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| **2021/22** | |
| **Dissertation Topics** | **Supervisor** |
| Innovative Applications of Advanced Solar Photocatalysis | Prof. Michael LEUNG |
| Citizen Science and Smart City Development (wastewater recycling) | Dr. Wanxin LI |
| Life Cycle Sustainability Assessment for "Green" Hydrogen Technologies and Application in Hong Kong: A Technologies Synergism Perspective | Dr. Liang DONG |
| Plastic Leakage Baseline Assessment in Hong Kong | Dr. Carol LIN |
| Exploring the Waste Landscape and Urban Metabolism in Hong Kong: a Spatial Explicit Material Flows Analysis | Dr. Liang DONG |
| Citizen Science and Smart City Development (misconnection of sewage to storm water pipe) | Dr. Wanxin LI |
| Liquid Crystal Monomers in Air Condition Dust | Dr. Henry HE |
| Risk assessment of the impact of flood disasters on traffic in Hong Kong under extreme climate | Dr. Shauhrat CHOPRA |
| Exploring the Sustainability of a Novel Cryptocurrency Based on Proof of State (PoS) and Blockchain: Comparative Study with Bitcoin on Carbon Emission and Social Justice | Dr. Liang DONG |
| Lactic Acid and Lipase Production from Food Waste via Microbial Fermentation | Dr. Carol LIN |
| Development of Recycling Process for Primary Alkaline Batteries | Dr. Denis YU |
| Gas−Particle Partitioning and Human Inhalation Hazards of The Liquid Crystal  Monomers (LCMs) In Indoor Air | Dr. Henry HE |
| Development of Photocatalyst for Hydrogen Production | Prof. Michael LEUNG |
| Wood Film application in Thermochromic Smart Window | Dr. Edwin TSO |
| Transition metal-based carbon nanomaterials for Hydrogen Evolution Reaction (HER) | Prof. Michael LEUNG |
| Photocatalytic HI splitting for hydrogen generation | Dr. Sam HSU |
| Dynamic performance investigation on absorption thermal energy storage | Dr. Wei WU |
| Integrated block chain and carbon footprint tool for the MRV on corporate’s carbon mitigation performanc | Dr. Liang DONG |
| Discovery of emerging organic contaminants in recycling e-device | Dr. Henry HE |
| Interim report of polymer electrolyte development for lithium-ion battery application | Dr. Denis YU |

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| **2020/21** | |
| **Dissertation Topics** | **Supervisor** |
| Bio-photoelectrochemical Hybrid Devices for Simultaneous Wastewater Treatment and Solar-fuel Generation | Dr. Sam HSU |
| Photochemical Xxidation of Air Pollutants | Prof. Chak K. CHAN |
| Citizen Science and Smart City Development: An Exploratory Study of the Greater Bay Area | Dr. Wanxin LI |
| Development of an Integrated Motor Drive for Drone Propulsion | Dr. Chunhua LIU |
| Metal pollution in the Pearl River Estuary | Prof. Wenxiong WANG |
| Investigating VOCs concentrations and emissions from satellite over the Guangdong-Hong Kong-Macau Greater Bay Area | Dr. Xuan WANG |
| UV-resins for Battery Applications | Dr. Denis YU |

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| **2019/20** | |
| **Dissertation Topics** | **Supervisor** |
| Comparative Investigations of Different HVAC Systems with / without Desiccant Dehumidifiers | Dr. Wei WU |
| Comparitive Study on Policies of Marine Plastic Litter Management between Two Asian Parts: Hong Kong and Mumbai, India | Dr. Liang DONG |
| Life Cycle Assessment for Circular Economy Decision-Making | Dr. Shauhrat CHOPRA |
| Thermal Effects on Urban Flow and Dispersion | Dr. Keith NGAN |
| Bio-photoelectrochemical Hybrid Devices for Simultaneous Wastewater Treatment and Solar-fuel Generation | Dr. Sam HSU |
| Citizen Science and Water Conservation in Hong Kong | Dr. Wanxin LI |
| Citizen Science and Water Conservation in Hong Kong | Dr. Wanxin LI |
| The Environmental Protection Policy and It's Application of Greater Bay Area | Dr. Wanxin LI |
| Resilience Analytics of Interdependent Infrastructure in Hong Kong | Dr. Shauhrat CHOPRA |
| Urban Green Space Management and Policy Implementation in Xi'an, China | Dr. Liang DONG |

