

## 15<sup>th</sup> YGES

2-3 July 2018, University of Surrey, Lecture Theatre M

### TECHNICAL PROGRAMME

#### Monday 2<sup>nd</sup> July

**Registration and tea/coffee:** from 9.00 (Lecture Theatre M foyer)

**Welcome:** 10:00-10:10 **Dr Rick Woods**, Associate Dean of Faculty

<b>Technical session 1: Model test and industrial applications</b>  <b>Chair:</b> <b>Dr Rick Woods</b> <i>University of Surrey</i>  <b>10:10-11:10</b>	Macro-modelling of anchors for offshore structures	A. Peccin da Silva	<i>University of Bristol</i>
	Heapey Embankment Remediation and Toolbox Methodology	N.F. Griffin	<i>United Utilities</i>
	Liquefaction-induced lateral spreading at Kamiezu Lake: A case study from the 2016 Kumamoto earthquake sequence	B. Ismael	<i>University of Manchester</i>
	A method to evaluate the accuracy of velocity models used in the positioning of microseismic events	J. Whittaker	<i>Cardiff University</i>

**Coffee break:** 11:10-11:40

<b>Technical session 2: Laboratory testing</b>  <b>Chair:</b> <b>Dr Susana Lopez-Querol</b> <i>University College London</i>  <b>11:40-12:25</b>	Stability of working platforms for tracked plant	G. Tanghetti	<i>City, University of London</i>
	Study of thermal performance enhancement in geothermal energy pile	I.O Olowoore	<i>University of Surrey</i>
	Early detection of seepage-induced internal erosion using acoustic emission monitoring	T. Biller	<i>Loughborough University</i>

**Lunch Break:** 12:25-13:30

**Keynote Lecture 1:** 13:30-14:10 **Dr Huge Wood**, COWI

<b>Technical session 3: Numerical modelling</b>  <b>Chair:</b> <b>Dr George Marketos</b> <i>Tony Gee and Partners LLP</i>  <b>14:10-15:25</b>	Contact models to simulate clay particle interaction	S. Bandera	<i>Imperial College London</i>
	Modelling of stone columns using the Discrete Element Method: an initial calibration study	P. Shukla	<i>University College London</i>
	Investigation of interface behavior between sand and rubber using experimental test and DEM	Z.L Ren	<i>University College London</i>
	Suction-enhanced geotechnical design through Capillary Barrier Systems	R. Scarfone	<i>University of Glasgow</i>
	Validation of 3D Finite Element models of pipelines crossing active faults via analytical and experimental methods	H.E. Demirci	<i>University of Surrey</i>

**Coffee break:** 15:25-16:00

<b>Technical session 4: Offshore wind turbine foundations</b>  <b>Chair:</b> <b>Prof Malcolm Bolton</b> <i>University of Cambridge</i>  <b>16:00-17:15</b>	Investigation of loading rate effects for monopile foundations using small-scale model pile tests	K.W. Wu	<i>University of Oxford</i>
	Suitability of Monopile and Jacket foundations for Contemporary Offshore Wind Turbines	A. Abdullahi	<i>University of Surrey</i>
	Dynamic design effects of foundation configuration of jacket supported offshore wind turbines	S. Jalbi	<i>University of Surrey</i>
	Centrifuge Modelling of Screw Piles for Offshore Wind Energy	C. Davidson	<i>University of Dundee</i>
	Investigation into the use of screw piles in clay for offshore wind turbine foundations	Y.U. Sharif	<i>University of Dundee</i>

**Photographs:** 17:15-17:25

**Accommodation check-in:** 17:25-18:00

**Lab tour:** 18:00-18:30

**Walk to Holiday Inn:** 18:30-19:00

**Banquette dinner at Holiday Inn:** from 19.00

## Tuesday 3<sup>rd</sup> July

**Tea/Coffee:** 8:20-8:40

<b>Technical session 5: Model test and industrial applications</b>  <b>Chair:</b> <b>Dr. Brian Simpson</b> <i>Arup</i>  <b>8:40-9:40</b>	Grouting in Chelburn Valley – Improvements to Aging Assets	J.A. Richardson	<i>United Utilities</i>
	Strain and strain rate effects on rocking response of footings subjected to machine vibrations	E. Katsiveli	<i>University of Bristol</i>
	Fault Damage Zones: Implications for geotechnical engineering near faulting	T.O. Morgan	<i>Imperial College London</i>
	Predicting Pile Settlement in London Clay	J.J. Crispin	<i>University of Bristol</i>

**Keynote Lecture 2:** 9:40-10:20 **Prof. Dipanjan Basu**, University of Waterloo, Canada

**Coffee break:** 10.20-10:50

<b>Technical session 6: Laboratory testing</b>  <b>Chair:</b> <b>Dr Paul Shepley</b> <i>University of Sheffield</i>  <b>10:50-12:05</b>	Evolution of stiffness in artificially cemented sands for geotechnical centrifuge modelling	J.A. Mendoza Ulloa	<i>University of Manchester</i>
	The development of a new micromechanical inter-particle loading apparatus for railway ballast	C.P.Y. Wong	<i>University College London</i>
	The Seismic Liquefaction of Mine Tailings	A. Cartwright	<i>University College London</i>
	Direct shear and interface shear testing of granular materials using polypropylene counterfaces at low stresses	L.W. de Leeuw	<i>University of Bristol</i>
	Compaction Characteristics and Shrinkage Properties of Fibre Reinforced London Clay	J. Wang	<i>Durham University</i>

**Lunch:** 12:05-13:05

**Keynote lecture 3:** 13:05-13:45 **Dr Ganga Prakhya**, Sir Robert McAlpine

<b>Technical session 7: Laboratory testing</b>  <b>Chair:</b> <b>Dr Erdin Ibraim</b> <i>University of Bristol</i>  <b>13:45-14:30</b>	Thermo-hydro-mechanical characterisation of London clay	S. Chen	<i>Imperial College London</i>
	Effect of salt on liquid limit and plastic limit of kaolin-bentonite mixtures	A. Muththalib	<i>University College London</i>
	Re-evaluating interface friction for geotechnical modelling	P. Shepley	<i>University of Sheffield</i>

**Coffee break:** 14:30-15:00

<b>Technical session 6: Numerical modelling</b>  <b>Chair:</b> <b>Prof Dipanjan Basu</b> <i>University of Waterloo, Canada</i>  <b>15:00-16:15</b>	Numerical Analysis of Double-O-Tube Shield Tunnelling	D. Zhou	<i>Imperial College London</i>
	Single element tests of normally consolidated and overconsolidated clays under drained and undrained triaxial compression in ABAQUS	M.H. Sohawon	<i>City, University of London</i>
	Finite Element Analysis of Buried Concrete Thrust Block providing Lateral Support to Raking Props	G. di Marzo	<i>A-Squared Studio Engineers Ltd</i>
	Analysis of geothermal energy utilisation in underground tunnels	O. Ogunleye	<i>University of Surrey</i>
	Numerical investigation on the performance of geothermal energy contiguous flight auger (CFA) pile	A.K. Sani	<i>University of Surrey</i>

**Best presentation award and closure:** 16:15-16:30

**Photographs:** 16:30-16:40

**Cathedral Tour:** 16:40-17:10