

## MONITOR: PROCEEDINGS

## ICE Proceedings

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## Bridge Engineering

Repair and strengthening of bridges  
167, No. BE3, September 2014,  
155–261

## Structural monitoring for asset management of railway bridges

P. Banerji, S. Chikermane, R. Scott, F. Surre, T. Sun, K. T. V. Grattan and J. Longthorne

## Bearing replacements for Forth Road Bridge approach viaducts

B. Colford, M. Chiarello, C. R. Hendy, H. Pouya, J. Sandberg and P. Smout

## A case study of replacement of external post-tensioning cables

Y. Rammer and B. Espion

## Management of fatigue cracking: West Gate Bridge, Melbourne

J. Silla-Sanchez and J. Noonan

## Refurbishment of structures on the Manchester Metrolink phase 3

M. Stacy, M. Burr, P. Jones, N. Kenworthy, J. McClean, F. McKeown and S. Molyneux

## Preserving Ireland's iconic railway viaducts

P. McCarron and A. McAdam

## Carbon fibre and composite strengthening of Minsterley Bridge in Shropshire, UK

A. Lowe, L. Canning and J. Williams

## Pier collision protection at Tay Road Bridge, Scotland

J. Redpath, D. MacKay, B. Angus and E. Scanlan

## Civil Engineering Special Issue

London 2012 legacy  
167, No. CE6, November 2014, 1–60

## London 2012 legacy: creating a more sustainable future for London and beyond

J. Daothong and D. Stubbs

## London 2012 legacy: principles, purpose, professionals and collaboration

N. McNevin

## London 2012 legacy: E20 – creating an integrated piece of city

K. Firth

## London 2012 legacy: transformation of the Olympic Park

C. Naish and S. Mason

## London 2012 legacy: design and reuse of temporary equestrian platforms

P. Pennington

## London 2012 legacy: Olympic Park waterways

A. Nicholls

## London 2012 legacy: managing flood risk at Queen Elizabeth Olympic Park

D. Palmer, D. Ker-Reid, N. Venn and A. Bruni

## London 2012 legacy: putting London Underground on a new track

D. Waboso

## Construction Materials

167, No. CM5, October 2014, 235–278

## Strength characteristics and durability of epoxy asphalts

I. Widyatmoko and R. C. Elliott

## Investigation on the mechanical properties of gypsum soil

A. R. Estabragh, S. Kargar and A. A. Javadi

## Influence of matrix grade on the mechanical behaviour of fibre-reinforced concrete

E. Vasaneli, F. Micelli and M. A. Aiello

## On the compressive strength of Botswana masonry units

C. Nelson and G. Malumbela

## Energy

Energy demand reduction

167, No. EN3, August 2014, 89–180

## Motivations to adopting energy efficiency measures in the home

M. J. Pelenur and H. J. Cruickshank

## Innovation in low-energy residential renovation: UK and France

G. Killip, T. Fawcett and K. B. Janda

## Policy making under uncertainty in electric vehicle demand

C. Morton, J. Anable and C. Brand

## Energy system impacts from heat and transport electrification

P. J. Baruah, N. Eyre, M. Qadrdan, M. Chaudry, S. Blainey, J. W. Hal, N. Jenkins and M. Tran

## Prospects for emissions reduction in the UK cement sector

P. W. Griffin, G. P. Hammond and J. B. Norman

## Energy demand and reduction opportunities in the UK food chain

S. A. Tassou, M. Kolokotroni, B. Geowreesunker, V. Stojceska, A. Azapagic, P. Fryer and S. Balakis

## UK innovation support for energy demand reduction

M. Hannon and J. Skea

## Engineering and Computational Mechanics

Tsunami modelling

167, No. EM3, September 2014,  
97–151

## Plausible megathrust tsunamis in the eastern Mediterranean Sea

B. L. Valle, N. Kalligeris, A. N. Findikakis, E. A. Okal, L. Melilla and C. E. Synolakis

## Boussinesq modelling of tsunami and storm wave impact

M. McCabe, P. K. Stansby, B. D. Rogers and L. S. Cunningham

## A GPU-accelerated shallow flood model for tsunami simulations

R. Amouzgar, Q. Liang and L. Smith

## Tsunami wave and structure interactions: an investigation with smoothed-particle hydrodynamics

L. S. Cunningham, B. D. Rogers and G. Pringgana

