

## 2019 Completions - Engineering

### **Dr. Ruoyang Chen**

(Specialisation: Chemical engineering) (Conferred: 20-Jan-2019)  
Desiccation Patterns of Blood Sessile Drops

### **Dr. Dashen Dong**

(Specialisation: Chemical engineering) (Conferred: 20-Jan-2019)  
Two-dimensional Plasmonic Nanoparticle Superlattices: Synthesis, Fabrication & Application

### **Dr. Ruiqi Guan**

(Specialisation: Civil engineering) (Conferred: 20-Jan-2019)  
Quantitative evaluation of fatigue crack using nonlinear guided waves in pipelines

### **Dr. Louis Evans King**

(Specialisation: Geotechnical engineering) (Conferred: 20-Jan-2019)  
The progressive development of soil arching in geosynthetic reinforced piled embankments

### **Dr. Chun Wai Lam**

(Specialisation: Materials engineering) (Conferred: 20-Jan-2019)  
Effects of Processing on Microstructure and Properties of Additively Manufactured Inconel 738

### **Dr. Reece William Lewis**

(Specialisation: Materials engineering) (Conferred: 20-Jan-2019)  
Ultra-High Molecular Weight Linear Coordination Polymers for Agricultural Spray Drift Control

### **Dr. Yinglei Li**

(Specialisation: Structural engineering) (Conferred: 20-Jan-2019)  
Behaviour of Hybrid Tubular Sections Utilising Seawater and Sea Sand Concrete, Fiber Reinforced Polymer and Stainless Steel

### **Dr. Amanda Li Ching Lum**

(Specialisation: Chemical engineering) (Conferred: 20-Jan-2019)  
Superheated Steam in Spray Drying for Particle Functionality Engineering

### **Dr. George Alexander Mutch**

(Specialisation: Manufacturing engineering) (Conferred: 20-Jan-2019)  
Effects of Foam Granulation on Dissolution Specific Properties and Applications in Detergent Manufacture

### **Dr. Mohammad Sajjad Shafiei**

(Specialisation: Transport engineering) (Conferred: 20-Jan-2019)  
Estimating Time-Dependent Origin-Destination Demand in a Large-Scale Congested Network Using Multi-Source Traffic Data

### **Dr. Binhuang Song**

(Specialisation: Electronic engineering) (Conferred: 20-Jan-2019)  
Short-Haul Optical Fibre Transmission Systems

### **Widhanalage Ramesha Indeewarie Soysa**

(Specialisation: Electrical and electronic engineering and technology- other) (Conferred: 20-Jan-2019)  
Virtual interface technology adaptation lab (vital)

### **Ian Daryl Sta Maria**

(Specialisation: Mechanical engineering) (Conferred: 20-Jan-2019)  
Graphene supplemented microbubble flotation for heavy crude oil removal from contaminated sand

**Dr. Tze Kih Tsai**

(Specialisation: Aerospace engineering) (Conferred: 20-Jan-2019)  
The effect of temperature profile and differential rotation on horizontal convection

**Dr. Ziyu Wang**

(Specialisation: Materials engineering) (Conferred: 20-Jan-2019)  
Light-matter interactions in low-dimensional perovskite nanocrystals and the applications

**Dr. Bowen Zang**

(Specialisation: Materials engineering) (Conferred: 20-Jan-2019)  
Fe-Metalloid-Based Soft Magnetic Nanostructures for Efficient Automotive Applications

**Dr. Wang Zhao**

(Specialisation: Chemical engineering) (Conferred: 20-Jan-2019)  
Graphene Oxide-Based Thin Film Nanocomposite Membranes for Water Purification

**Dr. Jannatul Azmir**

(Specialisation: Chemical engineering) (Conferred: 06-Feb-2019)  
A CFD-DEM simulation of food grain drying process in a fluidised bed

**Dr. Benjamin John Harwood**

(Specialisation: Computer engineering) (Conferred: 06-Feb-2019)  
Understanding High Dimensional Visual Data

**Dr. Martijn Kuller**

(Specialisation: Civil engineering - other) (Conferred: 06-Feb-2019)  
SSANTO: Planning Support for Water Sensitive Urban Design

**Dr. Trina Majumdar**

(Specialisation: Materials engineering) (Conferred: 06-Feb-2019)  
Strategies for the improvement of Ti-6Al-4V implant osseointegration

**Chamnap Phok**

(Specialisation: Electrical engineering) (Conferred: 06-Feb-2019)  
Analysis of Electrical Breakdown Influenced by the Statistics of Orthogonal Frequency Division Multiplexing (OFDM) Signals

