

MONITOR: PROCEEDINGS

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Bridge Engineering

Assessing the capacity of existing bridge structures: part 2

170, No. BE1, March 2017, 1–90
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Reinforced-concrete beam hinge joint fatigue assessment

D. P. Cousins

Transverse assessment of a concrete box girder bridge

A. Zaid and D. Collings

Structural capacity assessment of corroded RC bridge piers

M. M. Kashani, A. J. Crewe and N. A. Alexander

Assessment of an existing fully prestressed box-girder bridge

M. Pimentel and J. Figueiras

Waterloo Bridge – structural behaviour and strength

D. Astin

Capacity of a nineteenth century iron-arch bridge in Leeds, UK

A. Okorie, P. Clapham and B. Ndlovu

Bridge model updating using distributed sensor data

E. C. Bentz and N. A. Hoult



Construction Materials

170, No. CM2, April 2017, 71–115
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The use of glycerol and cooking oil in masonry unit production

H. M. Vu, J. P. Forth and V. V. Toropov

The environmental impact of phenolic foam insulation boards

D. Densley Tingley, A. Hathway, B. Davison and D. Allwood

Optimising construction with self-compacting concrete

D. Rich, J. Glass, A. G. F. Gibb, C. I. Goodier and G. Sander



Energy

Small modular reactors

170, No. EN2, May 2017, 45–89
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Appraisal of small modular nuclear reactors with 'real options' valuation

G. Locatelli, M. Pecoraro, G. Meroni and M. Mancini

Economy, safety and applicability of small modular reactors

I. Playbell

A novel steel-concrete composite system for modular nuclear reactors

B. Burgan, C. Kyprianou, S. Bingham and S. Waterhouse



Engineering Sustainability

Sustainability in energy and buildings – part 2

170, No. ES2, April 2017, 63–129
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Design strategies for buildings with low embodied energy

A. Lupišek, M. Nehasilová, Š. Mančík, J. Železná, J. Růžicka, C. Fiala, J. Tywoniak and P. Hájek

Estimation and sensitivity analysis of building energy demand

J. K. Gruber, M. Prodanovic and R. Alonso

Relieving fuel poverty in Wales with external wall insulation

J. Atkinson, J. Littlewood, G. Karani and A. Geens

In-construction tests show rapid smoke spread across dwellings

J. Littlewood and I. Smallwood

Transforming the Greek Cycladic islands into a wind energy hub

E. Zafeiratou and C. Spataru



Civil Engineering Special Issue

Crossrail project: designing and constructing the Elizabeth Line, London

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Crossrail project: the execution strategy for delivering London's Elizabeth line

W. Tucker

Crossrail project: engineering design management on the Elizabeth line, London

J.-M. Barsam, D. Harris and A. Hooper

Crossrail project: managing geotechnical risk on London's Elizabeth line

M. Black

Crossrail project: machine-driven tunnels on the Elizabeth line, London

M. King, I. Thomas and A. Stenning

Crossrail project: use of sprayed concrete tunnel linings on London's Elizabeth line

D. Coughlan, R. Diez, J. Comins and A. Stärk

Crossrail project: a deep-mined station on the Elizabeth line, London

A. St. John, J. Barker, S. Frost and D. Harris

Crossrail project: logistics management strategy for the Elizabeth line, London

D. Fraser, J. Haig, M. Heduan and G. Limna



Engineering and Computational Mechanics

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Modelling impact resistance of polymer-laminated steelwork

M. Kadhim, Z. Wu and L. Cunningham

Hydraulic jumps and breaking bores: modelling and analysis

H. Wang, X. Leng and H. Chanson



Engineering History and Heritage

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Redecking the Hogarth Flyover, London

J. Rose, Y. Hussein and A. Ghose

Engineering the landscape – Capability Brown's role

B. G. Clarke, B. Barrett, E. Hudson and J. Whibberley

Civil engineering heritage: country profile – Canada

A. MacKenzie and V. Straka



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Forensic engineering in urban renovation

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Building facade failures in the urban environment

K. J. Beasley

Building condition and impact assessment of underground construction

K. H. Goh

Erecting new buildings in New York City's old neighbourhoods

D. Eschenasy

Forensic engineering of construction materials: lessons learnt from disputes

J. Ingham and D. Leek



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Analysis of pre-vault tunnelling interaction with buildings

A. G. Bloodworth and G. T. Houlsby

Soil-structure interaction in a combined pile-raft foundation – a case study

A. Kumar, M. Patil and D. Choudhury

Testing of open section drilled C-pile and CT-pile wall

L. Larkela, J. Lehtonen and L. Korkiala-Tanttu

Effective friction angle of soft to firm clays from flat dilatometer

Z. Ouyang and P. W. Mayne



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Compressibility and stress history of very soft organic clays