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| **2018/19** | |
| **Dissertation Topics** | **Supervisor** |
| Crosslinking polymer for battery applications | Dr. Denis YU |
| Hybrid perovskite solar cells for electricity generation | Dr. Sam HSU |
| Develop Indicators of Sustainable Development Goals for Neighbourhoods in Hong Kong | Dr. Shauhrat CHOPRA |
| Spatio-temporal characteristics of micro-scale airflow at the Hong Kong International Airport as observed by a short-range LIDAR | Dr. Keith NGAN |
| Influence of supporting electrolytes and additives on carbon-based electrodes in the cerium solution | Dr. Walid DAOUD |
| (Bio-) photoelectrochemical devices for solar-fuel generation | Dr. Sam HSU |
| Development of Metal-Organic Framework (MOF) - Carbon Composite as adsorbents for high-performance gas adsorption and separation | Dr. Jin SHANG |
| Assess Resilience of Hong Kong's Transportation Infrastructure to gange its Climate change adaption capabilities | Dr. Shauhrat CHOPRA |
| Development of zeolite-carbon composite as adsorbents for high-performance gas adsorption and seperation | Dr. Jin SHANG |
| Comparison of Double-stator Permanent-Magnet Electric Machinese for Low-speed Application | Dr. Chunhua LIU |
| Energy conversion between factories and residential buildings for energy conservation | Dr. Wei WU |
| Design of TiO2 based nanomaterials for marine anti-corrosion and antifouling technology | Prof. Michael LEUNG |
| The development of Hybrid Semiconductors for Photovoltaic Cells | Dr. Sam HSU |
| Recycling of nickel metal hydride (NiMH) batteries | Dr. Denis YU |
| Stability of High-voltage High-capacity Cathode Material for Lithium ion Batteries | Dr. Denis YU |
| Iron and Nitrogen Doped on Carbon Material as Electrocatalyst for Oxygen Reduction Reaction (ORR) and Oxygen Evolution Reaction (OER) | Prof. Michael LEUNG |
| Comparative Investigations of Different HVAC Systems with / without Desiccant Dehumidifiers | Dr. Wei WU |

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| **2017/18** | |
| **Dissertation Topics** | **Supervisor** |
| Development of a wireless charging system for city tram | Dr. Chunhua LIU |
| Development of a low-speed machine for electric robotics | Dr. Chunhua LIU |
| Photovoltaic And Battery Systems for Peak Electricity demand reduction in Hong Kong Residences | Dr. Ian RIDLEY |
| Development of porous "Nano Containers" for smart gas storage and release | Dr. Jin SHANG |
| Pollution haven hypothesis and regional heterogeneity in environmental regulation | Dr. Lin ZHANG |
| The effectiveness of emission trading on the energy efficiency in China | Dr. Lin ZHANG |
| Energying Business Models of Solar Energy in Asia | Dr. Masaru YARIME |
| Policy and Institutional Analysis of Innovation Systems on Smart Cities | Dr. Masaru YARIME |
| Variability of Solar Radiation in Hong Kong | Dr. Wen ZHOU |
| Secondary organic aerosol formation | Prof. Chak K. CHAN |
| Atmospheric heterogeneous reactions | Prof. Chak K. CHAN |
| Modelling changes in particulate dispersion in HK parks induced by the replacement of exotic trees with native varieties | Prof. Peter BRIMBLECOMBE |
| APEC 2014, blue skies and short term improvement to Beijing's air quality | Prof. Peter BRIMBLECOMBE |
| Evaluate impacts of Southeast Asia biomass burning on Hong Kong air quality using WRF-CMAQ models | Dr. Nicky LAM |
| The diurnal cycle along South China coast during summer monsoon season | Dr. Wen ZHOU |

