

# GRADUATION CEREMONY

CEREMONY 5

WEDNESDAY 11 FEBRUARY 2026



# Acknowledgment of Country

Murdoch University is situated on the lands of the Whadjuk and Binjareb Noongar people. We pay our respects to their enduring and dynamic culture and the leadership of Noongar elders past and present. The Boodjar (country) on which Murdoch University is located has, for thousands of years, been a place of learning. We at Murdoch University are proud to continue this long tradition.

# ORDER OF PROCEEDINGS

*The audience is requested  
to stand during the  
Academic Procession.*

## Academic Procession

Welcome to Country

Chancellor's Address

## Presentation of Awards

School of Engineering  
and Energy

School of  
Information Technology

School of Mathematics,  
Statistics, Chemistry  
and Physics

## Presentation of Higher Degrees

Vice Chancellor and  
President's Address and  
Charge to Graduates

University Awards

Valedictory Address

Academic Recession

*Please note that photographs and footage will be taken at this event.  
Please contact the event organiser if you have any concerns or if you  
wish to be exempt from this activity.*

# CHANCELLOR'S MESSAGE



It is my great pleasure to congratulate you on the successful culmination of your course of study with Murdoch University.

Your degree equips you with the skills you need for an exciting career in your chosen field, along with the capacity for creativity, curiosity and critical thinking that are the foundation stones of a rich, rewarding life.

I know from personal experience the power of a Murdoch education. Many years ago, I was able to enrol by correspondence as a mature-aged student, the mother of three young children. After achieving my degree, I pursued a varied and exciting career in public life – one that led to my eventual appointment as Chancellor of Murdoch University!

I am therefore supremely confident that the knowledge and values you have learned as part of your Murdoch experience will give you the tools to understand our world and bring about change for the better.

The privilege of a university education should compel you to not only seek out a wonderful career, but to use your skills to give back to society, to make your mark, to truly make the world a better place.

As a valued Murdoch alumni, I also hope that your graduation will not be the end of your Murdoch experience – and that you remain connected to your alma mater through the many professional and personal rewards offered by our Office of Alumni and Philanthropy. Graduates of Murdoch University, I congratulate you on your accomplishments and wish you continued success as you embark on the next exciting stage of your life's journey.

Yours sincerely,

**Gail McGowan PSM**  
**Chancellor**



# CHARGE TO GRADUATES



Graduates, it is my great honour to welcome you to the fellowship of educated people.

The award of a university degree carries many privileges but like all privileges it also carries responsibilities. As graduates of Murdoch University, I urge you to use what you have learnt for your own betterment and for the benefit of the community.

I encourage you to use the skills and knowledge you have acquired with rigour and integrity and to commit yourselves to a program of life-long learning and discovery. I invite you to remember the lessons Murdoch has taught you about the worth of others, particularly those who have not had the opportunities that you have had.

At all times you should strive to set high goals and to continue the hard work that has brought you so far.

And finally, in all you do, I charge you to be deserving of the good name of Murdoch University.

**Professor Andrew J Deeks**  
**Vice Chancellor and President**



# PRINCIPAL OFFICERS OF THE UNIVERSITY

## **Visitor**

The Honourable Chris  
Dawson APM, Governor of  
Western Australia

## **Chancellor**

Ms Gail McGowan PSM

## **Deputy Chancellor**

Emeritus Professor  
Robyn Owens AM

## **Vice Chancellor and President**

Professor Andrew J Deeks

## **Deputy Vice Chancellor Research and Innovation**

Professor Peter Eastwood

## **Deputy Vice Chancellor Education**

Professor Don Klinger

## **Deputy Vice Chancellor Global Engagement**

Professor Simon McKirdy

## **President of Academic Council**

Associate Professor  
Garth Maker



# ACADEMIC DRESS

The gowns worn today have their origins in the lay costumes of the early Middle Ages.

