

THE HONG KONG POLYTECHNIC UNIVERSITY

DEPARTMENT OF MECHANICAL ENGINEERING

Post Specification

Assistant Professor in Thermofluids and Combustion (Ref. 19031307)

The Department of Mechanical Engineering is one of the three founding departments of the University since 1937 and 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 <http://www.polyu.edu.hk/me> for more information about the Department.

Duties

The appointee will be required to:

- (a) teach at undergraduate and postgraduate levels;
- (b) conduct research that leads to publications in top-tier refereed journals and awards of research grants;
- (c) undertake research, programme/curriculum development and administration;
- (d) supervise student projects and theses;
- (e) engage in industrial and scholarly research/consultancy activities; and
- (f) undertake academic and departmental administrative duties.

Qualifications

Applicants should have:

- (a) a PhD degree in relevant disciplines;
- (b) relevant post-qualification experience and a good track record of research in but not limited to one or more of following areas:
 - (i) combustion science and technology, advanced combustion systems for power generation/motor vehicles/aircraft, propulsion, turbulent combustion, two-phase combustion, gas-turbine engine, combustion chemistry, micro combustion;
 - (ii) environmental issues related to combustion, clean/renewable fuels, pollutant formation and control in combustion systems;
 - (iii) heat transfer; or
 - (iv) energy conversion and related emerging technologies or platforms;

- (c) strong commitment to excellence in teaching and research;
- (d) good publication records;
- (e) good networking ability; and
- (f) excellent communication skills and the ability to use English as the medium of instruction.

Remuneration and Conditions of Service

A highly competitive remuneration package will be offered. Initial appointment will be on a fixed-term gratuity-bearing contract. Re-engagement thereafter is subject to mutual agreement. For general information on terms and conditions for appointment of academic staff in the University, please visit the website at <http://www.polyu.edu.hk/hro/TC.htm>. Applicants should state their current and expected salary in the application.

13 March 2019