
- Dr D. Eakins (Imperial College London),
- Professor S. Mercier (Lorraine University, Metz),
- Professor G. Sutter (Lorraine University, Metz),
- Dr C. Czarnota (Lorraine University, Metz),
- Dr G. List (Lorraine University, Metz),
- Professor E. Markiewicz (Valenciennes University, Valenciennes),
- Professor H. Zhao (LMT, Cachan),
- Professor P. Verleysen (Ghent University, Ghent),
- Professor N. Bahlouli (Icube Strasbourg University, Strasbourg),
- Professor G. Voyiadjis (Louisiana State University, Baton Rouge),
- Dr M. Nishida (Nagoya Institute of Technology, Nagoya),
- Professor D. RITTEL (Technion, Haifa),
- Dr T. FRAS (ISL, Saint Louis),
- Dr B. RECK (ISL, Saint Louis),
- Dr E. LACH (ISL, Saint Louis),
- Dr R. Othman (King Abdulaziz University, Saudi Arabia),
- Professor G. Lu (Swinburne University, Melbourne),
- Dr W. Zhong (China Academy of Engineering Physics, Mianyang),
- Dr R. Kubler (Arts et Metiers Paristech, Aix en Provence).

Local organising committee (SWEC)

- Dr William Proud (Institute of Shock Physics, Imperial College London),
- Dr Katherine Brown (Cavendish Laboratory, University of Cambridge),
- Glenn Whiteman (AWE, Aldermaston),
- Dr Nadia Karim-Abdul (University College London).

Key dates

Abstract submission deadline* 5 June 2015 Early registration deadline 10 July 2015 Registration deadline 14 August 2015

Call for abstracts

Abstracts describing current research in the conference areas will be welcome. Presentation will be oral only. Each author is invited to submit an abstract online. The abstract must be in English. Abstracts should be two A4 pages in length including all reference and figures, and in 11-point font.

Early career researcher

If you are a PhD student, a postdoc of less than three years experience or working in industry for less than five years, you will qualify as an early career researcher. This means that you will receive support and feedback on your presentation by experienced researchers in your area via sessions arranged for you. This is linked to ongoing professional skills development conducted by IOP.

Travel and accommodation

The workshop will be held at the Institute of Physics, 76 Portland Place, London, UK. There are a number of hotels located in this area. The Institute has a number of agreements with local hotels and details can be found at

http://peter2015.iopconfs.org.

The Institute of Physics is located within walking distance of several underground tube stations connecting major lines including Bakerloo, Victoria, Circle and District providing good transport links to the rest of London. The closest stations are Regents Park and Great Portland Street, which are approximately five minutes walk away. London is easily accessible via train or air. More information regarding travel can be found at http://peter2015.iopconfs.org.

Further information

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Co-sponsors













^{*} Authors can submit abstracts and receive confirmation of their abstract status within 10 working days of submission.