

HKBU and Agilent (China) establish joint lab to promote research on new pollutants and toxicology

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The Hong Kong Baptist University (HKBU) State Key Laboratory of Environmental and Biological Analysis (SKLEBA) and Agilent Technologies (China) have jointly established the "SKLEBA (HKBU) - Agilent Joint Laboratory".

With its research focus on environmental new pollutants analysis and toxicology, the Joint Laboratory will provide scientific support to authorities in formulating public health policies, making contributions to Hong Kong, the Greater Bay Area, and the Nation.

The SKLEBA at HKBU is dedicated to cutting-edge research on persistent organic pollutants, while Agilent Technologies has state-of-the-art instruments and extensive expertise in engineering with robust technical support. The establishment of the Joint Laboratory will create a more advanced research and analysis platform, further empowering HKBU to broaden its capabilities in scientific research.

This collaboration will enable HKBU to delve deeper into the research on environmental and food safety as well as forensic analysis, responding to societal needs for environmental and biological analysis technologies.

The Joint Laboratory will be equipped with cutting-edge facilities, including the Gas Chromatography Mass Spectrometers for the analysis of volatile environmental pollutants and metabolites; a Liquid Chromatography Quadrupole Time-of-Flight Mass Spectrometer for the analysis of non-volatile environmental pollutants and metabolites; and an Infrared Microscope for examining the form and chemical composition of microplastics in the environment and in foods. Researchers will leverage the facilities along with advanced ionisation technology to identify trace pollutants in the environment; analyse and detect carcinogenic and DNA mutation chemicals in food such as acrylamide, melamine and malachite green; detect explosives and their compounds; and rapidly identify drugs and contraband such as fentanyl and ketamine.