





# ICE/IStructE/ACED Annual Meeting

# Wednesday 22 May 2019 (09.15 - 16.00)

## at IStructE International HQ, 47-58 Bastwick Street, London, EC1V 3PS

## The theme of this year's meeting is 'Inclusivity and Diversity in Civil Engineering'

### 9.15 Registration and Refreshments

9.45 Introduction Neil Tsang, Coventry University, ACED Chair

9.55 ICE Presidential Update Andrew Wyllie, President ICE

10.10 IStructE Presidential Update Joe Kindregan, President IStructE

10.25 JBM Update Nick Russell, Chair JBM

10.40 Engineers Ireland update Damien Owens, Engineers Ireland

#### 10.55 Coffee/Tea break

#### Session Chair: Paul McCombie

11.15 Diversity in the construction industry - who's discriminating now? Ann Bentley, Global Board Director of Rider Levett Bucknall, a member of the CBI's Construction Council

11.45 Diversity: Enriching engineering for the Forth Industrial Revolution *Mike Cook, Chairman of BuroHappold*  12.15 Is Maths a gateway or a barrier to Engineering? *Rob Eastaway, Director of Maths Inspiration* 

#### 12.45 – 13.45 Lunch

#### Session Chair: Esther Norton

13.45 Inclusive Design Dawn Bonfield MBE, Royal Academy of Engineering Visiting Professor of Inclusive Engineering at Aston University

14.15 TEACHERS - the new heroes of the Built Environment *Alison Watson MBE, Chief Executive, Class of Your Own Ltd.* 

14.45 Diversity – the institution's contribution Andrew Stanley, ICE

15.10 Degree Apprenticeships, End Point Assessments and Diversity John Laverty, ICE

#### 15.30 – 15.45 Coffee/tea break

15.45 – 16.15 Forum for open discussion of the day's topics followed by closing remarks

#### 16.15 Meeting finish

#### Selected talk synopses

John Laverty, ICE

#### Degree Apprenticeships, End Point Assessments and Diversity

ICE will describe its preparations for conducting apprenticeship end-point assessments (EPAs). The presentation will cover EPA assessment procedures, contractual and commercial arrangements, and time lines for 2019. It will also draw on ICE's experience of delivering Professional Reviews for Engineering Council registration to understand the opportunities and threats associated with the new apprenticeship standards. The headline messages on diversity in apprenticeships are that they may improve social inclusion but will probably work against gender diversity. The talk will also cover relevant data and suggest ways to address the apprenticeship gender issue.

#### Ann Bentley, Global Board Director of Rider Levett Bucknall, a member of the CBI's Construction Council

#### Diversity in the construction industry - who's discriminating now?

There are multiple campaigns to attract young people, particularly women and ethnic minorities, into construction. However, it is my contention that it is not lack of information that is preventing women, ethnic minorities and many white men joining the construction industry, but women are now themselves being discriminating particularly in the career decisions that they make. Some industries – I would say the more enlightened end of the law, accountancy, medicine and healthcare, social work and teaching have woken up to the fact that "competing for female talent" requires making fundamental changes to working practices, conditions and behaviours. The challenge for construction is not about giving girls more information and telling them how great it is, but to actually make it great!

#### Rob Eastaway, Director of Maths Inspiration

#### Is Maths a gateway or a barrier to Engineering?

Mathematical and statistical skills are an essential part of engineering. Yet many aspiring engineers are put off maths by the abstract nature of what they encounter up to GCSE. For this reason, engineers promoting the subject in schools often avoid mentioning its mathematical side. Is it possible to inspire school pupils in engineering without hiding the maths? And is the school curriculum emphasising the right sort of maths?

### Dawn Bonfield MBE, Royal Academy of Engineering Visiting Professor of Inclusive Engineering at Aston University

#### **Inclusive Design**

Dawn is Founder and Director of *Towards Vision*, a company which aims to work towards a vision of diversity and inclusion in engineering, and Immediate Past President and former Chief Executive of the Women's Engineering Society. She will discuss how to ensure that we prevent bias and discrimination being inadvertently added to our engineering solutions, but beyond that how we use our influence as engineers who shape the work to ensure that we reverse biases and discriminations, and ensure equal access for all.

#### Alison Watson MBE, Chief Executive, Class of Your Own Ltd.

#### TEACHERS - the new heroes of the Built Environment

With the doom and gloom of Brexit, more bad press for Major Projects delivery and relentless concerns surrounding a lack of Engineers, there's never been a more important time to refocus our attention on the UK's future talent. But given the narrowing of the curriculum, the constant pressure to hit performance targets and cuts to in-house careers advice, can we rely on school teachers to inspire the next generation of Built Environment professionals?