LCQ14: Promoting research and development of Hong Kong

Following is a question by the Hon Tang Fei and a written reply by the Secretary for Education, Dr Choi Yuk-lin, in the Legislative Council today (May 21):

Question:

According to a research publication released by the Legislative Council Secretariat last month, the number of research and development (R&D) personnel per million population in Hong Kong is significantly lower than that of neighbouring regions, and the proportion of local research postgraduates is continuously declining. There are views that research postgraduates also face multiple challenges in employment and the transformation of research outcomes. If such issues are not addressed in a timely manner, Hong Kong's future innovation development and economic restructuring will be affected. In this connection, will the Government inform this Council:

- (1) given that according to the aforesaid research publication, Hong Kong currently has only 4 809 researchers per million population, lagging far behind Singapore and South Korea, whether the Government has drawn up specific measures to attract and nurture local R&D talent, particularly in STEM fields; if so, of the details; if not, the reasons for that; whether it has set specific targets and timelines to increase the number of local R&D personnel in the next three years;
- (2) given that according to the aforesaid research publication, in the 2022-2023 academic year, only 63 per cent of research postgraduates from universities funded by the University Grants Committee secured full-time employment within six months after graduation, and only 11.6 per cent of graduates could manage to find jobs directly related to their studies, whether the Government has tailor-made support measures to address the employment challenges faced by research postgraduates, so as to help them maximise their potential and meet the needs of the local R&D industry; if so, of the details; if not, the reasons for that; and
- (3) as there are views pointing out that while Hong Kong's R&D outcomes reach international standards, they fall short in terms commercialisation and industrialisation, whether the Government will strengthen efforts to promote industry-academia-research collaboration to enhance the industrialisation of R&D outcomes and foster the development of an innovative economy; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government has all along been dedicated to promoting the development of innovation and technology (I&T), with a view to driving economic restructuring and more diversified development. Apart from the nation's clear support for Hong Kong's development into an international I&T hub under the 14th Five-Year Plan, the recently promulgated 2024-2035 master plan on building China into a leading country in education also proposed to establish an integrated co-ordinating mechanism for education, technology and talent, strengthening the supportive role of education for science and talent, closely tying in with the development of technological innovative centres in the Guangdong-Hong Kong-Macao Greater Bay Area and the development of a highland for high-level calibre and platform for attracting talent, and enhancing the overall efficacy of the innovation system.

The replies from the Education Bureau and the Innovation, Technology and Industry Bureau to the Hon Tang Fei's question are as follows:

(1) and (2) The Government has been expanding the local research and I&T talent pool through a multi-pronged approach. On the front of nurturing talent, the Government guides the University Grants Committee (UGC)-funded universities to align their planning with the nation's strategy of invigorating China through science and education, and support the goal of developing Hong Kong into an international I&T hub, including setting the key performance indicators in the 2022 Policy Address with 35 per cent of the students pursuing UGC-funded programmes to study in STEAM (science, technology, engineering, arts and mathematics) subjects. In addition, publicly-funded research postgraduate (RPg) places have been gradually increased from 5 595 in the 2022/23 academic year to 7 200 places in the 2024/25 academic year. Together with the gradual uplift of the over-enrolment ceiling from 70 per cent in the 2021/22 academic year to 100 per cent, institutions could flexibly enrol 14 400 RPg students at most, which is an increase of more than half, to constantly expand the I&T and research talents of Hong Kong.

Additionally, the STEM Internship Scheme under the Innovation and Technology Commission (ITC) subsidises undergraduates and postgraduates taking full-time STEM-related programmes to enrol in short-term internships, so as to foster their interest early in pursuing careers in I&T after graduation. The Research Talent Hub under the ITC also provides funding support for eligible companies or organisations to engage university graduates to conduct research and development (R&D) work.

For attracting talent front, the InnoHK Research Clusters has successfully attracted R&D talents from all over the world to Hong Kong, with over 2 500 local, overseas and Mainland researchers involved, and has provided training for over 1 200 PhD students. The ITC will launch the Frontier Technology Research Support Scheme, with a view to attracting international top-notch talents to conduct basic research in frontier technologies in Hong Kong and nurture local researchers.

According to the report "Hong Kong Innovation Activities Statistics

2023" released by the Census and Statistics Department in December 2024, the number of R&D personnel has reached 43 403 in 2023, which has increased steadily over the years.

(3) With an aim to enhance the I&T ecosystem and Hong Kong's competitiveness on the I&T front, the Government has been promoting collaboration among the industry, academic and research sectors through various measures, and adopting a multi-pronged approach to support commercialisation of R&D outcomes of local universities. For example, the \$10 billion Research, Academic and Industry Sectors One-plus Scheme under the Innovation and Technology Fund (ITF) funds, on a matching basis, research teams from universities with good potential to become successful start-ups to transform and commercialise their R&D outcomes, while industry sponsorship is a mandatory requirement. Furthermore, the ITF will continue to provide annual funding to the Technology Transfer Office of each of the eight UGC-funded universities, thereby supporting the development of innovative ideas and R&D outcomes into new products or services. The R&D centres set up by the Government have also been taking forward industry-driven applied R&D work that suits market needs and transferring technologies to the industries through contract researches, licensing arrangements, etc to commercialise their R&D outcomes. Meanwhile, the Government facilitated the establishment of the Hong Kong New Industrialisation Development Alliance. Pooling together talent and resources from various fields, the Alliance aims to serve as a platform for collaboration among the Government, industry, academia, research and investment sectors. With a view to promoting co-operation among enterprises and organisations, we believe that the Alliance will also be conducive to the promotion of transformation and commercialisation of R&D outcomes.