

2020 Completions - Science

Dr. Vidhi Bharti

(Specialisation: Atmospheric sciences) (Conferred: 22-Jan-2020)

Air-sea interaction studies of the Southern Ocean

Dr. Pablo Guillermo Farias

(Specialisation: Geology) (Conferred: 22-Jan-2020)

Tectono-thermal evolution of a long-lived Paleozoic accretionary margin: insights from the Famatinian orogeny, NW Argentina

Dr. Jake Mitchell Martin

(Specialisation: Environmental science) (Conferred: 22-Jan-2020)

Antidepressants in the water: impacts of the psychoactive pollutant fluoxetine on behaviour and reproduction in fish

Dr. Julia Alexandra Sen

(Specialisation: Geochemistry) (Conferred: 22-Jan-2020)

Molybdenum complexation in chloride- and hydrosulphide- bearing hydrothermal fluids: Insights from ab initial molecular dynamics simulations

Dr. Janet Jia Yin Tan

(Specialisation: Life science) (Conferred: 22-Jan-2020)

Bioactivities studies of different plant parts of *Costus woodsonii* Maas with emphasis on the rhizome

Dr. Christopher Richard Voisey

(Specialisation: Geology) (Conferred: 22-Jan-2020)

Crustal- to Nano- Scale Influences on Orogenic Gold Deposits: Insights from the Central Victorian Goldfields

Rupini Yesudasan

(Specialisation: Science) (Conferred: 22-Jan-2020)

Population Genomics Study on Sabah Weedy Rice Using Genotyping-by-Sequencing (GBS)

Dr. Christian Michael Davey

(Specialisation: Mathematics and statistics) (Conferred: 05-Feb-2020)

Bayesian Adaptive Independence Sampling with Latent Variables

Dr. Stephanie Falk

(Specialisation: Biology) (Conferred: 05-Feb-2020)

Mitochondria and Metabolism as Drivers of Climate Adaptation in Wild Populations of Eastern Yellow Robin

Dr. Avinash Satish Gaikwad

(Specialisation: Reproductive biology) (Conferred: 05-Feb-2020)

The role of Cysteine-rich secretory proteins, Antigen 5 and Pathogenesis-related 1 (CAP) superfamily proteins in sperm function and male fertility

Dr. Francesco Campaioli

(Specialisation: Physics) (Conferred: 19-Feb-2020)

Tightening Time-Energy Uncertainty Relations

Dr. Zac Peter Johnston

(Specialisation: Astrophysics) (Conferred: 19-Feb-2020)

Modelling Thermonuclear X-ray Bursts on Accreting Neutron Stars

Dr. Ragul Paramasivam

(Specialisation: Immunology) (Conferred: 19-Feb-2020)

Development of recombinant multi-epitope proteins-based point of care test diagnosis for multiple sexual transmitted diseases in humans

Dr. Michael James Roast

(Specialisation: Ecology) (Conferred: 19-Feb-2020)

Individual Variation in Immune Function in the Purple-crowned Fairy-wren (*Malurus coronatus*)

Dr. Catherine Ruth Dickson

(Specialisation: Ecology) (Conferred: 04-Mar-2020)

Impact of climate change on a sub-Antarctic keystone cushion plant, *Azorella macquariensis* (Apiaceae)

Dr. Sonja Marie Neske

(Specialisation: Oceanography) (Conferred: 04-Mar-2020)

Understanding the Warm Water Volume Precursor of ENSO events

Dr. Eduard Biche

(Specialisation: Mathematics) (Conferred: 18-Mar-2020)

Local Brownian motions

Dr. Mayooini Majuran

(Specialisation: Chemistry) (Conferred: 18-Mar-2020)

Synthesis and Spectroscopic Properties of Monometallics and Bimetallic Assemblies ? Potential Sensors Based on Electrochemically Sensitised Luminescence

Thivyah Munisparan

(Specialisation: Food science and biotechnology) (Conferred: 18-Mar-2020)

Drying effects on the bioactivity of piper nigrum linn. berries

Dr. Sonia Sanchez Gomez

(Specialisation: Ecology) (Conferred: 18-Mar-2020)

Fine-scale foraging behaviour of an inshore marine top-predator: implications for marine management

Dr. Colm Michael Talbot

(Specialisation: Astrophysics) (Conferred: 18-Mar-2020)

