

Address: Hong Kong Polytechnic University, Phase 8, Hung Hom, Kowloon, Hong Kong.
Telephone: (852) 3400 8451 Email: cnerc.steel@polyu.edu.hk Website: <https://www.polyu.edu.hk/cnerc-steel/>

Construction R&D Forum – *Bringing Applied R&D to New Heights*

Development Bureau, the Government of Hong Kong SAR
2022.11.04

Ir Prof. K.F. Chung, Director of CNERC, and Ir Prof. Michael C.H. Yam, Deputy Director and Executive Secretary of CNERC, were both invited to deliver a presentation on the **Construction R&D Forum** at the Grand Hyatt Hotel, Wan Chai on 4 November 2022. The theme of the Forum is “*Bringing Applied R&D to New Heights*”. The title of the presentation by Prof. Chung was “*Effective use of high strength S690 steel in construction – A journey from research and development to engineering application*” while that of Prof. Yam was “*The Smart Construction ERA: Education, Research and Application*”.

The Forum was jointly organized by the Development Bureau (DEVB) of the Government of Hong Kong SAR and the University-Government-Industry Consortium. The event was officiated by

- **Mr. Paul M.P. Chan** *GBM, GBS, MH, JP*
Financial Secretary, the Government of Hong Kong SAR
- **Ir Prof. J.G. Teng** *JP*
President, the Hong Kong Polytechnic University
- **Ms. Bernadette H. H. Linn** *JP*
Secretary for Development, Development Bureau, the Government of Hong Kong SAR
- **Ir Dr. Andrew K.C. Chan** *BBS, JP*
Chairman of Steering Committee, UGI Consortium for Sustainable Urban Development
- **Ir Ricky C. K. Lau** *JP*
Permanent Secretary for Development (Works), Development Bureau, the Government of Hong Kong SAR



Opening Ceremony of the Construction R&D Forum by
Ir Ricky Lau, Prof. J.G. Teng, Mr. Paul Chan, Ms. Bernadette Linn and Dr. Ir Andrew Chan

Through the Centre of Excellence for Major Project Leaders under **the Project Strategy and Governance Office** of the Development Bureau, the Forum brought together about 400 scholars and stakeholders from the Government and the industry. The Forum was an industrial-wide platform to exchange views on promotion and adoption of applied R&D to enhance the industry performance in order to cope with the challenges ahead. It was also part of the celebration of the 25th Anniversary of the Government of Hong Kong SAR.

During his Opening Address, **Mr. Paul Chan** said that the construction industry had long been indispensable to the economic development of Hong Kong. Infrastructure investment was always one of the vital factors underpinning economic revival of Hong Kong. In the next few years, the Government's capital works expenditure would exceed HK\$100 billion a year, and the overall construction volume of Hong Kong would soar to some HK\$300 billion a year. However, Mr. Chan pointed out that the construction industry was facing various challenges such as high construction costs, site safety issues and expectation to deliver results faster and more efficiently. Innovation was the key to tackle these concerns. A closer tripartite collaboration among the Government, the Universities and the Industry would help the Industry embrace innovation supported by applied R&D. The Government would spearhead applied R&D, pilot use of new materials, construction methods and technology in public works projects so that they would serve as a reference for an industrial wide adoption.

While speaking in a keynote presentation, **Ms. Bernadette Linn** said the Government would play a key role in driving construction innovation, in particular, promoting applied R&D in public works projects. The DEVB had set up a taskforce to steer and formulate policies on applied R&D, and to provide support and guidelines to various works departments and authorities with a view to achieving a wider adoption of innovation and technology in the construction industry. Ms. Linn called for support from the Industry in promoting applied R&D to support construction innovation, thereby enhancing the performance and sustainability of the Industry. She added that with Hong Kong's world-class expertise and experience in construction, the Industry would contribute to the development of Hong Kong as well as the realisation of the country's vision to become a global leader in innovation.

When concluding the Forum, **Ir. Ricky Lau** called for a change of mind-set, and urged the industry stakeholders to embrace innovation, equip themselves with innovative R&D outcomes, and drive for excellence in project performance, so as to contribute to the sustainable development of the Industry.

Ir Prof. K. F. Chung presented a comprehensive report on key research and development activities on high strength S690 steel undertaken at the University since 2010. He also explained key structural and economical advantages of adopting these high strength S690 steel in construction. Innovative engineering applications of these S690 steel were fully illustrated in

- the Double Arch Steel Bridge of the Cross Bay Link in the Tseung Kwan O area,
- the long span steel trusses in the Kowloon Tsai Swimming Pool, and
- the two long span steel roofs of the Yuen Long Stadium.



Prof. Chung presenting at the Construction R&D Forum
Presentation title: *Effective use of high strength S690 steel in construction – A journey from research and development to engineering application*



Prof. Yam presenting at the Construction R&D Forum
Presentation title: *The Smart Construction ERA: Education, Research and Application*

During his presentation, Prof. Michael Yam called for a continual industry-wide adoption of innovative technology and management among various stakeholders of the Construction Industry. All these efforts would certainly help the industry get ready for many huge infrastructure projects of the HKSAR Government.