

Research Assistant Professor

Description

Position: Research Assistant Professor

Department: Department of Mechanical and Automation Engineering (MAE), The Chinese University of Hong Kong (CUHK) (Prof. Li ZHANG as mentor)

Level of Education: PhD

Remarks: The position is considered as a full-time academic staff in Dept. of MAE, CUHK

1. Research area and interests

The Dept. of MAE at CUHK, together with the team of Prof. Li ZHANG, is now looking for outstanding candidates for Research Assistant Professor in the areas of **soft robotics**, medical robotics, micro-/nanorobotics, and their related translational research.

- Materials Science: Soft robotics and related technologies, soft matter and active colloids, and functional materials for actuation, sensing and micro-/nanorobots, such as biomaterials, hydrogels, 3D printing, etc.

Experts from different fields, including science, engineering and interdisciplinary, are also welcome

- Controls and Systems: Development of medical magnetic control systems, multi-scale swarm control, algorithms and UI
- Biomedical related: Multi-scale robotics and their medical applications, such as non-invasive medical intervention technology, capsule endoscopy technology, implantable devices and biosensing, pathogen detection and etc.

Home page of CUHK MAE: <https://www4.mae.cuhk.edu.hk/>

Home page of CUHK MAE academic staff:

<https://www4.mae.cuhk.edu.hk/people/academic-staff/>

2. Requirements

Applicants should have (i) a PhD degree in Engineering/Sciences or any related disciplines with post-doctoral training in relevant areas; (ii) a strong commitment to excellence in research and teaching; (iii) a record of excellence in research and potential to conduct innovative work; and (iv) good communication skills and good in English speaking and writing.

Appointees will be expected to (a) develop and/or participate in independent/collaborative research projects; (b) seek external research grants; (c) teach courses for undergraduate and postgraduate students in MAE (d) supervise projects and theses of undergraduate and postgraduate students; and (e) develop and assist in laboratory management.

Remarks:

1. *As required by the funding scheme, the following individuals will not be eligible for consideration: (a) CUHK PhD graduates who have not worked for at least two years elsewhere after obtaining the doctorate; and (b) candidates currently employed by CUHK in any capacity.*
2. *The appointees will have the chance to be promoted to Assistant Professor in the future, subject to their performance.*

3. Employee Benefits

Appointees will be employed by CUHK as Term A staff and eligible to enjoy various benefits of the University. The appointment will initially be made on a contract basis for three years, renewable subject to performance, funding and mutual agreement. The salary will be in the range of HK\$54,000 to HK\$73,710, subject to the qualification and experiences of the appointees.

4. Introduction of Li ZHANG's research group

Li Zhang joined CUHK in 2012. He is now a Professor in the Department of Mechanical and Automation Engineering (MAE), a Professor by Courtesy in the Department of Surgery, an associate member of the Department of Biomedical Engineering (BME) and a member of Chow Yuk Ho Technology Centre for Innovative Medicine. He is also a director of the Shenzhen Institutes of Advanced Technology (SIAT) of the Chinese Academy of Sciences (CAS) – CUHK Joint Laboratory of Robotics and Intelligent Systems. Dr. Zhang is an Outstanding Fellow of the Faculty of Engineering at CUHK and elected as a Fellow of IEEE (FIEEE) and Royal Society of Chemistry (FRSC).

Dr. Zhang's main research interests include small-scale robotics and their applications for translational biomedicine. He has authored or co-authored over 300 publications, including *Science Robotics*, *Nature Machine Intelligence*, *Nature Communications*, *Science Advances*, *Advanced Materials*, *Advanced Functional Materials*, *ACS Nano*, *Accounts of Chemical Research*, *JACS*, *Sensors and Actuators*, *IJRR*, *T-Ro*, *Soft Robotics* and different international meetings. In the past five years, our team's research achievements were reported by Science News, Nature News, CNN, TVB and Xinhua News.

For more detailed information, please visit: <http://www.cuhklizhanggroup.com/>

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