Astrophysics of Binary Black Holes at the Dawn of Gravitational-Wave Astronomy

Dr. Chew Ee Wong

(Specialisation: Chemical sciences general) (Conferred: 18-Mar-2020)

Antimicrobial-cyclodextrin containing compounds

Dr. Jade Renatha Kannangara

(Specialisation: Genetics) (Conferred: 02-Apr-2020)

The identification and characterisation of novel peptide signalling pathways that function in the *Drosophila* prothoracic gland

Dr. David Liptai

(Specialisation: Astrophysics) (Conferred: 02-Apr-2020)

General relativistic smoothed particle hydrodynamics with application to the tidal disruption of stars by supermassive black holes

Dr. Louise Solveig Noergaard

(Specialisation: Ecology) (Conferred: 02-Apr-2020)

Understanding the evolution of infectious disease at the invasion front

Dr. Supti Roy

(Specialisation: Biochemistry) (Conferred: 02-Apr-2020)

Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy- A new diagnostic tool for diagnosing pathogens and analytes in blood and sera

Dr. Sebastien Joseph Tempone-Wiltshire

(Specialisation: Physics) (Conferred: 02-Apr-2020)

Development of an apparatus for the rapid production of Rubidium-87 Bose Einstein Condensates

Dr. Jacques Dirair Atkinson-Bodourian

(Specialisation: Inorganic chemistry) (Conferred: 16-Apr-2020)

The Use of Sterically Encumbering Ligands for the Stabilisation of Low-Oxidation State Main-Group Element Containing Compounds

Dr. Song Bae

(Specialisation: Organic chemistry) (Conferred: 16-Apr-2020)

N-Heterocyclic Carbene Organocatalysis in Total Synthesis

Dr. Giancarlo Pozzo

(Specialisation: Physics) (Conferred: 16-Apr-2020)

Particle Astrophysics Aspects of Supersymmetric Models

Dr. Mathias Zeller

(Specialisation: Oceanography) (Conferred: 16-Apr-2020)

The Impact of Subtropical to Tropical Oceanic Interactions on Tropical Pacific Decadal Variability

Dr. Jhi Ametovski

(Specialisation: Chemistry) (Conferred: 29-Apr-2020)

Reaction Discovery in Phosphine Organocatalysis via the Beta-Phosphonium Ylide

Dr. Nathan Paul Gardiner

(Specialisation: Geology) (Conferred: 29-Apr-2020)

A stratigraphic record of subduction geodynamics

Dr. Eng Hwa Yeo

(Specialisation: Biochemistry and cell biology) (Conferred: 29-Apr-2020)

Characterization of the mechanism of z-FA-FMK anti-proliferative effects and cyst induction in *Toxoplasma gondii*

Dr. Sergei Biriukov

(Specialisation: Astrophysics) (Conferred: 14-May-2020)

Radiation Diffusion in Smoothed Particle Hydrodynamics

Dr. Mandeep Harode

(Specialisation: Chemistry) (Conferred: 28-May-2020)

Gold and Rhodium catalyzed cycloisomerization strategies for N-heterocyclic synthesis

Dr. Genevieve Danae Matthews

(Specialisation: Ecology and evolutionary biology) (Conferred: 28-May-2020)

The maintenance of a colour pattern polymorphism with sex-specific fitness consequences in an Australian skink

Dr. Callum Robert Dark

(Specialisation: Genetics) (Conferred: 11-Jun-2020)

Identification and functional validation of ADHD-associated gene variants

Dr. Kah Man Lai

(Specialisation: Science) (Conferred: 11-Jun-2020)

Attenuating Influenza A virus infection via internalization and downregulation of EGFR

Dr. Farhana Sadia

(Specialisation: Statistics) (Conferred: 11-Jun-2020)

Bayesian Change-Point Modeling with Segmented ARMA Model

Dr. Subhrajyoti Saha

(Specialisation: Mathematics) (Conferred: 11-Jun-2020)

Finite p-Groups and Coclass Theory

Dr. Hui Li Tan

(Specialisation: Science) (Conferred: 11-Jun-2020)

Fabrication and Characterisation of Injectable Composite Hydrogel as a Potential Scaffold for Tissue Engineering

Dr. Dabin Wang

(Specialisation: Chemistry) (Conferred: 11-Jun-2020)

Electrochemical Reduction of Nitrogen to Ammonia under Ambient Conditions

Dr. Muthana Nahdh Ali Ali

(Specialisation: Chemistry) (Conferred: 24-Jun-2020)