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| **2016/17** | |
| **Dissertation Topics** | **Supervisor** |
| Smart Environment: Superhydrohobic membrane distillation for wastewater resource recovery and reuse | Dr. Alicia AN |
| Noble Development for Seawater Desalination | Dr. Alicia AN |
| Air pollution | Prof. Peter BRIMBLECOMBE |
| Spatial decoration of cocatalysts on tungsten oxide for the remediation of micropollutants | Dr. Wey Yang TEOH |
| Development of a Wireless Power Transfer System for Aircraft Charging | Dr. Chunhua LIU |
| Development of a New Wireless Charging for Micro Medical Robotics | Dr. Chunhua LIU |
| Recyling of Primary Batteries | Dr. Denis YU |
| Direct Fermentation of Sugars to Jet Fuel | Dr. Carol LIN |
| Carbon Audit | Prof. Michael LEUNG |
| Electrochemical Study of cerium redox couple for flow battery application | Dr. Walid DAOUD |
| Self-cleaning materials and surfaces via nanotechnology | Dr. Walid DAOUD |
| Economic Analysis and Climate Change Policy: Lessons Learned and Future Challenges | Dr. Aude POMMERET |
| Post Occupation Evaluation (POE) of Academic Building 3, CityU, Hong Kong | Dr. Ian RIDLEY |
| Simulation Derived Multiple Regression Models of Indoor Thermal Comfort and Energy Performance in Residential Units of Hong Kong's Public Housing | Dr. Ian RIDLEY |
| Building Performance Assessment in Energy Use of Commercial Buildings in Hong Kong | Prof. Michael LEUNG |
| Stratosphere - troposphere Coupling and Blocking | Dr. Keith NGAN |
| Turning waste into energy for waste reduction and resource saving | Dr. Alicia AN |
| Cathode materials for sodium-ion batteries | Dr. Denis YU |

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| **2015/16** | |
| **Dissertation Topics** | **Supervisor** |
| Enhanced oil sorption performance of polystyrene nanofibers using carbon nanotube composite fabricated by electrospinning | Dr. Alicia AN |
| Quantitative Comparison of Stator-PM Machines for Wind Power Generation | Dr. Chunhua LIU |
| Design and Analysis of Dynamic Charging of Electric Vehicle by Wireless Power Transfer | Dr. Chunhua LIU |
| Electrochemical Characteristics of Layered-Spinel Li2MnO3/Li4Mn5O12 Composite Powders as Lithium Battery Electrode Materials | Dr. Denis YU |
| Analysis on the possibility in adopting the Passive Architectural Design for high-rise buildings in Hong Kong | Dr. Ian RIDLEY |
| An Analyse in the Feasibility of Adapting Renewable Energy for Hong Kong | Dr. Aude POMMERET |
| Long Term Trends in Visibility and Air Pollution in Hong Kong | Prof. Peter BRIMBLECOMBE |
| Effect of anthropogenic behavior on air pollution during Chinese New Year in different cities: A case study of 2015 | Prof. Peter BRIMBLECOMBE |
| Vertical profile campaign using CE-DOAS and bag sampling technique | Dr. Nicky LAM |
| Developing a Technique to Combine Active and Passive DOAS Measurements using a LP-DOAS Instrument | Dr. Nicky LAM |
| Data Assimilation of Personal Exposure Profile with Air Pollution and Environmental Sensors | Dr. Zhi NING |
| Evaluation of Evaporative VOCs in Passenger Vehicles for Regional Air Quality Management | Dr. Nicky LAM |
| Local Governance for Mitigating Climate Change in Hong Kong | Dr. Scott VALENTINE |
| Sustainability Assessment for  Metropolitan City | Prof. Michael LEUNG |

