## Conference report

# The 9<sup>th</sup> International Conference in Physical Modelling in Geotechnics (ICPMG2018), London, U. K.

#### Introduction

The 9<sup>th</sup> International Conference in Physical Modelling in Geotechnics (ICPMG 2018) was held at City, University of London, UK. The event was hosted between 17<sup>th</sup> - 20<sup>th</sup> July and attracted practicing engineers, academics and students from over 35 countries. 230 papers were published in the proceedings where approximately 140 oral presentations were given and around 90 posters were presented.

The conference followed the successful series of physical modelling conferences that first began in Paris in 1988. The conference disseminated a wide range of modelling techniques which covered topics such as dams, offshore and seismic modelling, tunnelling and foundations. Authors were also encouraged to report on; education in physical modelling in geotechnics, the use of plant roots in ground improvement, recent developments in imaging techniques, infrastructure, sample preparation and modelling methods and temporary works platforms. Many authors also discussed excellent findings bridging the gap between physical and numerical modelling.

#### **Notable lectures**

The fourth Schofield Lecture was given by Professor R. Neil Taylor of City, University of London on 17<sup>th</sup> July 2018. Professor Andrew N. Schofield, the founding father of centrifuge modelling in geotechnical engineering, attended the lecture to support his former PhD student. Professor Taylor briefly described his contribution to physical modelling and emphasised the importance of enjoying the research you do.

A special themed day presented some of the physical modelling community's work to invited members of industry. The event promoted the best of physical modelling techniques and many of the applications to industry. The day was well attended with an opening speech given by Professor Lord Robert Mair, the President of the Institution of Civil Engineers. Industry leaders discussed the problems that they face to give researchers direction to increase their impact on industry.

The ICPMG 2018 local organising committee were honoured that the following lecturers presented keynote and themed lectures to the conference delegates.

- Associate Professor Emilio Bilotta from the University of Napoli Federico II, Italy, presented the "Modelling tunnel behaviour under seismic actions: an integrated approach".
- Professor Christophe Gaudin from the University of Western Australia, Australia, presented on "Geotechnical modelling for offshore renewables"
- Dr Richard Goodey from City, University of London, UK, presented on the "Physical modelling applied to infrastructure development"
- Professor Susan Gourvenec, of the University of Southampton, UK, presented "The role of centrifuge modelling in capturing whole-life responses of geotechnical infrastructure to optimise design".
- Professor Yujing Hou of China Institute of Water Resources and Hydropower Research, China presented on the "Development of Geotechnical Centrifuges and Facilities in China".
- Dr Jonathan Knappett of the University of Dundee, UK, presented on "Physical modelling of structural and biological soil reinforcement"
- Professor Andy Take from Queen's University, Canada presented on "Current and emerging physical modelling technologies"
- Dr Dan Wilson (University of California at Davis, USA) on "An example of effective mentoring for research centres"

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## Laboratory tours

Delegates were invited to visit the Schofield Centre at Cambridge University to meet Professor A.N. Schofield and have a guided tour given by Professor Gopal Madabhushi and Professor Stuart Haigh. This visit was attended by 37 delegates. Tours of the Geotechnical Centrifuge facility and laboratories at City, University of London were also available during the conference with over 120 delegates in attendance. Details of recent projects were presented, including the apparatus used in the models.

### Conference activities

Over the course of the conference, delegates were treated to a number of social activities organised by the ICPMG 2018 local organising committee. Events included a Welcome Reception at Skinners' Hall; home to one of the "Great Twelve" livery companies which has its roots in medieval trade guilds.

Following the 4<sup>th</sup> Schofield lecture a drinks reception was hosted at City, University of London. A special beer was brewed to mark the occasion and in honour of Professor A.N. Schofield and Professor R.N. Taylor.

A gala dinner was held at Middle Temple Hall, one of the four Inns of Court. The historic hall boasts a table made from ancient timbers and hosted the first recorded performance of Shakespeare's Twelfth Night. The evening was a magical experience for many delegates who commented on its similarity to Harry Potter's Hogwarts.

Delegates were taken to Greenwich on vintage red Routemaster buses for a relaxing afternoon. A casual reception was held at the Trafalgar Tavern, overlooking the River Thames. Guests were treated live music and an enjoyable evening.

### Future physical modelling events

- ICPMG 2022 will be held in Daejeon, Korea
- Eurofuge 2020 will be hosted in Lulea, Sweden
- Asiafuge 2020 will be in Singapore



Figure 1. Main lecture theatre at City, University of London, UK



Figure 2. From left to right, Dr S. Nadimi, Professor M.D. Bolton, Professor R.N. Taylor, Professor A.N. Schofield and Dr B.T. Le following the 4<sup>th</sup> Schofield Lecture

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Figure 3. Gala dinner at Middle Temple Hall