Development of Composite Colloidal Capsules from Pickering Emulsions Stabilized by Graphene Oxide and their Application

Dr. Kimberly Mary Damsma

(Specialisation: Biological sciences general) (Conferred: 24-Jun-2020)

Plant-soil interactions and the effect on soil health in grazing systems

Dr. Joshua Brandyn Marlow

(Specialisation: Chemistry) (Conferred: 24-Jun-2020)

Nanoparticles and liquid crystals: the effects of size, shape, shear, surface chemistry, temperature, and concentration on structure and rheology

Dr. Andrea Pozzi

(Specialisation: Ecology and evolutionary biology) (Conferred: 24-Jun-2020)

Characterization of the small mitochondrial RNAs, and their role in the regulation of mito-nuclear interactions.

Dr. Krystle Angelique Aguda Santiago

(Specialisation: Microbiology) (Conferred: 24-Jun-2020)

Profiling the diversity, bioactivity and metabolomic analysis of endolichenic fungi from Malaysia and the Philippines

Dr. Gavin Neil Styles

(Specialisation: Chemistry) (Conferred: 24-Jun-2020)

Herbicide Dynamics and Bioavailability in the Soil

Dr. Sean Keith Bay

(Specialisation: Life science) (Conferred: 09-Jul-2020)

The structure and basis of soil microbial biodiversity

Dr. Ya-Jou Chen

(Specialisation: Biological sciences general) (Conferred: 09-Jul-2020)

Linking biogeochemical processes to microbial communities in permeable sediments

Dr. Craig Ian Dent

(Specialisation: Genetics) (Conferred: 09-Jul-2020)

Splice-site Strength: Quantification and Applications

Dr. Irene Mei Yen Lau

(Specialisation: Biological sciences - other) (Conferred: 09-Jul-2020)

Molecular and biochemical studies of Influenza A virus Nucleoprotein as a modulator of the NF-kB signalling pathway

Dr. Christian Stassen

(Specialisation: Atmospheric sciences) (Conferred: 09-Jul-2020)

Development and Application of a Hydrological Cycle Model as Part of the GREB Climate Model

Dr. Cuyler Kenneth Borrowman

(Specialisation: Chemistry) (Conferred: 22-Jul-2020)

Degradation, Efficacy, and Environmental Impact of a Sprayable Degradable Plastic Mulch

Dr. Liam Nicholas Briginshaw

(Specialisation: Genetics) (Conferred: 22-Jul-2020)

The role of KANADI in the liverwort *Marchantia polymorpha*

Dr. Conrad Tze Kiu Chan

(Specialisation: Astrophysics) (Conferred: 22-Jul-2020)

Numerical Methods for Simulating Core-collapse Supernovae

Dr. David Colin Kinniburgh

(Specialisation: Atmospheric sciences) (Conferred: 22-Jul-2020)

Dynamics of Coupled Fire-Atmosphere Interactions

Dr. Anupam Chaudhuri

(Specialisation: Mathematics) (Conferred: 05-Aug-2020)

One-point recursions and topological recursion for enumerative problems

Dr. Christopher Robert Gatto

(Specialisation: Biological sciences general) (Conferred: 05-Aug-2020)

The role of incubation moisture and metabolism in sea turtle hatching locomotor performance

Dr. Md Anisur Rahman

(Specialisation: Chemistry) (Conferred: 05-Aug-2020)

Mechanistic Subtleties in the Voltammetry of Polyoxometalates

Dr. Peter Andrew Joseph Van Rensch

(Specialisation: Atmospheric sciences) (Conferred: 05-Aug-2020)

East Australian spring rainfall during strong El Nino events

Dr. Amani Abdullah O Alahmadi

(Specialisation: Statistics) (Conferred: 19-Aug-2020)

Exact and approximate methods of sampling from posterior distributions of parameters in non-linear ordinary differential equations

Dr. Ansa Emmanuel Cobham

(Specialisation: Biological sciences general) (Conferred: 19-Aug-2020)

The regulation of the shape and size of the brain and wing disc in *Drosophila melanogaster*

Dr. Jessica Lauren Hoskins

(Specialisation: Ecology) (Conferred: 19-Aug-2020)

Size and temperature effects on physiological traits in arthropods

Dr. Rajesh Deka

(Specialisation: Chemistry) (Conferred: 23-Aug-2020)