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| **2014/15** | |
| **Dissertation Topics** | **Supervisor** |
| Designing of Organic Capped Noble Metal Functional Nanomaterial as Novel Sensitizers for Solar Cells | Dr. Michael LEUNG |
| Aerogel in Thermoelectric Material | Dr. Walid DAOUD |
| Functional evaluation of novel cellulose-degrading enzyme | Dr. Patrick LEE |
| Greenhouse Gas Accounting in Waste Sector in Hong Kong | Dr. Alicia AN |
| Implementation of Environmental Education in Hong Kong: A Evaluation of the Environmental Education Outcome | Dr. Aude POMMERET |
| Impact of traffic block on the urban roadside and general air quality in Hong Kong | Dr. Zhi NING |
| Fast charging anode material for Li-ion batteries | Dr. Denis YU |
| Modification of Carbon-based Electrode for Electrochemical Energy Storage | Dr. Walid DAOUD |
| Vertical NO2 measurements with cavity enhanced differential optical absorption spectroscopy | Dr. Nicky LAM |
| Benchmarking Greenhouse Gas Emissions of Office Buildings in Hong Kong | Dr. Michael LEUNG |
| Temporal variation of black carbon concentration in Hong Kong and its possible reasons | Dr. Zhi NING |
| Particle Size and Alloy Composite Effect on Aluminum Anode Material for Li-ion Batteries | Dr. Denis YU |

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| **2013/14** | |
| **Dissertation Topics** | **Supervisor** |
| Turning carbon dioxide into fuel: computational study of catalytic CO2 reduction | Dr. Patrick SIT |
| Aging and High Temperature Testing of Li-rich Materials as Cathode for Li-ion Battery | Dr. Denis YU |
| Spatial and temporal variability of precipitation over Hong Kong, 2010-2013 | Dr. Keith NGAN |
| Feasibility Study of Co-Generation by Landfill Gas in Hospitals in Hong Kong | Dr. Michael LEUNG |
| Air-conditioner with direct contact between air and chilled water | Dr. Michael LEUNG |
| Relationship between mechanical properties of binder and stability of alloy anodes — Feasibility Research of Polyimide DB100 binder in Tin-Based Materials | Dr. Denis YU |
| Studying the relationship between PM2.5 concentration and meteorological conditions in Beijing | Dr. Zhi NING |
| Waste to Energy – A sustainable Solution to Municipal Solid Waste Management in Hong Kong | Dr. Patrick LEE |
| Investigation of Vehicle Emissions Control on Urban Air Quality | Dr. Zhi NING |
| Develop a Portable and Open Source Air Quality Monitors Based on Arduino Platform | Dr. Zhi NING |
| Development of an algorithm for automatic calculation of passing-by vehicle emission factor from roadside measurement | Dr. Zhi NING |
| A STUDY OF THE PHOTOCATALYTIC PROPERTIES OF GLUTATHIONE (GSH)-CAPPED GOLD NANOCLUSTERS (Aux -NCS)/TiO2 IN THE PHOTODEGRADATION OF BISPHENOL A (BPA) UNDER VISIBLE LIGHT | Dr. Wey Yang TEOH |
| Energy Efficiency and Thermodynamic Analysis of Advanced Oil Free Magnetic Bearing Chiller System | Dr. Michael LEUNG |
| Determination of the air, surface, and skin microbiomes of Hong Kong’s households using high-throughput metagenomic sequencing analysis | Dr. Patrick LEE |
| Production of lactic acid in Escherichia coli (E. coli) SDU4 under different fermentation conditions | Dr. Carol LIN |
| Urban Ambient Air Monitor of Black Carbon Concentration by Busing AethalometerTM Instrument | Dr. Zhi NING |
| Numerical Investigation for Optimizing Performance of Triboelectric Generators for Mechanical Energy Harvesting | Dr. Walid DAOUD |

