Environmental Research, Technology Demonstration and Conference Project

ECF Project:	ECF 2018-05
Project Title:	International Conference on Sustainable Biowaste Management (SBM 2020)
Principal Investigator:	Professor Jonathan W C Wong, Department of Biology, Hong Kong Baptist University
Total Approved Grant:	\$300,000 or 70% of the total actual expenditure, whichever would be the less
Duration:	1/1/2019 to 30/4/2021
Project Status/Remarks:	Completed
Project Scope:	Increasing urban population and industrialisation are the key factors causing serious global environmental problems including increased solid waste generation, decreased soil quality, inadequate nutrient recycling, and increased emission of greenhouse gases. Similar situation is faced in densely populated Hong Kong which generates over 10,000 tonnes of municipal solid waste per day, of which 35% is food waste. Landfilling remains the main treatment technology which has additional environmental consequences. All these issues are interlinked and therefore there is a pressing need to develop integrated biotechnological approaches which allow efficient (bio) organic waste conversions for production of chemicals, materials, energy and food to provide greater profitability and environmental sustainability. However, current situation of such technologies in Hong Kong and/or overall Asia is not very appealing and technologies are not well integrated to achieve the goal of sustainability. Therefore, the conference created a timely platform to bring successful case studies and research innovations from developed and developing countries and devise strategies for waste management industry which is expected to face a huge transition with more business opportunities. Also, the conference also provided networking opportunities for young student researchers to exchange ideas with eminent scientists during the conference, which will ultimately benefit Hong Kong.

Summary of the Findings/Outcomes:	Due to pandemic Covid-19, the project team has deferred the conference from 2020 to 2021 and decided to go have a virtual SBM2021 conference in April 12 to 15, 2021. The conference has attracted an overwhelming 438 participants from 39 countries and regions to attend the conference. In addition to 7 keynote presentations, there were three parallel platform sessions and 3 parallel poster sessions daily for 3 consecutive days with a
	total of 89 platform presentations and 45 poster presentations. SBM 2021 provided a great opportunity and platform to exchange the views, visions, and experiences on bio-technology, bio-fertilizers and bio-products, and climate change abatements related to biowaste management. The outcome has immensely benefitted Hong Kong, Asia-Pacific partners and Western countries through knowledge exchange, fostering of collaborations and development of appropriate waste management technologies.