**Dr. Qibing Wang**

(Specialisation: Electronic & computing) (Conferred: 06-Feb-2019)  
Digital Signal Processing for Short-Haul Optical OFDM

**Dr. Yong Zhang**

(Specialisation: Metallurgy) (Conferred: 06-Feb-2019)  
Precipitation pathways in Al-Cu-(In-Sb)/Ge alloys

**Yue Zhao**

(Specialisation: Mechanical engineering) (Conferred: 06-Feb-2019)  
Influence of Binary Microstructures on Mechanical Properties of Selective Laser Melted Ti 6Al-4V Alloys

**Dr. Xinyuan Chen**

(Specialisation: Transport engineering) (Conferred: 19-Feb-2019)  
Modelling Remote Park-And-Ride With Feeder Bus Services

**Dr. Chai Yee Loke**

(Specialisation: Mechanical engineering) (Conferred: 19-Feb-2019)  
Study of ocular biomechanics: an application to glaucoma

**Dr. Ashley Ryan Murphy**

(Specialisation: Materials engineering) (Conferred: 19-Feb-2019)

Three-Dimensional Human Neural Cell Culture Using Tailored Porous Polymer Scaffolds

**Dr. Soroush Shakiba Esfahani**

(Specialisation: Chemical engineering) (Conferred: 19-Feb-2019)

In-situ Crystallization via Counter-Current Spray-Dryer: Mechanism of Particle Crystallization through spray drying

**Dr. Hui Min Tan**

(Specialisation: Chemical engineering) (Conferred: 19-Feb-2019)

Development of a Predictive Model for a Thermophilic High-Rate Anaerobic Reactor for Stable Operation, Consistent Effluent Quality and Biogas Production

**Dr. Chee Chiang Derrick Tiew**

(Specialisation: Electrical & electronic eng & tech general) (Conferred: 19-Feb-2019)

Frequency Domain Photocurrent Measurement

**Dr. Yuxiang Wu**

(Specialisation: Materials engineering) (Conferred: 19-Feb-2019)

Phase Transformations during the Processing of Third Generation Advanced High Strength Steels

**Guanzhong Xu**

(Specialisation: Structural engineering) (Conferred: 19-Feb-2019)

3D Printing of Concrete: Some Practical Challenges and Recommendations

**Dr. Jodie Adrian Yuwono**

(Specialisation: Materials engineering) (Conferred: 19-Feb-2019)

Electrochemical Activity of the Magnesium Surfaces in Aqueous Electrolytes: A First-principles Investigation

**Dr. Xiongfeng Lin**

(Specialisation: Chemical engineering) (Conferred: 06-Mar-2019)

Dipole-Field-Tuning of Back-Contact Perovskite Solar Cells

**Dr. Mahdi Moshref Javadi**

(Specialisation: Materials engineering) (Conferred: 06-Mar-2019)

Graphene-Based Membranes: Structure, Mechanical, and Stimuli-Responsive Properties

**Dr. Taposh Roy**

(Specialisation: Mechanical engineering) (Conferred: 06-Mar-2019)

Evaluation of mechanical performance of laser clad rail steels for repairing railway rails

**Dr. Yunlong Tang**

(Specialisation: Geotechnical engineering) (Conferred: 06-Mar-2019)

Influence of Proppant Behaviour on Hydraulic Fracturing Conductivity in Deep Reservoirs

**Dr. Belal Zaid Hassan Bakheet**

(Specialisation: Civil engineering) (Conferred: 20-Mar-2019)

Optimizing electrochemical treatment of cyanobacteria and cyanotoxins

**Dr. Wickramarachchige Don Thilina Lakmal Gunawardhana**

(Specialisation: Chemical engineering) (Conferred: 20-Mar-2019)

Biorefinery Opportunities in a Thermomechanical Pulping Mill

**Dr. Tianyu Liu**

(Specialisation: Materials engineering) (Conferred: 20-Mar-2019)

The Bonding Charge Density in Copper by Parallelised Multislice Differential Quantitative Convergent-Beam Electron Diffraction, Using a New and Improved Independent-Atom Model

**Dr. Wencheng Liu**

(Specialisation: Mechanical engineering) (Conferred: 20-Mar-2019)

Multi-scale modelling of mechanical anisotropy in forming of aluminium sheet

**Yitian Meng**

(Specialisation: Chemical engineering) (Conferred: 20-Mar-2019)

Ordered Mesoporous Carbons as a Versatile Gas Adsorbent

**Dr. Raviteja Patchava**

(Specialisation: Electrical engineering) (Conferred: 20-Mar-2019)