## Advanced numerical modelling of tsunami wave propagation, transformation and run-up

A. S. Dimakopoulos, A. Guercio and G. Cuomo

## Engineering History and Heritage

167, No. EH4, November 2014,  
169–214

## A monument of civil engineering: the first Mexican railway

D. Bühler

## Winchelsea masonry arch bridge: first major maintenance

D. Morris

## Compatible repairs to stonebuilt structures

D. E. Wiggins and A. J. Klemm

## Design and construction deficiencies of timber railway bridges

N. A. Bill

## Engineering Sustainability

167, No. ES5, October 2014, 187–238

## Sustainable structures: bamboo standards and building codes

A. Gatóo, B. Sharma, M. Bock, H. Mulligan and M. H. Ramage

## Comparison of carbon dioxide emissions for two landfill capping layers

J. Raja, N. Dixon, G. Fowmes, M. Frost and P. Assinder

## Using metal plates for measurement of cement dust emission

K. Henni-Chebra, A. Bougara and J. M. Khatib

## Earthquake strategy for sustainable infrastructure in Turkey

R. C. Erenoglu and O. Erenoglu

## Sustainability in civil engineering education: why, what, when, where and how

R. A. Fenner, H. J. Cruickshank and C. Ainger

## Forensic Engineering

Tunnel failures – part two

167, No. FE4, November 2014,  
187–232

## Geotechnical control of tunnel works in Hong Kong

P. L. R. Pang

## Diagnosing causes of lining cracks in mountain tunnels

C.-H. Lee and T.-T. Wang

## Tunnel excavation failures and unforeseen ground conditions

S. Palazzo

## Failures in air-conditioning systems

D. Arnold

# MONITOR:PROCEEDINGS

## Geotechnical Engineering

167, No. GE5, October 2014, 415–506

### Evaluation of peat strength for stability assessments

N. Boylan and M. Long

### Uncertainty in pile resistance from static load tests database

A. P. Galbraith, E. R. Farrell and J. J. Byrne

### Modelling helical screw piles in soft clay and design implications

S. A. Stanier, J. A. Black and C. C. Hird

### Design and measurement of piled-raft foundations

Y. J. Tang, J. Pei and X. H. Zhao

### Stress history profiling in soils using OCD–G0 anisotropy relationship

T. Ku and P. W. Mayne

### Lessons learnt from installation of field instrumentation

M. S. P. Wan and J. R. Standing



## Prediction of the overflow of sediment from trailer dredgers

J. Spearman

## An analytical approach to explain the Fuhrboter equation

S. A. Miedema

## Municipal Engineer

Management of water and sanitation services

167, No. ME3, September 2014, 121–165

## Economic analysis and survey of water infrastructure in emerging economies

R. Booth

## Water and sanitation in Brazil: the public-private pendulum

L. Heller, S. C. Rezende and S. Cairncross

## Meeting water demand in growing cities: a PPP project in Sudan

R. Save and L. Ryan-Collins

## Water supply and sanitation in China: a review

X. Zhang and Q. Zhao

## Network modelling for road-based faecal sludge management

R. Kennedy-Walker, T. Holderness, D. Alderson, B. Evans and S. Barr



## Ground Improvement

167, No. GI4, November 2014, 233–310

## Improvement of acid sulfate soils using lime-activated slag

S. Islam, A. Haque, S. A. Wilson and P. G. Ranjith

## Comparing column penetration and total-sounding data for lime-cement columns

N. Bergman and S. Larsson

## Swell-shrink behaviour of lime precipitation treated soil

T. Thyagaraj and S. Zodinanga

## Ground improvement by vacuum consolidation – a review

H. Griffin and B. C. O'Kelly

## Reliability-based ultimate limit state design of spread footings on aggregate-pier-reinforced clay

A. W. Stuedlein, J. C. Huffman and S. Reddy

## Stiffness of wall-type grouting under transversal loading

P. Ruggeri, V. M. E. Fruzzetti, A. Vita, D. Segato and G. Scarpelli



## Management, Procurement and Law

167, No. MP5, October 2014, 207–252

## What is best value in public sector building construction?

U. Ojako, J. H. Park, T. Williams, A. Marshall and M. Chipulu

