

Young Researchers' Conference 2014 - Programme

- 09.30 Registration and coffee
- 10.00 Welcome by Martin Powell – Chief Executive of The Institution of Structural Engineers
- 10.10 Membership matters
- 10.20 Keynote address by Professor Molly Stevens – Imperial College London
- 10.50 Chairman's introduction
- 11.00 **Session 1**
- 11.00 Combined predictive structural finite element and musculoskeletal modelling of bone structure for study of fracture under solid blast conditions (Abstract No. 42)
Claire Villette – Imperial College London
- 11.15 Origami thin-walled beams and arches for energy absorption (Abstract No. 24)
Yang Li – University of Oxford
- 11.30 Discussion
- 11.40 Coffee
- 12.00 **Session 2**
- 12.00 Long term performance of CFRP tendons in pretensioned structures (Abstract No. 41)
Eleni Toumpanaki – University of Cambridge
- 12.15 Lifetime extension of reinforced concrete slab-on-beam structures (Abstract No. 15)
Monika Grusova – University of Bath
- 12.30 Crack control in base-restrained reinforced concrete walls (Abstract No. 29)
Marianna Micallef – Imperial College London
- 12.45 Discussion
- 13.00 Lunch
- 13.40 Poster session
- 14.15 **Session 3**
- 14.15 Preliminary performance-based seismic design of buildings equipped with structural fuses (Abstract No. 16)
Hector Guerrero-Bobadilla – University of Manchester
- 14.30 Self-centering steel frames with web hourglass shaped pins using fuse-post tensioned bars and viscous dampers (Abstract No. 9)
Athanasios Dimopoulos – University of Warwick
- 14.45 Behaviour of a cold-formed steel portal frame in fire: full scale testing and finite element analysis (Abstract No. 19)
Ross Johnston – Queen's University Belfast
- 15.00 Bi-treated glass: double treatment process for enhanced performance (Abstract No. 45)
Marco Zaccaria – University of Cambridge
- 15.15 Discussion
- 15.35 Tea & judging
- 16:00 Prize giving & closing remarks
- 16:30 Close

Poster presentations

Aeroelastic control of long-span suspension bridges (Abstract No. 4)
Konstantinos Bakis – University of Oxford

Fire performance of cold-formed steel sections (Abstract No. 5)
Shanshan Cheng – University of Plymouth

The synergistic response of structures to thermal and blast loading (Abstract No. 6)
Laurence Clough – University of Southampton

Behaviour of steel pipes under high mass low velocity impacts (Abstract No. 11)
Shamsoon Fareed – Heriot-Watt University

Shear strengthening of reinforced concrete slab-on-beam structures using externally bonded FRP fabrics (Abstract No. 13)
Robert Foster – University of Cambridge

Design and construction of long-span prestressed tubular steel structures (Abstract No. 14)
Jonathan Gosaye Fida Kaba – Imperial College London

Demystifying the compressive ring in slabs under fire (Abstract No. 22)
Payam Khazaeinejad – University of Edinburgh

Dynamic response of steel-concrete composite under-deck cable-stayed bridges under the action of moving loads (Abstract No. 25)
Fernando Madrazo-Aguirre – Imperial College London

Bending behaviour of column face for concrete filled hollow sections (Abstract No. 26)
Mohammed Mahmood – University of Nottingham

Post-tensioning of timber beams with basalt fibre reinforced polymer (Abstract No. 28)
Emma McConnell – Queen's University Belfast

Damage identification method of bridge structures based on finite element model updating (Abstract No. 32)
Jie Niu – University of Exeter

The effect of prestress force magnitude on the natural bending frequencies of prestressed concrete structures (Abstract No. 33)
Darragh Noble – Trinity College Dublin

Numerical modelling of prestressed concrete I-girders strengthened in shear with EB CFRP (Abstract No. 35)
Michael Qapo – University of Birmingham

Shear panel components in the vicinity of beam-column connections in fire (Abstract No. 36)
Guan Quan – University of Sheffield

Strengthening of two-way reinforced concrete slabs using CFRP materials (Abstract No. 38)
Mahmood Tavallaee – Kingston University

Enhancement of reinforced concrete frame infill using collar jointed masonry (Abstract No. 43)
Chuanlin Wang – University of Leeds