Physical Layer Techniques for 5G: Waveform Design and Millimeter Waves

**Dr. Sika Shrestha**

(Specialisation: Electrical engineering) (Conferred: 20-Mar-2019)

Practical implementation of Chipless RFID System

**Dr. Joseph Chang Lun Chan**

(Specialisation: Engineering - other) (Conferred: 09-Apr-2019)

Development of Sliding Mode Observer Schemes for Infinitely Unobservable Descriptor Systems

**Dr. Mohammed Shahnewaz Chowdhury**

(Specialisation: Electrical engineering) (Conferred: 09-Apr-2019)

Towards Autonomous Training of Scene-Specific Pedestrian Detectors in Visual Surveillance Environments

**Dr. Armaghan Fakhfour**

(Specialisation: Mechanical engineering) (Conferred: 09-Apr-2019)

The design of surface acoustic waves field for manipulation of particles in microfluidics

**Dr. Rebecca Ann Milhuisen**

(Specialisation: Chemical engineering) (Conferred: 09-Apr-2019)

Investigation of New Redox Active Materials for Thin Film Solar Cells

**Dr. Jayesree Nagarajan**

(Specialisation: Chemical engineering) (Conferred: 09-Apr-2019)

Recovery of carotenoid and pectin from agro-wastes using water-induced complexation method

**Dr. Jessie Leigh Ratcliffe**

(Specialisation: Biomedical engineering) (Conferred: 09-Apr-2019)

Porous Polymer Scaffolds for the Maintenance of Stem Cell Pluripotency

**Dr. Pengfei Shen**

(Specialisation: Civil engineering) (Conferred: 09-Apr-2019)

Framework for real time control and operational optimisation of stormwater biofilters

**Dr. Fanyi Li**

(Specialisation: Materials engineering) (Conferred: 17-Apr-2019)

Injectable cell-laden microgels for regeneration of human articular cartilage tissue

**Dr. Dominic James Tan**

(Specialisation: Aerospace engineering) (Conferred: 17-Apr-2019)

Aeroacoustic Analysis of Broadband Shock-Associated Noise Sources In Screeching Round Jets

**Dr. Sri Ranga Anudeep Vanarasi**

(Specialisation: Materials engineering) (Conferred: 17-Apr-2019)

Delivery Across Biological Barriers Using Raft Polymers

**Dr. Yunmeng Zhao**

(Specialisation: Chemical engineering) (Conferred: 17-Apr-2019)

A Dry Spinning Approach to Smart Fiber-Based Stretchable Electronics

**Dr. Hossein Basser**

(Specialisation: Civil engineering) (Conferred: 01-May-2019)

Modeling multi-fluid flow over and within porous media: Application of Smoothed Particle Hydrodynamics

**Dr. Qicheng Hou**

(Specialisation: Chemical engineering) (Conferred: 01-May-2019)

Semitransparent and back-contact perovskite solar cells for the application in tandem solar cells

**Dr. So Hung Huynh**

(Specialisation: Mechanical engineering) (Conferred: 01-May-2019)

Plastrons on Superhydrophobic Surfaces: Mechanics and Applications

**Dr. Behzad Jamali**

(Specialisation: Water and sanitary engineering) (Conferred: 01-May-2019)

Integrated Modelling for Urban Flood Management

**Dr. Xin Ying Kong**

(Specialisation: Chemical engineering) (Conferred: 01-May-2019)

Development of Highly Efficient Bismuth-Based Photocatalysts for Carbon Dioxide Reduction into Energy-Rich Hydrocarbon Fuel

**Dr. Ze Meng**

(Specialisation: Environmental engineering) (Conferred: 01-May-2019)

Sources and treatment of Campylobacter in stormwater constructed wetlands

**Dr. Craig David Osborne**

(Specialisation: Chemical engineering) (Conferred: 01-May-2019)

Bacterial Methane Monooxygenase: from Molecular Evolution to Biotechnology

**Dr. Kok Hong Tan**

(Specialisation: Mechanical engineering) (Conferred: 01-May-2019)

Oxide-based Visible Light Photoelectrochemical Water Splitting: Nanodimensional and Heterointerface Design of Photocatalysts

**Dr. Shaohua Zhang**

(Specialisation: Structural engineering) (Conferred: 01-May-2019)

Intermediate Strain Rate Behaviour of Pultruded Glass Fibre Reinforced Polymer (GFRP)

**Dr. Xue Zhang**

(Specialisation: Chemical engineering) (Conferred: 01-May-2019)