Studies on Bidentate E,N (E = S, Se, Te), N,N (Redox Active) and Tridentate N,N,N Ligands: Complexes with Lanthanoids, Tin and Transition Metals

Dr. Pranali Sharad Deore

(Specialisation: Applied biology) (Conferred: 23-Aug-2020)

Identification of novel, non-invasive, early markers of *Oxyrrhis marina*-mediated *Dunaliella tertiolecta* grazing

Dr. Uttam Dutta

(Specialisation: Chemistry) (Conferred: 23-Aug-2020)

Development of Highly Regioselective Functionalizations of Arenes, Heteroarenes and Alkynes

Dr. Preeti Gopal

(Specialisation: Physical sciences - other) (Conferred: 23-Aug-2020)

Tomographic Reconstruction: a Radiation Reduction Approach

Dr. Laxman Vamshi Krishna Kandala

(Specialisation: Organic chemistry) (Conferred: 23-Aug-2020)

BF₂-25-oxasmaragdyrin based systems for Near Infra-Red Fluorescence (NIRF) Imaging and Photothermal Therapy (PTT) for Cancer Treatment

Dr. Ajit Kumar

(Specialisation: Chemistry) (Conferred: 23-Aug-2020)

The Development of Room Temperature Sodium-Sulfur Batteries

Dr. Ponsubbiah Soundrapandian Nadar

(Specialisation: Chemistry) (Conferred: 23-Aug-2020)

Studies on the reaction and catalyst deactivation mechanisms in the direct aromatization of methane

Dr. Sandeep Yadavrao Pimparkar

(Specialisation: Chemistry) (Conferred: 23-Aug-2020)

Exploration for Distal C-H Functionalization of Aliphatic and Aromatics by Pd Catalysis

Dr. Himanshu Shrivastava

(Specialisation: Mathematics - other) (Conferred: 23-Aug-2020)

Supply chain planning for perishable products under uncertainties

Dr. Devika Shylaja

(Specialisation: Mathematics) (Conferred: 23-Aug-2020)

Numerical Methods for Elliptic Partial Differential Equations and Optimal Control Problems

Dr. Sachin Bandopant Talekar

(Specialisation: Food science and biotechnology) (Conferred: 23-Aug-2020)

Integrated Biorefinery Concept From Pomegranate Processing Waste

Dr. Jeremy Naruhito Baker

(Specialisation: Mathematics) (Conferred: 02-Sep-2020)

The Fluid Limit Approximation with Random Initial Conditions for Small Noise Processes

Dr. Marina Castelli

(Specialisation: Physics) (Conferred: 16-Sep-2020)

Atomically precise low-dimensional metal-organic nanostructures with tailored electronic properties

Dr. Tom James Fisher

(Specialisation: Genetics) (Conferred: 16-Sep-2020)

Growing with the flow: how PIN mediated auxin transport helps to shape the growth and development of the liverwort, *Marchantia polymorpha*

Dr. Boris Goncharov

(Specialisation: Astrophysics) (Conferred: 16-Sep-2020)

Neutron stars as gravitational wave emitters and detectors

Dr. Jin Min Lee

(Specialisation: Environmental science) (Conferred: 16-Sep-2020)

The effect of land use on the distribution and microbiota diversity of *Aedes albopictus* (Diptera: Culicidae) in an urban tropical landscape of Malaysia

Dr. Zoe Luisa Eleanor Seeger

(Specialisation: Chemistry) (Conferred: 16-Sep-2020)

Towards the prediction of properties in large clusters of ionic liquids with quantum chemical methods

Dr. Anshika Sharma

(Specialisation: Molecular Virology) (Conferred: 16-Sep-2020)

Molecular and biochemical studies on Filamin A and its interaction with the nucleoprotein of Influenza A virus

Ngoc Phuong Anh Doan

(Specialisation: Food science and biotechnology) (Conferred: 30-Sep-2020)

Dry fractionation as green approach in concentrating vitamin E in olein fraction of palm fatty acid distillate prior to its extraction

Dr. Lian Wu

(Specialisation: Agriculture, environmental and related studies - other) (Conferred: 30-Sep-2020)

The application of LiDAR and machine learning in estimating crop traits and yield prediction

Dr. Asha Vijayeta

(Specialisation: Atmospheric sciences) (Conferred: 14-Oct-2020)

