

# **THE HONG KONG POLYTECHNIC UNIVERSITY**

## **DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING**

### **Post Specification**

**Postdoctoral Fellow (several posts) [Appointment period: each for one year initially, with possibility of further appointment]**

### **Duties**

The appointees will assist the Director of the Hong Kong Branch of National Engineering Research Centre for Steel Construction in the research project – “Effective high strength steel construction for sustainable infrastructure development in Hong Kong”. They will also be required to assist the Director of the Centre to manage and execute a number of research projects. The key objectives of the Centre are:

- (a) to establish a high level technological platform to promote effective design and construction of modern building and civil engineering structures as well as sustainable infrastructure development in Hong Kong; and
- (b) to advance technological capabilities of Hong Kong’s construction industry in the design and construction of super high-rise buildings, long span bridges and buildings of large enclosure using high performance materials in Hong Kong and overseas.

The appointees will participate in the following research projects under the thematic research directive “Effective high strength steel construction for sustainable infrastructure development in Hong Kong” funded by the Hong Kong Branch of National Engineering Research Centre for Steel Construction:

1. Material characterisations
2. Ductile metal fracture of high performance steels
3. Bolted connections
4. Welded connections and welding technology
5. Composite columns in multi-storey MiC buildings
6. Hysteretic behaviour of steel
7. Tubular connections
8. Member response on fabricated tubular sections
9. Foundation engineering

Through a combination of targeted laboratory testing and detailed numerical modelling, the Centre aims to generate fundamental data and understanding on the responses of high strength steel materials and members for modern steel construction technology in building and civil engineering structure in Hong Kong.

## **Qualifications**

Applicants should have a doctoral degree or an equivalent qualification in a related discipline and must have no more than five years of post-qualification experience at the time of application.

Applicants are invited to submit an application together with a 2-page proposal\* to Miss Catherine E. Ng at [catherine.e.ng@polyu.edu.hk](mailto:catherine.e.ng@polyu.edu.hk).

\*The brief proposal should include the following:

- Project Title
- Key Objectives and Significance
- Project Outline
- Expected Project Deliverables
- Reference

## **Remuneration**

A highly competitive remuneration package will be offered. Applicants should state their current and expected salary in the application.

March 2021