Investigation and Evaluation of Super-Hydrophobic Surfaces for Use in Paper-based Liquid Packaging Materials

**Dr. Yuan Feng**

(Specialisation: Chemical engineering) (Conferred: 19-May-2019)

Synthesis of Vanadium Dioxide Particles for Smart Window, Sensing and Other Applications

**Dr. Wenxin Mao**

(Specialisation: Chemical engineering) (Conferred: 19-May-2019)

Study of Lead Halide Perovskite Single Crystals

**Dr. Llyza Ellena Mendoza**

(Specialisation: Chemical engineering) (Conferred: 19-May-2019)  
Nanocellulose Gels: Concepts and Applications

**Chengke Ruan**

(Specialisation: Civil engineering) (Conferred: 19-May-2019)  
Pore analysis of porous construction materials by metal intrusion - extending the limits of Washburn's equation

**Dr. Joel Luke Weightman**

(Specialisation: Aerospace engineering) (Conferred: 19-May-2019)  
The Sound Production Mechanisms of Impinging Supersonic Jets

**Dr. Qi Zhang**

(Specialisation: Materials engineering) (Conferred: 19-May-2019)  
High Cycle Fatigue Performance of Precipitate Strengthened Aluminium Alloys

**Dr. Mohammed Razzaq Mohammed Hamazi**

(Specialisation: Materials engineering) (Conferred: 29-May-2019)  
Injectable Composite Biomaterials for Cartilage Tissue Engineering

**Dr. Linyun Huang**

(Specialisation: Electrical & electronic eng & tech general) (Conferred: 29-May-2019)  
Information Theoretical Studies of Non-Gaussian Noise Channels and Markovian Constrained Relay Channels

**Dr. Aysu Onur**

(Specialisation: Chemical engineering) (Conferred: 29-May-2019)  
Engineering Cellulose Fibre Composites for Liquid Filtration

**Dr. Anurag Parihar**

(Specialisation: Chemical engineering) (Conferred: 29-May-2019)  
Conversion of lignocellulose to platform chemicals using a fluidised bed reactor

**Eric Plancon**

(Specialisation: Aerospace engineering) (Conferred: 29-May-2019)  
Turbulence generation of round subsonic jets with fractal grids

**Dr. Ashkan Shokri**

(Specialisation: Environmental engineering) (Conferred: 29-May-2019)  
Development of an optimal framework to assimilate GRACE retrievals into a fine-resolution land surface model

**Dr. Yuxiang Wang**

(Specialisation: Chemical engineering) (Conferred: 29-May-2019)  
Numerical study on droplet motions on heterogeneous substrates: from a wettability viewpoint

**Dr. Pei Yu**

(Specialisation: Materials engineering) (Conferred: 29-May-2019)  
Synthesis and Characterisation of Electrochemically-derived Graphene Oxide

**Dr. Yan Zuo**

(Specialisation: Electrical engineering) (Conferred: 29-May-2019)  
Advances in Decision Forests and Ferns with Applications in Deep Representation Learning for Computer Vision

**Dr. Harini Pranami Hapuarachchi**

(Specialisation: Electronic & computing) (Conferred: 12-Jun-2019)

Analysis of Exciton-Plasmon Nanohybrids

**Dr. Jayasree Kanathasan**

(Specialisation: Biomedical engineering) (Conferred: 12-Jun-2019)

Peptide Functionalised Fluorescent Porous Silicon and Carbon Dot Nanoparticles for Breast Cancer Imaging

**Dr. Mayur Katariya**

(Specialisation: Aerospace engineering) (Conferred: 12-Jun-2019)

Tailored bio-chemical solutions on Unmanned Aerial Vehicles

**Dr. Leifeng Shi**

(Specialisation: Civil engineering) (Conferred: 12-Jun-2019)

Study of Mechanical and Electrical Properties of Engineered Cementitious Composites for Self-sensing Application

**Dr. Guanwen Zhou**

(Specialisation: Other engineering & related tech general) (Conferred: 17-Jun-2019)

Experimental And Numerical Study On Characteristics Of Coal Pressurized Grade Conversion In A Dual Fluidized Bed

**Dr. Dailin Chen**

(Specialisation: Process & resources engineering general) (Conferred: 22-Jun-2019)

Experimental and simulation study on particle clustering behavior in the fast fluidized bed

**Dr. Xuejiao Liu**

(Specialisation: Chemical engineering) (Conferred: 22-Jun-2019)

Gas-solid flow characteristics and scaling of spouted beds with non-spherical particles

**Dr. Liangcong Jiang**

(Specialisation: Materials engineering) (Conferred: 26-Jun-2019)

