

# Propulsion Futures Beacon Projects' theme

- PF001 Modelling (Richard Wheatley)
- PF002 From epitaxy to science and processing technologies of novel van der Waals crystals (Amalia Patane)
- PF003 Solid State H2 Storage Demonstrator (David Grant)
- PF005 Strategic linkage with BUAA for Hydraulic Propulsion Drives (Seamus Garvey)
- PF007 Metal anodes for Li-ion and Na-ion batteries (Darren Walsh)
- PF008 Hybrid Coatings for Conductors and Insulators (David Grant)
- PF010 Translating Energy Materials into Prototype Scale Devices (David Amabilino)
- PF011 Hybrid Electric VTOL UAV (Richard Glassock)
- PF012 Molecular Materials for Energy Generation Devices (Neil Champness)
- PF013 EPR facility (Jon McMaster)
- PF014 Additive manufacturing for Thermoelectric device array fabrication (Simon Woodward)
- PF016 Thermal conducting Nanocomposites (Xianghui Hou)
- PF017 XPS x-ray photoelectron spectroscopy (James O'Shea)
- PF018 DNP - dynamic nuclear polarization (Jeremy Titman)
- PF019 Exploring and harnessing charge-, spin- and phonon-quanta in new semiconducting quantum systems (Amalia Patane)
- PF020 Thermal Conductivity equipment (Xianghui Hou)
- PF021 High Speed Multi Air Gap Machines & Rotor Assembly (Chris Gerada)
- PF023 Integrated Genset with Gas Turbines (Chris Gerada)
- PF026 Synergy Lead (Seamus Garvey)
- PF028 Reliability of Electrical Systems for Aircraft (Paolo Giangrande)
- PF029 Spark Plasma Sintering (Ming Li, Fang Xu)
- PF033 Optically Accessed Dynamic Bearing Loading Rig (Alasdair Cairns)
- PF034 Inverted Raman Microscope (Lee Johnson)
- PF035 Multi MW Propulsion Facilities (Michael Galea, Chris Gerada)
- PF036 High Speed Intensified Imaging
- PF037 Aerospace Demonstrator Lead (Richard Glassock)
- PF039 Materials Processing (Ming Li)
- PF040 High Energy Density Power Train (Michael Gimeno-Fabra)
- PF041 RExMoto\_Phase1 (Richard Glassock)
- PF042 Power Hardware in the Loop (Michael Galea)
- PF043 MBE of group III-nitrides (Sergei Novikov)
- PF044 Liquid Plasma Processing platform (Tanvir Hussain)
- PF045 Electrical-FAN (Phase1) (Paolo Giangrande)
- PF046 Device Lab Technician (David Amabilino)
- PF047 Energy Storage Devices (Lee Johnson)
- PF048 Thin Film Analysis equipment (Simon Woodward)
- PF049 Slot Dye Coater (David Amabilino)
- PF050 Optoelectronic device fabrication (David Amabilino)
- PF051 Imaging ellipsometer (Chris Mellor)
- PF053a Nanostructured Oxides as Electrode Materials (David Amabilino)
- PF053b Magnetron Sputtered Thin Films and Composites for Automotive and Aerospace Electrical Insulation (Michael Gimeno-Fabra)
- PF053c High-performance perovskite solar cells (Ming Li)
- PF053e Fuel Cell and Their Fuels (Ming Li, Gavin Walker)
- PF053f Nanoscale characterisation of bulk heterojunctions formed by organic materials for photovoltaic devices (David Amabilino)
- PF053g One-Dimensional Metal Oxides in Carbon Nanotubes for Energy Storage Materials (Andrei Khlobystov)
- PF053h Triboelectric energy harvesting from interaction of polymeric materials (Xianghui Hou)
- PF053i Characterisation of nanocrystalline Thin-Films-Graphene (TFG) UV-VIS-NIR photon detectors (Oleg Makarovsky)
- PF053j Transformative semiconducting materials for energy conversion and optoelectronics (Amalia Patane)
- PF053k Exploring and harnessing charge- and spin-quanta in two-dimensional quantum systems (Amalia Patane)
- PF053l Preparation of redox active chromophores for energy generation and storage at interfaces (David Amabilino)
- PF053m Applications of Carbon Nanotube/Metal Oxide Hybrids in Electrochemical Energy Storage (Neil Champness)
- PF053n Development of advanced polymer nanocomposites for thermal management applications (Xianghui Hou)
- PF053o Highly tuneable supported nanocatalysts for efficient and practical hydrogen storage (David Amabilino)
- PF054a Insulating coatings for high temp windings and motors (David Grant)
- PF055 Air Race E (Richard Glassock)
- PF056 High Temperature And High Magnetic Field Characterisation Of Nanodevices (Oleg Makarovsky)

