

**PolyU's ECF 2021-22 Funded Projects**

<b>Project</b>	<b>Lead Researcher</b>	<b>Funding Amount (HK\$)</b>
Engineering a microbial biosensor for monitoring microplastics pollution	Dr CHUA Song Lin, Assistant Professor, Department of Applied Biology and Chemical Technology	499,000
Development of Novel Photocatalytic Technology for Solar-driven Simultaneous Hydrogen Production and Pollutant Degradation from Wastewater	Dr HO Cheuk-lam, Assistant Professor, Department of Applied Biology and Chemical Technology	500,000
Green Conversion of Microalgal Biomass into High Value Products	Dr YUNG Ka-fu, Associate Professor, Department of Applied Biology and Chemical Technology	498,000
Optimal design of high performance textile-based solar steam generator by tunable capillary evaporation	Dr SHOU Dahua, Assistant Professor, Institute of Textiles and Clothing	485,300
Innovative Bifacial Solar Photovoltaic: from theoretical model to its practical application in Hong Kong	Ir Prof. LU Lin Vivien, Professor, Department of Building Environment and Energy Engineering	494,000

Press Release

新聞稿

<b>Project</b>	<b>Lead Researcher</b>	<b>Funding Amount (HK\$)</b>
World Meteorological Organization (WMO) - Global Atmosphere Watch (GAW) VOC Expert Workshop	Ir Prof. GUO Hai, Professor, Department of Civil and Environmental Engineering	500,000
Study of High Purity Oxygen Aeration for Biological Polishing of Chemical Enhanced Primary Treated Sewage Effluent and Cellulase Production from Sludge	Dr LEU Shao Yuan, Associate Professor, Department of Civil and Environmental Engineering	1,999,800
Recycling yard waste into new-generation biochar adsorbents for CO <sub>2</sub> and VOCs removal	Prof. Dan TSANG, Professor, Department of Civil and Environmental Engineering	1,179,557
Climate-Resilient Planning and Design for Coastal Stormwater Drainage Systems	Dr WANG Shuo, Assistant Professor, Department of Land Surveying and Geo-Informatics	490,600
A multi-source remote sensing based technique for monitoring oil spills	Prof. Charles Man-sing WONG, Professor, Department of Land Surveying and Geo-Informatics	1,920,520

Press Release

新聞稿

<b>Project</b>	<b>Lead Researcher</b>	<b>Funding Amount (HK\$)</b>
Intelligent monitoring and diagnosis platform for second-life battery energy storage systems based on artificial intelligence and internet of things technologies	Dr WANG Minghao, Research Assistant Professor, Department of Electrical Engineering	499,000
Developing high power electric vehicle (EV) chargers using waste graphite and separators derived from end-of-life EV batteries	Dr XU Zhenglong, Assistant Professor, Department of Industrial and Systems Engineering	464,400
GPS-assisted Smart Robot with Self- exploration Ability for Litter Pick-up and Sorting on Curved Hillsides	Dr CHU Kar Hang Henry, Assistant Professor, Department of Mechanical Engineering	499,400
<b>Total</b>		<b>10,029,577</b>