## THE HONG KONG POLYTECHNIC UNIVERSITY

# DEPARTMENT OF MECHANICAL ENGINEERING / DEPARTMENT OF BUILDING AND REAL ESTATE

# **Post Specification**

#### **Chair Professor of Construction Robotics** (Ref. 20072406)

The Department of Mechanical Engineering (ME) and Department of Building and Real Estate (BRE) jointly invite applications or nominations for the post of Chair Professor of Construction Robotics.

ME and BRE have been two of the three founding departments of the University since 1937.

ME is one of the seven academic units in the Faculty of Engineering. Its world-class faculty and internationally reputed programmes draw students from across the globe. It offers academic programmes at both undergraduate and postgraduate levels, over a large spectrum of topics including Combustion and Pollution Control, Fluid-structure Interactions, Materials and Mechanics, Sound and Vibration, Control and Robotics, Clean Energy Technologies, Aeronautical Engineering, Product Design and Development. Please visit the website at <a href="http://www.polyu.edu.hk/me">http://www.polyu.edu.hk/me</a> for more information about ME.

BRE is one of the constituent departments of the Faculty of Construction and Environment. It offers a full range of programmes leading to the awards at both undergraduate and postgraduate levels. It has an undergraduate student body of over 750 full-time students and over 170 part-time students, and a postgraduate student body of over 300. BRE currently has a total of 25 full-time academic staff, 21 technical and administrative staff and over 100 research personnel. BRE is committed to excellence in teaching, research and service to the community. Please visit the website at <a href="http://www.bre.polyu.edu.hk/">http://www.bre.polyu.edu.hk/</a> for more information about BRE.

#### **Job Functions**

Reporting to the Heads of Departments, the Chair Professor is expected to provide leadership in academic activities, including research, teaching and service in both departments. The appointee is expected to be a senior academic with a proven track record and international research reputation in Robotics and Control, particularly in Smart Construction.

The appointee will be required to:

- (a) provide leadership in all aspects of academic activities, including research, teaching and service in both departments;
- (b) provide leadership and build synergy in existing and emerging technologies including, but not limited to, Construction/industrial Robotics, Mechatronics and Mechanisms, Smart Systems and Control, Digital Construction, Building Information Modelling (BIM), Internet of Things (IoTs), Cloud Computing, 3D Printing and Artificial Intelligence (AI), as well as other strategic interdisciplinary areas pertinent to both departments;
- (c) provide leadership and actively engage in promoting research collaboration, securing external research grants, and enhancing research quality and publication output;

- (d) engage in scholarly research/high-level consultancy;
- (e) supervise research students;
- (f) teach and contribute to curriculum development at undergraduate and postgraduate levels; and
- (g) contribute to academic administration and management in the University.

# **Qualifications**

Applicants should have:

- (a) a doctoral degree in Automation, Robotics, Mechatronics, Smart Systems and Control, Artificial Intelligence, or a closely related field;
- (b) an international reputation in research and scholarship;
- (c) a strong record in attracting research funding and excellence in research outputs;
- (d) a demonstrated commitment to excellence in teaching and learning;
- (e) a global perspective, proven qualities of academic leadership, and a demonstrated ability of fostering collaboration with faculty members with different cultural and research backgrounds in teaching, intellectual contributions and service activities; and
- (f) ability to bring more visibility, prestige and reputation to the University.

Preference will be given to those with experience in the construction discipline and a recognized professional qualification. Interdisciplinary leadership experience would be considered as a major asset.

### **Remuneration and Conditions of Service**

The terms of appointment and remuneration package are negotiable and highly competitive. For general information on the terms and conditions for the appointment of academic staff in the University, please visit the website at http://www.polyu.edu.hk/hro/TC.htm.

## **Application and Nomination**

Applicants are invited to send a detailed curriculum vitae and direct any enquiries to the **Human Resources Office**, **The Hong Kong Polytechnic University**, **Hong Kong via email to search.chairprof-me@polyu.edu.hk**, **quoting the position being applied for and the reference number**. It is optional for applicants to include two to three reference letters in their applications. **Recruitment will continue until the position is filled**. Candidature may be obtained by nominations. General information about the University is available at <a href="http://www.polyu.edu.hk">http://www.polyu.edu.hk</a> or from the Human Resources Office [Tel: 2766 6562].

Applicants should download the application form (72A) from <a href="https://www.polyu.edu.hk/hro/job/en/guide">https://www.polyu.edu.hk/hro/job/en/guide</a> forms/forms.php.