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Price (2020 subscription)

Institutional: £465 (incl. e-archive, p&p and VAT) Personal (print only): £130 (incl. p&p) Personal (online only): £130 Personal (Student Member): £40 (incl. p&p)

Single copies: £25 (incl. p&p)

Printed by

Warners Midlands plc The Maltings, Manor Lane Bourne, Lincolnshire PE10 9PH United Kingdom

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The Structural Engineer (ISSN 1466-5123) is published by IStructte Ltd, a wholly owned subsidiary of The Institution of Structural Engineers. It is available both in print and online.

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The Institution of Structural Engineers Incorporated by Royal Charter Charity Registered in England and Wales number 233392 and in Scotland number SC038263





Ed Clark Guest Editor



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An unprecedented era of opportunity

ONLY WE CAN DRIVE

AN ESSENTIAL

CULTURAL CHANGE

IN STRUCTURAL

MATERIAL USE

YOU MUST HAVE WONDERED, probably increasingly, what the profession of structural

engineering will look like in future. The authors of the papers in this special issue certainly have. They provide a glimpse into some of the possibilities which lie around the corner for us. These are fabulous and inspiring papers, and we encourage you to read them all. In fact, these 14 were

selected from over 100 high-calibre submissions. An overwhelming response which shows the huge strength of feeling and breadth of views around this topic. Thank you to everyone who submitted.

This eclectic array of papers maps out options for various interesting journeys of opportunity. Quite some journeys

they are too. We believe passionately that we are entering an unprecedented era of opportunity for innovative structural engineering. This is a renaissance period for our profession. Seldom have our skills been more in demand than in responding to the acute embodied-carbon issues associated with our climate emergency.

Luckily, in this era of increasing carbon-related design priorities, we have extraordinary digital tools to help us. These tools, combined with new methods of construction and an expanding palette of structural materials, provide us with new possibilities at exactly the right time, when the fingers are beginning to point at us to reduce the carbon footprint of our structures.

Only we can drive an essential cultural change in structural material use, so eloquently articulated from various standpoints in many of the papers in this issue. This change will require us to adapt and to have the courage to embrace disruption. Some of the papers highlight the new skills that we will need to develop and the aptitudes and talents that we need to nurture in the engineers of tomorrow.

We're also urged to value empathy, creativity and collaboration skills as much as our technical capability. To acknowledge that a broader outlook is required to be influential in addressing the future challenges that society faces

This sums up what this special issue is all about: articulation of a fast-

changing landscape culturally for our profession, coupled with various approaches which can help us to lead the design of a built environment which touches gently on our temporarily borrowed resources.

Ed Clark MEng, CEng, FIStructE, MICE is a Director at Arup in London, UK and outgoing chair of the Institution's Structural Futures Committee.

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