



MACE PGR CONFERENCE 2018 26th March 2018 - George Begg - Room C1

09:25 - 09:30 **Welcome** **PGR Director/Head of School**
 09:30 - 10:00 **Keynote Speaker** **Session chair: B.D. Rogers**

Session 1: Building Engineering and Climate Change **Session chair: Neema Opiyo**

10:00- 11:15	Fire resistance of composite buildings with earthquake damage to fire protection	Riza Suwondo
	An Experimental Study on Lateral-Torsional Buckling of Laminated Glass	Lauren Riddell-Smith
	Laser scanning for existing buildings to support building assessment schemes	Felipe Mellado
	Making hospitals resilient to climate change and its implications on Power Networks.	Ilias Gennis
	Evaluating coffee stems potential for generating power in small-scale downdraft gasifiers-gas engine systems in Colombian coffee farms	Samira Garcia-Freites

11:15 – 11:55 Refreshment and Poster session **Session chair: Mutiu Alabi-Bello**

Session 2 : Wind & Geomatic Engineering **Session chair: Ilias Gennis**

11:55-13:10	Towards real-time urban wind flow modelling using an embedded large-eddy simulation lattice Boltzmann method	Marta Camps Santasmasas
	Assessment of Offshore Wind Energy opportunities in India using WRF for resource simulation including sea breeze	Rohan Kumar
	Effect of foundation soil stiffness on seismic earth pressure	Junied Bakr
	Upper bound solution of laterally loaded short rigid piles in undrained clay	H.Hassan
	Effect of liquefaction on the seismic response of port facilities in reclaimed islands: a case study from the 2016 Kumamoto earthquake sequence	Bashar Ismael

13:10– 14:00 Lunch Break

Session 3: Multi-Phase Flows and Materials **Session chair: Ehimen Iyamabo**

14:00- 14:45	Design of low residue packs by Smoothed Particle Hydrodynamics (SPH)"	Aaron English
	Dynamic Modelling of Two-Phase Cooling Systems Using the Object-Oriented Modelling Platform EcosimPro	Viren Bhanot and Paolo Petagna
	Experimental Model for Functional Evaluation of the Effects of Electrical Stimulation: Alternating Current Effects in Human Dermal Fibroblasts	Edgar A. Pina-Galan

Session 4: Innovative Manufacturing **Session chair: Alexandra Alcantara Guadardo**

14:45-15:45	The manufacture and characterisation of U-Zr nuclear fuel alloys	Hywel Ragnauth
	Electrospun meshes fabricated with PCL-Surgihoney® for wound healing Applications	Enes Aslan
	An in-situ SEM study of transverse failure in unidirectional composite laminate reinforced by Polypropylene/S-glass hybrid yarn	Chengguang Liu
	Tool/Chip Contact Phenomenon Modeling for Cutting Tools with Chip Breakers.	Ahmed Alghamdi

15:45 – 16:15 Refreshment Break

Session 5: Fluid-Structure Interaction and Turbulence **Session chair: Qiangjun Zhang**

16:15- 17:15	Numerical simulation of turbulent flow and drop break-up in a high pressure	Ioannis Bagkeris
	Implementing numerical wall function for large eddy simulation in OpenFOAM"	Brendan Iyamabo
	Fluid-structure interaction modelling of cardiovascular applications using discrete methods.	Benjamin Owen
	Flow-Induced Instability of Flexible Filaments Hanging in Cross Flow	Jorge Silva-Leon

17:15 - 17:20 **Closing remarks** **(PGR Director and Conference Committee)**
 17:20- 18:00 **Networking** **ALL**
 18:00 - late **Evening Social event with Prize-giving** **ALL**