

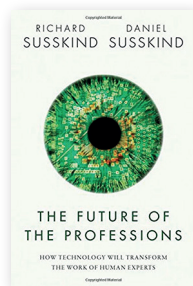
MONITOR: BOOKS

Books

REVIEWS

The future of the professions

by Richard Susskind and Daniel Susskind, published by Oxford University Press, 2015, £18.99, reviewed by **Ian Jenkinson**, UK



The Future of the Professions has been shortlisted for the Chartered Management Institute's 2017 Management Book of the Year Prize in the management futures category. It speaks directly to a raft of issues that confront all professions during the next few decades.

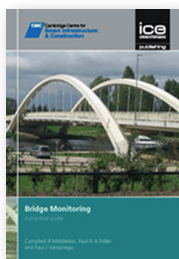
The authors review the ways in which technology has transformed the professions to show how the transmission of specialised knowledge has enabled many non-specialists to question, challenge and ultimately empower people to make a range of decisions that affect their lives. From this they pose a series of questions about the nature of the professions, the skills and the competencies that may emerge and the ways that professional work is likely to be reconfigured.

They define a number of ways in which the professions might develop in the future: the traditional model; the network of experts; the paraprofessional; the knowledge mining engineer; the communities of experience; and the artificial intelligence model. None, apart from the first, bear much relationship to the ways in which civil engineers currently organise themselves.

For anyone interested in the ways their company could develop and hence the way in which they may choose to organise their career, there is much in the book to learn and reflect upon.

Bridge monitoring: a practical guide

by Campbell Middleton, Paul Fidler and Paul Vardanega, published by ICE Publishing, 2016, £65, reviewed by **Sebastian Lewandowski**, Highways England, UK



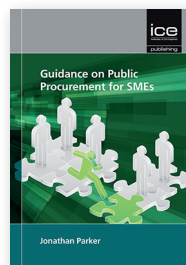
Written jointly by three authors and with contributions from a number of industry specialists, this book brings together a wealth of UK and international experience into one concise volume.

Bridge monitoring: a practical guide focuses on the most commonly used technologies available today and gives examples of their real-world application through seven case studies. These cover structures varying from single-span masonry arches to large-scale cable-stayed bridges such as the Second Severn Crossing. Each example is supplemented with references for further reading.

While by no means an in-depth specialist guide, it will certainly be a good read for those interested in the subject matter and, together with the monitoring specification examples, it is a book worthy of consideration for the libraries of designers involved in the field as well as asset owners.

Guidance on public procurement for SMEs

by Jonathan Parker, published by ICE Publishing, 2016, £40, reviewed by **Philippe Bouillard**, Université Libre de Bruxelles, Belgium



I was pleased to review this book because I have recently been commissioned to survey public procurement throughout Europe. As a civil engineer, I am interested in the legal aspects of procurement but I need someone to make the topic more accessible and understandable – which is what the author has done.

It is a pocket book at just 65 pages, very easy to read and covers the main concepts of EU public sector regulations, procedures and processes. It then focuses on the new procurement provisions for small- to medium-size enterprises (SMEs), concluding with top ten tips and common mistakes.

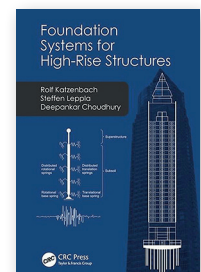
Bearing in mind that more than 80% of construction activities in

Europe are actually handled by SMEs, this book will definitely be helpful for them, as well as for any civil engineers wishing to have a comprehensive overview of EU public procurement. For UK readers concerned about Brexit, the author believes it is unlikely to have any influence on UK public sector procurement.

Foundation systems for high-rise structures

by Rolf Katzenbach, Steffen Leppla and Deepankar Choudhury, published by CRC Press, 2016, £76.99,

reviewed by **Yancheng Cai**, Meinhardt, China.



This book starts by explaining the basics of geotechnical analysis for foundation systems for high-rise structures in accordance with Eurocode 7, including analysis for stability and serviceability, the necessary soil investigations, key technical regulations and quality and safety assurance.

It then goes on to provide a detailed analysis for spread foundations, deep foundations, combined pile–raft foundation systems and special foundations, with a chapter on each. Each chapter is further explained and illustrated by practical applications.

