ECCOMAS Thematic Conference

CMCS 2019 is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS). For further information on ECCOMAS visit the website www.eccomas.org

Conference Venue

The conference will be held in the Senate Room at the University of Glasgow, situated in the vibrant West End of the city. The West End contains numerous historic attractions, award-winning food and drink, and is well connected to the transport network.

Registration Fees

A reduction applies for early registration by 31st March 2019 :

	Early	Late
Invited oral presentation by distinguished lecturer	£435	£480
Contributed poster presentation by young investigator	n/a	£390

The registration fee includes: welcome reception, conference banquet and refreshments.

Contact Information

E-mail: cmcs2019@glasgow.ac.uk

Web: www.gla.ac.uk/research/az/gcec/cmcs2019

University of Glasgow

TU/e Technische Universiteit Eindhoven University of Technology

FAU FRIEDRICH-ALEXANDER UNIVERSITÄT ERLANGEN-NÜRNBERG

UPEM UNIVERSITÉ PARIS-EST MARNE-LA-VALLÉE

ECCOMAS Thematic Conference

CMCS 2019

Computational Modeling of Complex Materials across the Scales

1-4 October 2019, Glasgow, UK

www.gla.ac.uk/research/az/gcec/cmcs2019

Objectives

The international ECCOMAS Thematic Conference "Computational Modeling of Complex Materials across the Scales (CMCS)" will take place on 1-4 October 2019 in Glasgow, UK.

The objective of CMCS is to elucidate cutting-edge developments in multi-scale computational modelling of complex materials, possessing distinct fine-scale structure and/or exhibiting coupled phenomena. Particular emphasis is on emergent coarse-scale behaviour due to the underlying fine-scale structure. CMCS thus focuses on both the (experimentally-informed) modelling of complex fine-scale structural phenomena, and on their upscaling to coarser scales. CMCS will gather scientists from different disciplines working on scale-bridging challenges in complex materials to advance the field significantly. CMCS will foster inspiring and rewarding discussions and will serve as a platform for establishing and nurturing links between researchers.

The scope includes:

- Heterogeneous solids and structures
- Multi-scale modeling methodologies
- Computational micromechanics
- Structure-property relations

Conference Topics

The topics addressed in this colloquium will include:

- Space/time computational homogenization
- Simulation of complex (multiphysics, multi-field) phenomena at the microscale
- Non-separated scale problems and generalized continua
- Emergent phenomena
- Modeling of interfaces
- Microcracking simulation, advanced algorithms for complex microstructures e.g. arising from experimental imagery
- Advanced methodologies combining experiments and numerical simulations for of microscale phenomena and their upscaled behaviour
- Efficient computational methodologies to reduce computing times in multiscale computations

Conference Chairs

Paul Steinmann, University of Glasgow, UK / University of Erlangen-Nuremberg, Germany

Andrew McBride, University of Glasgow, UK

Marc Geers, Eindhoven University of Technology, The Netherlands

Julien Yvonnet, Université Paris-Est, France

Instructions for Authors

The format of CMCS consists of invited lectures by experts in the field. In addition, there will be a limited number of contributed poster presentations by young investigators.

Prospective contributors of poster presentations are invited to submit a mini-abstract by 8th March 2019, see the conference website www.gla.ac.uk/research/az/gcec/cmcs2019.

Important Dates

Early registration deadline	31st March 2019
Registration closes	31st August 2019

How to contribute a young investigator's poster presentation:

1. Submission of mini-abstract by 8th March 2019
2. Notification of acceptance by 8th April 2019
3. After acceptance standard registration applies

Glasgow Computational Engineering Centre