The Investigation on the Stability of Perovskite Solar Cells

**Dr. Dusan Jovanovic**

(Specialisation: Water and sanitary engineering) (Conferred: 26-Jun-2019)

Modelling Escherichia coli Dynamics in an Urban Estuary

**Dr. Yew Wai Liew**

(Specialisation: Biomedical engineering) (Conferred: 26-Jun-2019)

Dynamics preceding onset and termination of atrial fibrillation and ventricular tachycardia

**Dr. Asheque Al Mahbub**

(Specialisation: Geotechnical engineering) (Conferred: 26-Jun-2019)

Investigation of Microstructure and Compression Behaviour of Cemented Sand using X-Ray CT Imaging

**Dr. Tat Thang Nguyen**

(Specialisation: Civil engineering) (Conferred: 26-Jun-2019)

Micromechanical investigation of highly porous cement-based materials: A focus on geopolymer foam concrete

**Dr. Ishrath Hana Shiraz**

(Specialisation: Materials engineering) (Conferred: 26-Jun-2019)

Synthesis of Film Forming Polymer Latexes using Silica Nanoparticles as Pickering Stabilisers

**Dr. Trung-Hieu Tran**

(Specialisation: Geotechnical engineering) (Conferred: 26-Jun-2019)

A coupled hydro-mechanical SPH framework to model desiccation cracking in clay soils

**Dr. Tak Kwin Chang**

(Specialisation: Civil engineering) (Conferred: 10-Jul-2019)

Real-time rainfall-runoff modelling by dynamic evolving Neuro-fuzzy systems

**Dr. Binbin Chen**

(Specialisation: Mechanical engineering) (Conferred: 10-Jul-2019)

On the Kinematic Coordination of the Human Eyes and Head: A Unified Approach

**Dr. Jingying Liu**

(Specialisation: Materials engineering) (Conferred: 10-Jul-2019)

Growth of low-dimensional perovskite nanomaterials for optoelectronic applications

**Dr. Sabah Sabaghy**

(Specialisation: Civil engineering) (Conferred: 10-Jul-2019)

Towards harmonious downscaled soil moisture maps from the SMAP and SMOS satellites

**Dr. Nazar Jaber Habeeb Aljabar**

(Specialisation: Structural engineering) (Conferred: 24-Jul-2019)

CFRP Strengthening of Steel Plates Subjected to Mixed Mode Fatigue Loading

**Dr. Negin Amini**

(Specialisation: Chemical engineering) (Conferred: 24-Jul-2019)

Microwave Assisted Pretreatment of Lignocellulose to Overcome Barriers to the Sugar Platform

**Dr. Amlan Chakraborty**

(Specialisation: Chemical engineering) (Conferred: 24-Jul-2019)

On the Development of Immunomodulators for Attenuation of Airway Inflammation

**Dr. Sanjid Ahmed Patwary**

(Specialisation: Materials engineering) (Conferred: 24-Jul-2019)

Graphene Coating On Mild Steel For Corrosion Resistance

**Dr. Parijat Ray**

(Specialisation: Materials engineering) (Conferred: 24-Jul-2019)

Development of Anticorrosive Coatings from Renewable Resources

**Dr. Kye Jakob Robinson**

(Specialisation: Chemical engineering) (Conferred: 24-Jul-2019)

Development of Biosensing Nanoparticles using Organosilica

**Dr. Kira Rundel**

(Specialisation: Materials engineering) (Conferred: 24-Jul-2019)

Naphthalene Diimide-Based Acceptors for Organic Solar Cells

**Dr. Joel Aljoscha Samsu**

(Specialisation: Chemical engineering) (Conferred: 24-Jul-2019)

The Effect of Cooling Staves on the Burden Flow in the Ironmaking Blast Furnace

**Dr. Dizhe Zhang**

(Specialisation: Chemical engineering) (Conferred: 24-Jul-2019)

Numerical Investigation Of Particle Segregation In Sandpile And Vibrated Systems



**Dr. Ke Zhang**

(Specialisation: Materials engineering) (Conferred: 24-Jul-2019)  
Charging dynamics in graphene-based nanoporous supercapacitor electrodes

**Dr. Song Zhou**

(Specialisation: Chemical engineering) (Conferred: 24-Jul-2019)  
Selective Removal of Alkali and Alkaline Earth Metals from Low-Rank Xinjiang Coal

**Dr. Xiao Peng Gong**

(Specialisation: Mechanical engineering) (Conferred: 07-Aug-2019)  
Computational Modelling of Friction Stir Processing Applying a Coupled Eulerian Lagrangian Method