Over a quarter of the book – some 70 pages – is devoted to the dynamic behaviour of foundation systems, explaining soil dynamic parameters, free-field ground response analysis and liquefaction. Seismic soil–pile structure interaction and numerical dynamic analysis are also described.

This book is full of useful information on foundation systems for high-rise structures, providing state-of-the-art technical and scientific knowledge. The descriptions and explanations by the authors are detailed and clear. I recommend it to all those involved in designing foundations for tall buildings.

MONITOR:BOOKS

NEW BOOKS

The ICE library maintains one of the most comprehensive collections of civil engineering books in the world, including all titles from ICE Publishing (shown in bold below). New books received in the past 3 months include the following.

Advances in civil engineering	A Ruiz	£106-99
Advances in rock-support and geotechnical engineering	S Wang	£110-00
Best tall buildings: a global overview of 2016 skyscrapers	A Wood and S Henry	£48-00
BIM and quantity surveying	S Pittard and P Sell	£24-99
BIM in healthcare infrastructure: planning, design and construction	M Phiri	£75-00
Building regulation for resilience	T Moullier	£22-50
Bridge monitoring: a practical guide	C Middleton, P Fidler and P Vardanega	£65-00
Bridges	C Menn	£70-00
Civil engineering systems analysis	L Amador-Jimenez	£44-99
Code of practice for cyber security in the built environment	H Boyes and Institution of Engineering and Technology	£80-00
Computational methods, seismic protection, hybrid testing and resilience in earthquake engineering	G Cimellaro <i>et al.</i>	£90-00
Conceptual structural design: bridging the gap between architects and engineers (2nd ed.)	O Larsen	£40-00
Construction engineering design calculations and rules of thumb	R Rajapakse	£76-00
Crossrail project: infrastructure design and construction. Volume 3	M Black	£65-00
Dams – benefits and disbenefits; assets or liabilities?	A Pepper and British Dam Society	£130-00
Design of column-reinforced foundations	M Bouassida	£79-95
Distributed fibre optic strain sensing for monitoring civil infrastructure: a practical guide	C Kechavarzi <i>et al.</i>	£65-00
Eco-design of buildings and infrastructure	B Peuportier <i>et al.</i>	£114-00
Energy geotechnics	F Wuttke <i>et al.</i>	£159-00
Engineers fees 2017	Fees Bureau	£213-00
Fatigue design of marine structures	I Lotsberg	£74-99
Foundation systems for high-rise structures	R Katzenbach	£76-99
From rail to road and back again? A century of transport competition and interdependency	R Roth and C Dival	£80-00
Geotechnical earthquake engineering and soil dynamics	A Nolan	£104-95
Geotechnical finite element analysis: a practical guide	A Lees	£70-00
Guidance on public procurement for SMEs	J Parker	£40-00
Land drainage and flood defence responsibilities (5th ed.)	Institution of Civil Engineers	£45-00
Marine applications of advanced fibre-reinforced composites	J Graham-Jones and J Summerscales	£160-00
Marine concrete structures: design, durability and performance	M Alexander	£130-50
Onshore structural design calculations: power plant and energy processing facilities.	M El-Reedy	£95-00
Operational safety of dams and reservoirs: understanding the reliability of flow-control systems	D Hartford <i>et al.</i>	£100-00
Practical engineering management of offshore oil and gas platforms	N Samie	£48-09
Precision surveying: the principles and geomatics practice	J O Ogundare	£96-95
Remaking the San Francisco Oakland Bay Bridge: a case of shadowboxing with nature	K Frick	£31-99
Structural behaviour of asphalt pavements: integrated analysis and design of conventional and heavy duty asphalt pavement	L Sun	£125-00
Structural cross sections: analysis and design	N Anwar	£82-00
Structural geology and rock engineering	J W Cosgrove	£104-00
TBM excavation in difficult ground conditions – case studies from Turkey	N Bilgin	£70-00
The Eiffel Tower: the three-hundred-metre tower	B Lemoine	£12-15
The story of the Irish Mail: a London train to Ireland via Holyhead	W Davies	£8-50
The Thames Iron Works 1837–1912: a major shipbuilder on the Thames	D Harrison	£10-00
Traffic flow theory: characteristics, experimental methods, and numerical techniques.	D Ni	£95-00

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