## Innovative construction procurement at Wits University

S. Laryea and R. Watermeyer

## Stimulating sustainable infrastructure development through public-private partnerships

M. Wessels

## Proactive construction safety systems and the human factor

P. Forsythe



## Maritime Engineering

167, No. MA2, June 2014, 55–108

## Nearshore placement of dredged material to support shoreline stabilisation

J. Z. Gailani and S. J. Smith



## Structures and Buildings

167, No. SB10, October 2014, 569–629

## Delivering the Emirates Air Line, London, UK: design and construction of the steel main towers

P. Miller, M. Birchall and F. McCormick

## Delivering the Emirates Air Line, London, UK: north and south stations

J. Rowe and T. Narey

## Emirates Air Line, London, UK: south tower substructure in the River Thames

C. Smith, A. Nikolic and C. Baxter

## Shake table test of reinforced concrete wall structure with concealed bracings

J.-W. Zhang, W.-L. Cao, C. Yu and H.-Y. Dong

## Longitudinal shear resistance of composite slabs

S. J. Hicks, A. F. Pennington and A. S. Jones

## Experimental study of concrete decks restrained by steel strap

B.-W. Cho, C.-H. Kim and S.-T. Yi



## Transport

Climate change

167, No. TR5, October 2014, 267–350

## Forecasting infrastructure resilience to climate change

T. A. Dijkstra, N. Dixon, C. J. Crosby, M. W. Frost, D. Gunn, P. R. Fleming and J. H. Wilks

## The impact of climate change on the European road network

K. Fifer Bizjak, A. Dawson, I. Hoff, L. Makkonen, J. S. Ylhäisi and A. Carrera

## A heuristic approach to reduce carbon dioxide emissions

T. Kramberger, D. Dragan and K. Prah

## Measuring carbon dioxide emissions from the Chinese transport sector

S. Zhou, Y. Yan and X. Yang



## Developing a new road deterioration model incorporating flooding

M. U. Khan, M. Mesbah, L. Ferreira and D. J. Williams

## Determining the quality of highway service caused by rainfall

N. Mashros and J. Ben-Edigbe

## Effects of rainfall intensity on traffic crashes in Hong Kong

L. Y. Yuan, B. Y. Chen and W. H. K. Lam

## Urban Design and Planning

China: city planning in transition – part one

167, No. DP5, October 2014, 187–236

## Changing spatial planning in China's five-year planning system

L. Wang and J. Shen

## China's urban planning and administrative urbanisation: case of Ordos

F. Wang and Y. Liu

## A review of large-scale urban design in China

Y. Tang

## China's urban planning in transition

C. Gu, L. Hu, J. Guo and I. G. Cook



## Waste and Resource Management

Towards zero waste in industrial networks – part two

167, No. WR4, November 2014, 137–190

## Recycling glass fibre-reinforced plastics in the automotive sector

M. Regenfelder, J. Faller, S. Dully, H. Perthes, I. Williams, E. den Boer, G. Obersteiner and S. Scherhauser

## Resource efficiency networks in the construction of new buildings

I. D. Williams, T. Curran, E. den Boer, A. Pertl, D. Lock, A. Kent and P. Wilding

## Zero-waste networks in construction and demolition in Portugal

V. Durão, J. Caixinhas, S. Osório-Peters, E. den Boer, I. D. Williams, T. Curran and A. Pertl

## Business to business end-of-life IT industrial networks

R. Peagram, I. D. Williams, T. Curran, S. R. Mueller, E. den Boer, B. Kopacek, S. Schadlbauer and J. Musterle



## Water Management

167, No. WM9, October 2014, 487–547

## Field study of dynamic behaviour of sediment in combined sewer overflow chambers

Y. Zhou, Y. Chen and W. Shao

## A bridge pier scour model with non-uniform sediments

S. Pournazeri, S. S. Li and F. Haghghat

## Integrating integrated water management

M. Everard

## A coupled 1D and 2D hydrodynamic model for free-surface flows

H. Yu and G. Huang

## Modelling of flow, transport and disinfection kinetics in contact tanks

A. Angeloudis, T. Stoesser, D. Kim and R. A. Falconer



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