**Dr. Caitlin Rose Langford**

(Specialisation: Biomedical engineering) (Conferred: 07-Aug-2019)  
Emulsion Templated Porous Polymers as Scaffolds for Anterior Cruciate Ligament Tissue Engineering

**Dr. Joshua Benjamin Pinski**

(Specialisation: Mechanical engineering) (Conferred: 07-Aug-2019)  
Optimal design of micromanipulation systems for precision haptic exploration

**Dr. Yang Wang**

(Specialisation: Chemical engineering) (Conferred: 07-Aug-2019)  
One Dimensional Hierarchical Nanomaterials Derived from M-MoO<sub>4</sub> (M=Ni, Co) as Highly Effective Electro-catalysts for Water Splitting

**Mohammadhossein Zamani**

(Specialisation: Engineering) (Conferred: 07-Aug-2019)  
BACTERIA ENCAPSULATION USING SYNTHESIZED POLYUREA FOR SELF-HEALING OF CEMENT PASTE

**Dr. Narendra Akiti**

(Specialisation: Chemical engineering) (Conferred: 10-Aug-2019)  
Granule Breakage in a Controlled Shear Field - Modelling and Experiments

**Dr. Rupesh Sudhakar Rao Bobade**

(Specialisation: Mechanical engineering) (Conferred: 10-Aug-2019)  
Synthesis and Analysis of Novel Compliant Remote Center Motion Mechanisms

**Dr. Uma Chaduvula**

(Specialisation: Geotechnical engineering) (Conferred: 10-Aug-2019)  
Experimental Studies on the Cracking Behaviour of Geofiber Reinforced Expansive Soils

**Dr. Naresh Chandrasekaran**

(Specialisation: Materials engineering) (Conferred: 10-Aug-2019)  
Device Performance and Charge Carrier Dynamics in Organic Solar Cells: the Impact of Donor Polymer Properties and Morphology

**Dr. Poorwa Gore**

(Specialisation: Materials engineering) (Conferred: 10-Aug-2019)  
Effect of anodically induced surface modification on the existence of the negative difference effect and 'cathodic activation' on magnesium

**Dr. Apurva Shriniwas Joshi**

(Specialisation: Aerospace eng & tech general) (Conferred: 10-Aug-2019)  
Experiments in modeling and control of multi-agent systems

**Dr. Hrisheekesh K**

(Specialisation: Mechanical engineering) (Conferred: 10-Aug-2019)

A numerical study on the near-body vorticity dynamics of a square cylinder under inline pulsatile flow

**Dr. Vamshi Krishna Kammadanam**

(Specialisation: Computer engineering) (Conferred: 10-Aug-2019)

Symmetric and Asymmetric Schemes with ideal secrecy and secure transaction over physical channel

**Dr. Anup Kundu**

(Specialisation: Mechanical engineering) (Conferred: 10-Aug-2019)

Computational Study of Interaction of an Elastic Plate with Laminar Flow Involving Large-scale Flow-induced Deformation

**Dr. Arijit Lodh**

(Specialisation: Materials engineering) (Conferred: 10-Aug-2019)

Microstructural origin of residual stress

**Dr. Bankim Chandra Mahanta**

(Specialisation: Civil engineering) (Conferred: 10-Aug-2019)

Investigation and assessment of physico-morphological and thermomechanical responses of few sedimentary rocks

**Dr. Raghavendra Ragipani**

(Specialisation: Chemical engineering) (Conferred: 10-Aug-2019)

Use of steel slag for carbon dioxide capture and utilisation

**Dr. Abhishek Sharma**

(Specialisation: Materials engineering) (Conferred: 10-Aug-2019)

Computational analysis of Nanoporous materials for gas adsorption and separation applications

**Dr. Alifa Afiah Binti Ahmad Zahidi**

(Specialisation: Mechanical engineering) (Conferred: 21-Aug-2019)

Viscous biochemical samples: its characteristics and transportation issues

**Dr. Meipeng Jian**

(Specialisation: Chemical engineering) (Conferred: 21-Aug-2019)

Ultrathin Two-dimensional Metal-Organic Framework Nanosheets for Water Desalination Membranes

**Dr. Benjamin Joshua Meyer**

(Specialisation: Computer engineering) (Conferred: 21-Aug-2019)

Representation Learning and Semantics for Robotic Vision

**Dr. Boon Junn Ng**

(Specialisation: Engineering) (Conferred: 21-Aug-2019)

Development of Visible-Light-Active All-Solid-State Z-Scheme System for Highly Efficient Photocatalytic Overall Water Splitting

