Imperial College London





Tunnelling in London: learning lessons from Crossrail

A half day seminar at Imperial College

1:00 – 4:30 pm 18th March 2015, followed by Rankine lecture at 5:30pm

Chair:

Prof. Lidija Zdravković, Imperial College

Session 1		1:00 – 2:30
Harnessing lessons learnt: Crossrail	Mike Black	1:00 - 1:25
initiatives	Crossrail	
Crossrail Sprayed Concrete Lining	Andrew Davis	1:30 – 1:55
Depressurisation at Stepney Green Caverns	Mott MacDonald, UK	
	Emilio Linde	
	OTB Engineering	
Developments in assessing tunnelling-	David Harris	2:00 – 2:25
related ground movements and damage	DI Harris Geotechnics Ltd. Director.	
	BFK. Chief Geotechnical Engineer on	
	C300/C410/C435	
Coffee break		2:30 – 3:00
Session 2		3:00 – 4:30
Research into the behaviour of shafts: wall	Prof. Robert Mair	3:00 – 3:25
strains and ground movements	University of Cambridge, UK	
Investigating the effects of tunnelling on	Dr. Jamie Standing	3:30 – 3:55
existing tunnels: field & laboratory studies	Imperial College London, UK	
Investigating the effects of tunnelling on	Prof. David Potts	4:00 – 4:25
existing tunnels: numerical studies	Imperial College London, UK	

Major developments in the tunnelling industry have been achieved in recent years since the construction of the Jubilee Line Extension and Channel Tunnel Rail Link. Tunnelling and underground construction for Crossrail have provided another opportunity to improve our understanding and experience of the effects of these activities on the ground and the structures lying above and within it. Specific approaches are often necessary for the differing geology beneath London. Crossrail initiatives are seeking to make sure we optimise the lessons learnt from the design and construction processes. These will be described and examples given of lessons learnt from recent experiences on the Crossrail project. In the second session major research programmes run by Cambridge University and Imperial College are described along with some of the key findings. Time will be allowed during the sessions for discussion from the floor.

Venue:

Imperial College London, Department of Civil & Environmental Engineering Skempton Building, London SW7 2BU

Main room:

Overflow room:

LT 164 – ground floor, Skempton Building

LT 201 - first floor, Skempton Building