HALF-DAY WEBINAR

on

Recent advances in design methodology for post-installed reinforcements

Organised by
Department of Civil Engineering, The University of Hong Kong

Supported by
Structural Division of The Hong Kong Institution of Engineers, Institution of Civil Engineers, Hong Kong, Hong Kong Institute of Steel Construction, HILTI (Hong Kong) Limited & Engineering Discipline of Hong Kong Institute of Vocational Education

Date:	14 August 2020 (Friday)
Time:	14:00 – 17:15 (Hong Kong time)
Format:	Webinar

SYNOPSIS

Post-installed reinforcements (PIR) use adhesive or cementitious grout to bond the reinforcements and concrete together. They are widely used to connect new structural components to old concrete structures. However, design methodology for PIR is not available for Hong Kong. This half-day webinar aims at bringing the key international researchers in the field of PIR to share with us their updated knowledge of structural analysis and design of connections involving PIR. In this webinar, different failure modes of PIR in moment connections will be shared. The rebar anchorage design with aid of strut-and-tie method suitable for Hong Kong will be presented. In addition, recent development of high-performance PIR systems and research dedicated to specific applications of PIR will be addressed.

Language: English

CPD Credit: This webinar is recommended for three CPD-hour credits.
e-Certificate of Attendance will be issued to attended participants.

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PROGRAMME RUNDOWN

Time	Topic	Speaker
14:00 – 14:05	*Introduction to the use of Webinar*	
14:05 – 14:15	Opening Address – Ir Prof Francis AU *Head of the Department of Civil Engineering, HKU*	
Chairman: Ir Dr Ray SU		
14:15 – 15:10	Post-installed reinforcing bar technology – State of the art and future developments	Dr Giovacchino GENESIO *Hilti, Germany*
15:10 – 15:15	*5-min Break*	
15:15 – 16:10	Design methods for anchorage of post-installed rebars: Rebar end anchorage design, introduction to anchor theory and the improved bond splitting provision	Dr Daniel LOOI *Swinburne University of Technology, Malaysia*
16:10 – 16:15	*5-min Break*	
16:15 – 17:10	Experimental and analytical study of moment connections with post-installed rebars	Ir Augustus LEE *RMIT, Australia*
17:10 – 17:15	Closing Remarks – Ir Michael LEUNG, *General Manager*, *HILTI (HK) Ltd*	

(This programme might be subject to minor modifications without further notice.)

Registration fee: HK$300 per person (*non-refundable*)

The registration fee includes a webinar book in softcopy.

All payments are non-refundable.

Registration: Please visit our website: http://www.civil.hku.hk/WPIR20/ for online registration. The deadline for the registration will be on **4 August 2020 (Tuesday)**.

Enquiries: For general enquiries, please contact Ms Ruby Kwok:
Tel: +852 2219-4986, Fax: +852 2559-5337, Email: civevent@hku.hk

Please visit our website: http://www.civil.hku.hk/WPIR20/

ABOUT THE SPEAKERS

Dr Giovacchino GENESIO graduated in structural engineering at the University of Florence (Italy) and obtained his PhD at the University of Stuttgart (Germany) on seismic assessment and retrofitting of reinforced concrete structures. He worked as a consultant for 5 years dealing with qualification, design, training and quality inspection of fastening systems. He is currently Code and Approval Engineer for Hilti. His field of interest includes concrete to concrete connections, seismic retrofitting and fastening technology. He is author or co-author of several publications on these topics.

Dr Daniel LOOI is currently a lecturer and course coordinator for the civil engineering programme at Swinburne University of Technology, Sarawak campus, Malaysia. He is a chartered professional engineer (structural) of Engineers Australia and a member of the Earthquake Committee of the Institution of Engineers Malaysia. He obtained his bachelor's degree in civil engineering from The University of Malaya and his PhD in structural engineering from The University of Hong Kong (HKU). He was a postdoctoral fellow in the Department of Civil Engineering of HKU. Daniel has published research works in seismic engineering, concrete mechanics, modular buildings, and fastening technologies, which include post-installed reinforcements. He is the recipient of the HKIE Outstanding Paper Award for Young Researcher/Engineer in 2015. In his earlier career, Daniel worked as a structural application engineer in a multinational company, specialised in structural analysis and design computation for buildings and plants.

Ir Augustus LEE is an RPE and a certified CIC BIM manager. He obtained his BEng (1st Hons), LLB and MPhil in the U.K. He also has a MSc (Distinction) awarded by the HKUST. His PhD research was on "Structural Behaviour of Post-installed Reinforcements in Wall-slab Moment Connections" in RMIT University. He was a BIM panel corresponding member of the IStructE. Currently, he serves as the Structures expert panel and Safety, health and wellbeing panel, in the ICE and IStructE, respectively. He is also a consultant of the RMIT University. His research interests are finite element analysis, modular integrated construction, retrofitting technology and GIS application.