**Sewminda Kalana Samarasinghe**

(Specialisation: Transport engineering) (Conferred: 21-Aug-2019)

Studies on Ambulance Transport related Technologies

**Dr. Taiyang Wu**

(Specialisation: Electrical & electronic eng & tech general) (Conferred: 21-Aug-2019)

Wearable and Implantable Sensor Systems with Energy Harvesting Techniques for IoT-Connected Healthcare Applications

**Dr. Md Ferdous Alam**

(Specialisation: Geotechnical engineering) (Conferred: 04-Sep-2019)  
Fabric Evolution of Granular Soils Subjected to Triaxial Loading Using X-Ray Computed Tomography

**Dr. Shahi Taphsir Islam**

(Specialisation: Transport engineering) (Conferred: 04-Sep-2019)  
THE TRAVEL TIME RELIABILITY OF A PARK-AND-RIDE TRANSPORT NETWORK

**Dr. Qingdong Ou**

(Specialisation: Materials engineering) (Conferred: 04-Sep-2019)  
Two-Dimensional Perovskite Nanomaterials for Optoelectronic Applications

**Dr. Haozhe Xing**

(Specialisation: Civil engineering) (Conferred: 04-Sep-2019)  
CHARACTERISATION OF ROCK DYNAMIC BEHAVIOUR BY FULL-FIELD MEASUREMENTS

**Dr. Christina Ng**

(Specialisation: Engineering) (Conferred: 22-Sep-2019)  
Development of Stochastic Cell Transmission-based Binary Logistic Lane Change Model for Multilane Highways

**Dr. Ivan Pradipta**

(Specialisation: Engineering) (Conferred: 22-Sep-2019)  
Prevention of rebar corrosion by natural antioxidants derived from green tea

**Dr. Kamran Baksh Soomro**

(Specialisation: Engineering) (Conferred: 22-Sep-2019)  
Saline water influence on water productivity, soil salinity and economics of bitter-gourd (*Momordica charantia* L) using drip irrigation method.

**Dr. Liujun Zhu**

(Specialisation: Civil engineering) (Conferred: 22-Sep-2019)  
Towards multi-SAR-mission retrieval of soil moisture

**Dr. Muhsin Hassan**

(Specialisation: Electrical engineering) (Conferred: 07-Oct-2019)  
Shared Aperture Planar Array Antenna for Soil Moisture Radiometer

**Dr. Qinye Li**

(Specialisation: Chemical engineering) (Conferred: 07-Oct-2019)  
Catalysts Design for Ammonia Synthesis at Room Temperature

**Dr. Yunzhi Ling**

(Specialisation: Chemical engineering) (Conferred: 07-Oct-2019)  
Holey Soft/hard Interface Design for High-adhesion and Stretchable Electronic-skin Sensor

**Dr. Siddhartha Shrestha**

(Specialisation: Chemical engineering) (Conferred: 07-Oct-2019)  
Particle Scale Modelling of Bubble Dynamics in Bubbling Fluidized Beds of Ellipsoids

**Dr. Sudaraka Mallawa Arachchi**

(Specialisation: Computer engineering) (Conferred: 16-Oct-2019)  
Nanoparticle Based Photoacoustic Treatment of Cancer

**Dr. Weirui Tan**

(Specialisation: Chemical engineering) (Conferred: 16-Oct-2019)  
Low-cost Chemical-responsive Adhesive Sensors for Environmental and Biochemical Sensing

**Dr. Ahsanul Kaiser**

(Specialisation: Engineering) (Conferred: 30-Oct-2019)

Smart Drug Delivery And Image-Guided Therapy for Cancer with Modified Carbonate Apatite Nanoparticles

**Dr. Rohan James Nowell**

(Specialisation: Mechanical engineering) (Conferred: 30-Oct-2019)

Design, Development and Evaluation of a Miniature 3-PRS Wrist Mechanism for Robotically Assisted Endonasal Surgery

**Dr. Genaro Gonzalo Carnero Guzman**

(Specialisation: Geotechnical engineering) (Conferred: 13-Nov-2019)

Hydraulic behaviour of geosynthetic clay liners under polar climate conditions

**Dr. Kahlil Ernest Desai**

(Specialisation: Chemical engineering) (Conferred: 13-Nov-2019)

Improving Scale-up of Powder Mixing in the Pharmaceutical Industry

**Dr. Miriam Varsha Issac**

(Specialisation: Chemical engineering) (Conferred: 13-Nov-2019)

Synergistic Effects on the High-Temperature Reactivity of Coal Blends with Biochar or Scrap-Tyre Char in CO<sub>2</sub> Rich Conditions

