

## Royal Society 2018 Newton International Fellows

**Mr Willian Natori**, Brazilian - Dynamics of Quantum Spin Liquids: Signatures of Majorana Fermions in Magnetic Materials - hosted by Imperial College London.

**Dr Yadira Valdivieso Diaz**, Mexican - Mirror symmetry and geometric models in algebra - hosted by the University of Leicester.

**Miss Diana Rojas-Ciofalo**, Mexican - Dark matter phenomenology in three-Higgs doublet models - hosted by the University of Southampton.

**Mr Ricardo Marquez Gomez**, Mexican - Histamine participation in the striatal development of patch and matrix in health and tic related disorders - hosted by the University of Oxford.

**Ms Jurene Kemp**, South African - Evolution and function of buzz pollination: An experimental test using fluorescent nanoparticles - hosted by the University of Stirling.

**Dr Mohammed Ataul Islam**, Indian - Ligand expansion molecular dynamics: revealing potential design opportunities hidden in protein-ligand crystal structures - hosted by the University of Manchester.

**Dr Mehtap Ozbey Arabaci**, Turkish - Multiwavelength Observations of Be/X-ray Binaries Displaying Giant (Type II) Outbursts - hosted by the University of Southampton.

**Dr Qingqing Mei**, Chinese - Two-dimensional structured materials as emerging catalysts for biomass conversion - hosted by the University of Manchester.

**Dr Wei Pu**, Chinese - Multi-Modal Signal Processing for Art Investigation - hosted by University College London (UCL).

**Mr Bingkun Yu**, Chinese - Space-weather impact on whole-atmosphere coupling via lightning - hosted by the University of Reading.

**Mr Feng Zhao**, Chinese - Unprecedented Dynamic Kinetic Resolution of Tertiary Alcohols - hosted by the University of St Andrews.

**Dr Liang Zhang**, Chinese - Spectral and Timing Analysis of Black Hole X-ray binaries with China's first X-ray satellite HXMT - hosted by the University of Southampton.

**Dr Chunqing Sun**, Chinese - Late-Pleistocene to Holocene tephrostratigraphy over continental China - hosted by Queen's University Belfast.

**Miss Yijin Pan**, Chinese - On Use of Machine Learning in Future Mobile Networks - hosted by the University of Kent.

**Dr Chao Zheng**, Chinese - Migration of Pollutant Particles in Rivers: A Multiscale Approach - hosted by the University of Surrey.

**Mr Tao Cheng**, Chinese - Control of electron transfer by bond-specific infrared excitation in multimetallic systems - hosted by the University of Sheffield.

**Dr Kunping Guo**, Chinese - High-performance Near-infrared Organic Light-Emitting Diodes - hosted by University College London (UCL).

**Mr Mingchao Liu**, Chinese - Harnessing elastic instability for the control of fluidic actuation in soft robots - hosted by the University of Oxford.

**Mr Abhilash Pullanchiyodan**, Indian - Fully printed fabric based flexible and self healing supercapacitor - hosted by the University of Glasgow.

**Dr Pranati Nayak**, Indian - Fundamental electrochemistry and electron transfer processes at 2D materials based microband electrodes - hosted by the University of Oxford.

**Dr Bikash Kumar Shaw**, Indian - Spin-Electronic Properties in Metal Organic Framework Solids, Liquids and Glasses - hosted by the University of Cambridge.

**Dr Santanu Manna**, Indian - Development of explicit asymptotic models for near-surface wave fields in anisotropic in-homogeneous solids - hosted by Keele University.

**Mr Manoj Kumar**, Indian - Phase diagram of the random-field Potts model - hosted by Coventry University.

**Ms Swathi Suran**, Indian - Single molecule transport through atomic-scale graphene capillaries - hosted by the University of Manchester.

**Dr Suman Sarkar**, Indian - Climate change impacts on coralline algae in response to the Paleocene-Eocene Thermal Maximum - hosted by the University of Bristol.

**Dr Bodhisattwa Saha**, Indian - Investigation of respirasome dynamics during mitochondrial dysfunction using structural proteomics - hosted by the University of Oxford.

**Miss Arpita Vats**, Indian - An enzymatic approach to mitigate the risk of bioactive pollutants including antibiotics in wastewaters - hosted by the University Of Nottingham.

**Mr Vijyesh Vyas**, Indian - Iron complexes for asymmetric transfer hydrogenation catalysts; applying the lessons learnt from tethered Ru(II) catalysts. - hosted by the University of Warwick.

**Dr Prasenjit Barman**, Indian - Mechanochemistry: Understanding from a Kinetic Point of View - hosted by Queen's University Belfast.

**Dr Suparna DuttaSinha**, Indian - Mathematical Modelling of Biofilm Formation on surface-modulated implant materials and its Architectural Characterisation - hosted by the University of Exeter.

**Dr Supreeth Nagendran**, Indian - Layered Double Hydroxides as Electrodes for Supercapacitors: A study on the charge-discharge mechanism - hosted by the University of Cambridge.

**Dr Satyawan Dnyaneshwar Nagane**, Indian - Interfacial engineering in perovskite semiconductors using novel multi-functional sulfur-containing organic cations - hosted by the University of Cambridge.

