

Russell Binions Research Symposium 2023

Date: Thu 27th April 2023 **Venue:** Bancroft Building: Mason Lecture Theatre, Bancroft 2.41 and 2.40

Event starts 1300 and runs till 1900; 3 parallel sessions (Research Centre focuses)

Bioengineering Research Centre

Bancroft 2.41

	Time		Speaker	Title
<i>Session 1: Chair: Sheetal Inamdar</i>				
PDRA1	1315	1330	Subrata Mondal	Designing Artificial Chaperones against Alzheimer's Disease
PhD1	1330	1345	Luke Philbrooks	Tendon-on-a-Chip: An In-vitro Model of Tendon
PhD2	1345	1400	Saba Qureshi	A dynamic model of the dentogingival entheses
PhD3	1400	1415	Davide Carta	Engineering retinal vascularization on a chip to model pathological events in eye diseases and study the effect of modulator drugs
Coffee Break: 1415-1500 (LONGER for Bioengineering due to smaller 3 rd year cohort)				
<i>Session 2: Chair: Subrata Mondal</i>				
PDRA2	1500		Alexander Zolotarev	Finding the Source of Atrial Fibrillation
PhD4	1515		Chen Liu	Electroadhesion for Soft and Morphing Robots
PhD5	1530		Cem Sulker	Soft robotic hand exoskeleton for rehabilitation and virtual reality
PDRA3	1545	1600	Sheetal Inamdar	Nanoscale mechanics of cartilage in ageing

Sustainable Engineering Research Centre

Mason Lecture Theatre

	Time		Speaker	Title
<i>Session 1: Chair: Luis Murillo Herrera</i>				
PDRA1	1300	1315	Jorge Ontaneda	Accurate band alignments for complex heterojunctions from first principles
PhD1	1315	1330	Muhammad Umar Nazir	Sustainable High Performance Leather Waste Composites
PhD2	1330	1345	Xuyao Tang	Superior energy storage properties of samarium-doped bismuth sodium titanate-based lead-free ceramics
PhD3	1345	1400	Oliver Tomes	A New Model for Stretchable Nanocomposite Strain Sensors
PhD4	1400	1415	Aaron Soul	Better Bonding, Better Parts: Understanding the Layer Strength of ABS-GNP FDM Printed Parts

PhD5	1415	1430	Jincheng Wu	Membrane fouling in static filtration of static filtration harvesting of microalgae: <i>Nannochloropsis oculata</i>
1430-1445: Coffee break (SHORTER for Sustainable Engineering due to larger 3 rd year cohort)				
<i>Session 2: Chair: Subhajit Pal</i>				
PDRA2	1445	1500	Sara Naderizadeh	Piezoresistive Elastomer Composites Used for Pressure Sensing
PhD6	1500	1515	Suwei Li	High-entropy Half-Heulser compounds for thermoelectric application
PhD7	1515	1530	Yuan Zhang	Hybrid energy harvester based on perovskite solar cell and ZnO piezoelectric nanogenerator
PhD8	1530	1545	Lara Seemungal	High entropy sulphides as novel cathode materials for lithium-sulfur batteries
PhD9	1545	1600	Eva Mazzolini	Upscaling organic photovoltaics using green solvents
PhD10	1600	1615	Rajveer Rajaura	Characterisation of MOCVD graphene for electronic device applications
PhD11	1615	1630	Maria Olczak	Methane emissions and climate change

Intelligent Transport Research Centre

Bancroft: 2.40

	Time		Speaker	Title
<i>Session 1: Chair: Abu Bakar Dawood</i>				
PDRA1	1300	1315	Pang Yong	Quasi-static responses of mussel plaque attachment on wet surfaces
PhD1	1315	1330	Shuo Mi	Numerical simulation of flow-net interactions
PhD2	1330	1345	Songwei Liu	Multi-objective Multigraph A* Search with Learning Heuristics based on Node Metrics and Graph Embedding
PhD3	1345	1400	Thomas Thorn	Easy-Repairing, Self-Sensing Composites with Enhanced Mechanical Performance for Extended Components Life
PhD4	1400	1415	Xin Yang	Optimal control of multiple drones in a multi-obstacle environment
PhD5	1415	1430	Yan Wang	Modelling and Control of a Novel Morphing Quadrotor UAV
1430-1500: Coffee break				
<i>Session 2: Chair: Pang Yong</i>				
PDRA2	1500	1515	Abu Bakar Dawood	Capacitance and Optical Tomography-based Distributed Tactile Sensing
PhD6	1515	1530	Giacomo Sasso	Soft Robotic Patterning of Liquids
PhD7	1530	1545	Kirsty Rutherford	The Influence of Carbon Black Colloidal Properties on the Parameters of the Kraus Model
PhD8	1545	1600	Simone Asci	Towards A Generalizable Simulation Framework to Study Spacecraft Dynamics

PhD9	1600	1615	Bilge Kacmaz	Real Time Optimal Trajectory Synthesis for an Unmanned Aerial Vehicle in Urban Air Mobility Applications.
PhD10	1615	1630	Israfil Soyler	Investigation of combustion of ammonia blends for power and heat generation

1630-1700: Coffee break

1700-1745: Keynote lecture by Prof. Deepak Vashishth, Professor of Bioengineering, Rensselaer Polytechnic Institute, New York, USA (IRC Alumnus and QMUL PhD): Venue: **Mason Lecture Theatre**

1745-1900: Drinks and nibbles reception

1800-1900: Prize ceremony (best presentations and other prizes;) Venue: **Mason Lecture Theatre**