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| **2012/13** | |
| **Dissertation Topics** | **Supervisor** |
| Elucidating the mechanism of novel Fe-based nanocatalysts in the preferential oxidation of carbon monoxide | Dr. Wey Yang TEOH |
| Photodeposition of noble metals and metal-oxides on colloidal semiconductor nanocrystals for solar energy harvesting, water splitting and hydrogen generation | Dr. Wey Yang TEOH |
| Graphene oxide modified gold electrode as electrochemical senor for detection heavy metal ions in drinking water | Dr. Wey Yang TEOH |
| Trigeneration – A Study of Trigeneration System and Its Potential of Development in Hong Kong | Dr. Josie CLOSE |
| Identification of novel anaerobic fermentative bacteria in cellulose-degrading consortia | Dr. Patrick LEE |
| Life-cycle evaluation of greenhouse gas emission of precast concrete panel | Dr. Michael LEUNG |
| Fabrication of Hematite Photoanode for Photoelectrochemical Water Splitting | Dr. Wey Yang TEOH |
| Photocatalytic Microfluidic Reactor for Dye Degradation | Dr. Michael LEUNG |
| Investigation of indoor air quality: two case studies | Dr. Zhi NING |
| Energy-Efficient Cold Water Drop Air Conditioner | Dr. Michael LEUNG |
| Fabrication of Nanogenerator | Dr. Walid DAOUD |
| Towards a small scale tidal energy generation system in remote shallow areas with low speed currents | Dr. Josie CLOSE |
| Research on the synoptic weather pattern of extreme temperature in Macao | Dr. Wen ZHOU |
| Can we predict heat waves a season ahead in Hong Kong? | Dr. Francis TAM |
| Factors Effecting a Solar-TEG Hybrid System | Dr. Walid DAOUD |
| Waste heat recovery for enhancing heat dissipation by thermoelectric materials | Dr. Walid DAOUD |

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| **2011/12** | |
| **Dissertation Topics** | **Supervisor** |
| Commuter Pollution Exposure in Hong Kong Transport System | Dr. Zhi Ning |
| Photocatalytic Water Splitting Over Quantum Dot-Sensitised Titanium-Graphene Nanoassemblies | Dr. Wey Yang Teoh |
| PM, NOx and Butane emissions from on-road vehicle fleets in Hong Kong and their implications on emission control policy | Dr. Zhi Ning |
| Advanced Cooling of LED Lighting System by Heat Pipe | Dr. Michael Leung |
| Advices on greener consumption of clothing in Hong Kong by evaluation of carbon footprint for garment products though Life Cycle Analysis | Dr. Michael Leung |
| Doppler Weather Radar Dynamics Retrieval for Thunderstorm Nowcasting | Co-supervised by Dr. Wen Zhou and Dr. Li Ping Wah from HKO |
| Life cycle GHG analysis for crystalline silicon and thin film generation photovoltaics | Dr. Michael Leung |
| Optimal use of green technologies on roof of hig-rise buildings to achieve high green-building performacne | Dr. Michael Leung |
| Life cycle assessment of waste management options in megacity Focus on food waste | Dr. Nicky Lam |
| Life cycle assessment of food waste management options in megacity such as Hong Kong | Dr. Patrick Lee |
| Remediation of contaminated drinking water using novel graphene/ photocatalyst nanocomposites | Dr. Wey Yang Teoh |
| Developing a smart bus distribution model for improving Hong Kong roadside air quality | Dr. Zhi Ning + Dr. Nicky Lam |
| Predicting the day-to-day variations of air quality of Hong Kong using an NWP model | Dr. Francis Tam |

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| **2010/11** | |
| **Dissertation Topic** | **Supervisor** |
| Designing of nanotubular arrays as efficient photoelectrodes | Dr. Wey Yang TEOH |
| The impact of ENSO on the East Asian winter climate and its decedal variability | Dr. Francis TAM |
| Nanostructured photocatalysts for solar water purification | Dr. Michael LEUNG |