**Dr Chiranjit Acharya**, Indian - Illuminating wound closure: 3D-printed fast-dissolving polymer films for light-triggered tissue repair - hosted by Liverpool John Moores University.

**Dr Giulio Facchini**, Italian - Exploring the form, morphogenesis and function of a remarkable self-organised biological structure: the arboreal nests of nasute termites - hosted by the University of Roehampton.

**Dr Mohammad Zakir Hossain**, Canadian - Flow management by patterned heating and surface topography - hosted by Imperial College London.

**Dr Jennifer Drummond**, American - The fate and persistence of microplastics and associated pathogens in lowland rivers - hosted by the University of Birmingham.

**Dr Micaela Matta**, Italian - From Biopigments to Bioelectronics: Modelling Semiconducting Interfaces based on Eumelanin - hosted by the University of Liverpool.

**Dr Sangita Das**, Indian - Isoform-Selective HDAC Inhibitors - hosted by Durham University.

**Mr Jan Kronqvist**, Finnish - Warm-Starting Mixed-Integer Nonlinear Optimization for Chemical Catalysis and Machine Learning - hosted by Imperial College London.

**Dr Matteo Cozzi**, Italian - Parabolic Equations And Nonlocal Operators - hosted by the University of Bath.

**Dr Ajay Verma**, Indian - Metallo-Carbenoids and Organocatalysis in Synergy – hosted by Cardiff University.

**Mr Weixin Yang**, Chinese - Intelligent Human-computer Interaction via high-order path signature representation and deep learning - hosted by the University of Oxford.

**Dr Buddha Deka Boruah**, Indian - In-plane Lithium Ion Microbatteries: A Step Towards On-Chip Photo-Researchable Batteries - hosted by the University of Cambridge.

**Dr Andres Gonzalez Quiros**, Spanish - Monitoring and coupled hydrogeophysical modelling of saltwater intrusion in heterogeneous coastal aquifers - hosted by the University of Aberdeen.

**Dr Niloufar RaeisHosseini**, Iranian - Flexible and biocompatible memristor as biological synaptic emulator with graphene electrodes using self-assembled carbon-rich filament for scalable neuromorphic computing - hosted by Imperial College London.

**Mr Thomas Aubry**, French - Volcanic Forcing in Climate Model Projections: A New Paradigm. - hosted by the University of Cambridge.

**Dr Bijan Mondal**, Indian - The Cyclobutadienide Approach to Lanthanide Single-Molecule Magnets - hosted by the University of Sussex.

**Mr Jorge Meijide Suarez**, Spanish - Synthesis of Mechanically Chiral Rotaxanes as ligands for enantioselective gold catalysis - hosted by the University of Southampton.

**Dr Hoan Ngo**, Vietnamese - Using knockout mice to discover new roles for septins in host defence against bacterial infection - hosted by the London School of Hygiene and Tropical Medicine (LSHTM).

**Dr Junya Watanabe**, Japanese - Evolutionary morphology of convergent evolution in wing-propelled diving birds - hosted by the University of Cambridge.

**Dr Marta Lima**, Brazilian - Identification and validation of the targets of compounds demonstrating in vitro activity against *Trypanosoma cruzi* - hosted by the University of Dundee.

**Dr Simone Guareschi**, Italian - The effects of biological invasions on the ecological integrity of rivers and biomonitoring indices: identifying challenges and predicting the consequences - hosted by Loughborough University.

**Mr Jeffrey Thompson**, American - The Genetic and Developmental Basis of Differential Evolutionary Histories - hosted by University College London (UCL).

**Dr Moonmoon Deb**, Indian - Investigating the mechanistic detail of LAD compaction and TAD disassembly in mitosis - hosted by the University of Edinburgh.

**Dr Marcelo Mattar**, Brazilian - Model-based planning as approximate inference by neural sampling - hosted by the University of Cambridge.

**Dr Shaked Ashkenazi**, Israeli - Uncovering the role of the iRhom2-ADAM17 interaction in inflammatory signalling - hosted by the University of Oxford.

**Dr Stéphane Bugeon**, French - Identifying the cell types involved in spatial representation in mouse primary visual cortex - hosted by University College London (UCL).

**Dr Alexandra Schnell**, Australian - Comparing the Convergent Minds of Cuttlefish and Corvids - hosted by the University of Cambridge.

Private Fellowships

**Royal Society - Kohn Foundation International Fellow**

**Dr Guy Polturak**, Israeli - Exploring Triterpene Diversity in Monocots (EXTRIDIM) - hosted by the John Innes Centre.

**Royal Society - Sino British Fellowship Trust International Fellow**

**Dr Xiao Wu**, Chinese - Coordinated Control of Coal Fired Supercritical Power Plant Integrated with Solvent Based Post Combustion CO<sub>2</sub> Capture System - hosted by the University of Sheffield.

**Royal Society - K C Wong Foundation International Fellow**

**Dr Jiyuan Du**, Chinese - Catalytic Enantioselective Synthesis of Axially Chiral compounds - hosted by the University of Oxford.

**Royal Society - K C Wong Foundation International Fellow**

**Dr Muwei Jian**, Chinese - SUV : Summarizing Unconstrained Videos Via Saliency Detection - hosted by the University of Portsmouth.