M. Baroni and M. S. S. Almeida

Study of soil nailed wall under service loading condition

S. K. Razavi and M. H. Bonab

Limit analysis of ground anchor forces

S. Xiao and W. D. Guo

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The engineering behaviour of enzymatic lime stabilised soils

G. N. Eujine, S. Chandrakaran and N. Sankar

Bearing capacity charts of soft soil reinforced by deep mixing

A. S. A. Rashid, J. A. Black, A. B. H. Kueh, H. Mohamad and N. Md Noor

Stabilising railway embankments using an integrated tied back-to-back strengthening system

M. Esmaili and B. Arbabi

Creep improvement factors for vibro-replacement design

B. G. Sexton, V. Sivakumar and B. A. McCabe

Management, Procurement and Law

Benefitting workers and society through safer design

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Design hazard identification and the link to site experience

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Zero roadworker harm: ethical and legal challenges

A. Burbridge and R. Troutbeck

Stakeholders' role in improving Ghana's construction safety

D. Donkoh and E. Aboagye-Nimo

The antecedents and development of unsafety

S. D. Smith, F. Sherratt and D. C. Oswald

Critical theory: understanding the impact language has on workers' safety and health

C. McAleenan and P. McAleenan

Maritime Engineering

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An earthquake-event-based method for mapping tsunami hazards

M. A. Jaimes, E. Reinoso, M. Ordaz, R. Silva, E. Mendoza, B. Huerta, G. Durán, X. Chávez and J. C. Rodríguez

Improving the prediction of scour around submarine pipelines

Z. Zhang, B. Shi, Y. Guo and D. Chen

Numerical test for single concrete armour layer on breakwaters

E. Anastasaki, J.-P. Latham and J. Xiang

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Appraisal of urban road safety factors in South Africa

D. K. Das and E. A. Burger

Simulation and analysis of traffic flow for traffic calming

A. Abdi, H. Bigdeli Rad and E. Azimi

Analysis of pedestrian crossing speed – the case of Istanbul

S. Dündar

New risk method to assess tree interaction with structures

F. W. Y. Ko and J. R. Standing

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Bamboo in structures and buildings

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Application of bamboo in mangrove rehabilitation projects

S. Harihar and H. J. Verhagen

Geometric and material effects on bamboo buckling behaviour

K. A. Harries, J. Bumstead, M. Richard and D. Trujillo

Mechanical characterisation of structural laminated bamboo

B. Sharma, H. Bauer, G. Schickhofer and M. H. Ramage

Experimental evaluation of longitudinal splitting of bamboo flexural components

M. J. Richard, J. Gottron, K. A. Harries and K. Ghavami

Bamboo active school: structural design and material testing

M. J. Richard, P. E. Kassabian and H. S. Schulze-Ehring

Flexural properties as a basis for bamboo strength grading

D. Trujillo, S. Jangra and J. M. Gibson

BIM Bamboo: a digital design framework for bamboo culms

R. Lorenzo, C. Lee, J. G. Oliva-Salinas and M. J. Ontiveros-Hernandez

A new method to measure the axial and shear moduli of bamboo

R. Moran, K. Ghavami and J. J. García

Corrugated bamboo as reinforcement in concrete

A. Khatib and G. Nounu

Transport

Transport emissions, climate change and air quality

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Transport emissions in Beijing: a scenario planning approach

M. Cao, C.-L. Chen and R. Hickman

Land-use drivers of transport emissions – revisited

A. Wenban-Smith

Using personal carbon dioxide trading to promote cleaner cars

Y. Li, W. Li, Y. Wei, L. Bao and H. Deng

Air quality in enclosed railway stations

J. E. Thornes, A. Hickman, C. Baker, X. Cai and J. M. Delgado Saborit

Greenhouse gas from ridership on the Jubilee Line Extension

S. Saxe and S. Denman

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V. Nefedov

Walking accessibility of urban parks in a compact megacity

H. Liang, D. Chen and Q. Zhang

Assessment of social sustainability: a comparative analysis

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Assessing the aesthetic value of traditional gardens and urban parks in China

J. Zhao, R. Li and X. Wei

Waste and Resource Management

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Governments as drivers for a circular economy

A. ten Wolde

A regional model for household pharmaceutical waste management

G. Ristic, A. Đorđević and S. Hristov

Development of a sustainable checklist in construction

V. W. Y. Tam, K. N. Le, J. Wang and X. Wang

Life-cycle assessment of municipal solid waste management

S. T. Mali and S. S. Patil

Sustainable adobe bricks with construction wastes

M. N. Rojas-Valencia and E. Aquino Bolaños

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Climate change effects and extreme rainfall non-stationarity

A. G. Yilmaz

Non-linear Muskingum model with inflow-based exponent

A. R. Vatankhah

A method for optimal floodgate operation in cascade reservoirs

S. Chen, S. Yan, W. Huang, Y. Hu and G. Ma

Cantilever failure investigations for cohesive riverbanks

S. Patsinghasanee, I. Kimura, Y. Shimizu and M. Nabi

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