**Dr. Valentina Marchionni**

(Specialisation: Civil engineering) (Conferred: 13-Nov-2019)

Hydrological cycle and tree water use in remnant urban reserves

**Dr. Pavan Pramod Sripada**

(Specialisation: Chemical engineering) (Conferred: 13-Nov-2019)

Biomass gasification and Utilization of its Syngas for the One Step Synthesis of Dimethyl Carbonate

**Dr. Minh Khoa Tran**

(Specialisation: Geotechnical engineering) (Conferred: 13-Nov-2019)

Behaviour of Clayey Soils during Desiccation: Experimental and Micromechanical Modelling

**Dr. Siyuan He**

(Specialisation: Chemical engineering) (Conferred: 27-Nov-2019)

MIXING AND SEGREGATION OF ELLIPSOIDAL PARTICLES IN A ROTATING DRUM

**Dr. Mohammed Mansoor Ahmed Mohammed**

(Specialisation: Electrical engineering) (Conferred: 27-Nov-2019)

Optical OFDM for Visible Light Communications and Visible Light Positioning

**Dr. Zhi Yuen Ng**

(Specialisation: Aerospace engineering) (Conferred: 27-Nov-2019)

On the characteristics and stability of the wakes of cylinders with a triangular cross-section

**Dr. Jun Wei Ngan**

(Specialisation: Structural engineering) (Conferred: 27-Nov-2019)

Vibration serviceability of pultruded GFRP sandwich panel floor systems

**Dr. Nhi Sa Nguyen**

(Specialisation: Chemical engineering) (Conferred: 27-Nov-2019)

Lithium ion conductive ceramic membrane for ion separation

**Dr. Kirubanandan Shanmugam**

(Specialisation: Chemical engineering) (Conferred: 27-Nov-2019)

Spray coated nanocellulose films-production, characterisation and applications

**Dr. Chong Siang Yaw**

(Specialisation: Chemical engineering) (Conferred: 27-Nov-2019)

Synthesis and Characterisation of Nanostructured Bismuth Vanadate-based Heterojunction Photoelectrodes for Photoelectrochemical Water Splitting

**Dr. Shaun Ee Xiang Ang**

(Specialisation: Chemical engineering) (Conferred: 15-Dec-2019)

Sustainable and Recyclable Nanocellulose Production, Characterisation and Applications

**Dr. Ezgi Onal**

(Specialisation: Materials engineering) (Conferred: 15-Dec-2019)

Selective Laser Melting of Ti6Al4V Lattice Structures for Bone Implants

**Dr. Radhika Shehan Vidanage De Silva**

(Specialisation: Geotechnical engineering) (Conferred: 15-Dec-2019)

Rock fracture stimulation using a slow energy releasing fracturing compound for permeability enhanced in-situ leaching

**Dr. Yuanming Yan**

(Specialisation: Materials engineering) (Conferred: 15-Dec-2019)

The study of the surface film formed on an ultra-lightweight Mg-Li(-Al-Y-Zr) alloy

**Dr. Chen Zhao**

(Specialisation: Chemical engineering) (Conferred: 15-Dec-2019)

Bio-inspired nanochannel membranes for smart mass transport and conversion

**Dr. Jun Yong Chan**

(Specialisation: Chemical engineering) (Conferred: 18-Dec-2019)

Development of Metal Organic Framework Membranes for Chiral Separation

**Dr. Xingya Li**

(Specialisation: Chemical engineering) (Conferred: 18-Dec-2019)

Construction of metal-organic framework-based ion channels for fast and selective ion transport

**Dr. Grace Louise Talbot-Walsh**

(Specialisation: Chemical engineering) (Conferred: 18-Dec-2019)

Optimization of Processed Cheese Manufacture and Fortification Methodologies for Improved Sensorial and Functional Properties

**Dr. Wei Wang**

(Specialisation: Civil engineering) (Conferred: 18-Dec-2019)

DEVELOPMENT OF HIGH-PERFORMANCE CEMENTITIOUS COMPOSITES: BIOINSPIRED DESIGN, DIGITAL FABRICATION, AND AI-BASED CHARACTERIZATION

**Dr. Yongli Wu**

(Specialisation: Chemical engineering) (Conferred: 18-Dec-2019)

Multiscale modelling and analysis of particle-fluid flows in packed and fluidized beds

**Dr. Xiaogang Zhang**

(Specialisation: Geotechnical engineering) (Conferred: 18-Dec-2019)

Mechanism of carbon dioxide sequestration in deep coal seams