ENSO in a changing climate simulations

Dr. Megan Louise Cook

(Specialisation: Environmental studies - other) (Conferred: 28-Oct-2020)

An investigation into the occurrence and migration of ^{239,240}Pu in the Australian environment

Dr. Lukas Schuster

(Specialisation: Ecology and evolutionary biology) (Conferred: 28-Oct-2020)

The Causes and Consequences of Variation in Metabolic Rate in a Sessile Marine Invertebrate

Dr. Nuraina Anisa Binti Dahlan

(Specialisation: Materials science) (Conferred: 11-Nov-2020)

Biomimetic carboxymethylcellulose-based bilayer scaffolds for skin repair and regeneration

Dr. Cody Benjamin Duncan

(Specialisation: Physics) (Conferred: 11-Nov-2020)

On Hadronization Phenomenology in Monte Carlo Event Generators

Dr. David Hoffmann

(Specialisation: Atmospheric sciences) (Conferred: 11-Nov-2020)

The Representation of Drought in Observations and Climate Models

Marie Andrea Laetitia Huet

(Specialisation: Microbiology) (Conferred: 11-Nov-2020)

Investigation of the culturable human gut mycobiota from the segamat community, Johor, Malaysia

Carolyn Ma

(Specialisation: Biological sciences - other) (Conferred: 11-Nov-2020)

Investigating The Effect Of Protein Quality And Its Molecular Sensors On Life-History Traits In *Drosophila Melanogaster*

Dr. Athena Xin Hui Ng

(Specialisation: Immunology) (Conferred: 11-Nov-2020)

The role of redox biology in host-pathogen interactions: Macrophage and *Toxoplasma gondii*

Dr. Jianbin Wang

(Specialisation: Environmental science) (Conferred: 11-Nov-2020)

The Water-energy Nexus Framework in Urban Water Management at Precinct Scale

Dr. Jamon Dennis Pennicott

(Specialisation: Applied and computational mathematics) (Conferred: 24-Nov-2020)
Numerical Modelling of Waves in the Solar Atmosphere

Dr. Andrew Thomas Holm

(Specialisation: Organic chemistry) (Conferred: 25-Nov-2020)
Gold(I)-catalysed cycloisomerisation of 1,6-diyne esters for the synthesis of carbocycles

Dr. Jimmy Christopher Kotsakidis

(Specialisation: Physics) (Conferred: 25-Nov-2020)
Investigating the Air Stability of As-Grown and Intercalated 2D Materials for Future Electronics

Dr. Zahra Fatima Islam

(Specialisation: Microbiology) (Conferred: 09-Dec-2020)
Determinants of Atmospheric Trace Gas Oxidation in Bacteria

Dr. Rachel Imogen Leihy

(Specialisation: Ecology) (Conferred: 09-Dec-2020)
Variation in Antarctic biodiversity across space and time

Dr. Peng Luan

(Specialisation: Chemistry) (Conferred: 09-Dec-2020)
Regulating Bulk and Surface Charge Behaviour of Photoanodes for Enhanced Solar Water Oxidation Efficiency

Dr. Samithree Prasadika Rajapaksha Samaranayaka Rajapaksha M

(Specialisation: Applied and computational mathematics) (Conferred: 09-Dec-2020)
On the simulation of arterial road networks

Dr. Sinuo Tan

(Specialisation: Chemistry) (Conferred: 09-Dec-2020)
New Classes of Stimuli-Responsive Polymeric Materials for Separation Applications

Dr. Rahil Nuruddin Valani

(Specialisation: Physics) (Conferred: 09-Dec-2020)
Superwalking Droplets and Generalised Pilot-Wave Dynamics

Shaheena Shehnaz Ahmed Rifaie Thowfeek

(Specialisation: Microbiology) (Conferred: 21-Dec-2020)
Extended spectrum beta lactamase producing Enterobacteriaceae in the community: Analysis of persistence and molecular characterization (A Case study on Segamat, Johor)

Sze Le Loh

(Specialisation: Chemistry) (Conferred: 21-Dec-2020)
Structural Investigations of Water-Soluble Calixarene with Polycationic Salts

Dr. Habtewold Deti Waktola

(Specialisation: Analytical chemistry) (Conferred: 21-Dec-2020)
Separation and Identification Strategies for Lipids and Volatiles Analysis in Natural Oils