## Regalia Colours

### Discipline

Agricultural Sciences  
Allied Health  
Business  
Clinical Chiropractic  
Education  
Engineering and Energy  
Environmental and Conservation Sciences  
Information Technology  
Law and Criminology  
Mathematics and Statistics, Chemistry and Physics  
Media and Communication  
Medical, Molecular and Forensic Science  
Nursing  
Psychology  
Social Sciences and Arts  
Veterinary Medicine

Green  
Grey  
Tan  
Light Green  
Gold  
Orange  
Green  
Orange  
Violet  
Green  
Blue  
Green  
Yellow  
Grey  
Blue  
Purple

### Research

Master of Philosophy  
Research Masters With Training  
Doctor of Education  
Doctor of Information Technology  
Doctor of Philosophy  
Doctor of Psychology  
Doctor of Veterinary Medical Science

Cream  
Cream  
Gold  
Orange  
Red  
Grey  
Purple

### Higher Degrees

Doctor of Economics  
Doctor of Literature Royal  
Doctor of Science  
Doctor of Veterinary Science

Tan  
Blue  
Green  
Purple

### Honorary Degrees

Doctor of the University  
Doctor of Letters Royal  
Doctor of Laws

White  
Blue  
Violet

GRADUANDS



## School of Engineering and Energy

### **Graduate Certificate in Energy and Carbon Studies**

Yvette Joy KING

Ying Kuen LAI

Scott SHERIDAN

Kathryn Fiona SINCLAIR

### **Graduate Diploma in Energy and Carbon Studies**

Benjamin DANAHER

Shane Robert O'CONNOR

### **Bachelor of Engineering Technology**

Touseef AHMAD

Karma CHODEN

Sangay JAMTSO

Kelzang NAMGYEL

Tshering WANGCHUK

Tshering YUDEN

### **Bachelor of Engineering with Honours and Bachelor of Commerce**

Ephraim Komborero  
MUGUTI

### **Master of Engineering Practice**

Saad ABDULLAH

Muhammad ADNAN

Areej AHMED

Sikandar E AZAM

Abu BAKAR

Ahmad Faizan BUTT

Tashi CHODEN

Tashi DAWA

Lhazin Yeshey DEMA

Tshering DHENDUP

Chencho DORJI

Sonam DORJI

Tshenchap DORJI

Emily Wanjiru GITAU

Sarita GURUNG

Mehmood UL HASSAN

Ahmed IBRAHIM

Sunil JAMIL

Fatah KHAN

Sarwar Imtiaz KHAN

Kritika LAMA

Dema LHAMO

Robin Kiprop LIMOH

Tawanda MUNYAKARI

Tenzin NAMGYEL

Shushil PAUDEL

Hamayoun RAZA

Affaq Ahmad RIAZ

Muhammad Umair SAEED

Tshering SAMDRUP

Azariah Kipkirui SANG

Rashik SHARMA

TALHA

Sangay TAMANG

Sonam TENZIN

Tashi TENZIN

THUKTEN

Pema TOBGAY

Claudia Alejandra  
TORRES ZAMORA

Sangay Tenzin TSHERING

Thinley TSHERING

Muhammad USMAN

Sonam WANGCHUK

Tandin WANGCHUK

Ugyen WANGCHUK

Tandin WANGMO

Pema YOEZER

Pingping YUAN

Sangay ZANGMO

### **Master of Renewable and Sustainable Energy**

Sushil ADHIKARI

Syed Muhammad AHSAN

Mohsin ALI

Shehan Bin ASHRAF

Steve Andrew ASTORGA

Riya BENNY

Belmin CAUSEVIC

Talha Tariq CHEEMA

Tanaka Melissa  
CHIGWANDA

Karma CHOKI

Ugyen CHOPHEL

Eduardo COSTA DUMINELLI

DAWA

Muhammad HABIB  
UR REHMAN

Tayyab HUSSAIN

Javeria JAVAID

Elisha Kiprotich KETER

Pema KHANDU

Festus Kiprotich KIMELI

KIPKIRUI Vincent

Juan Camilo  
OTALORA CALA



# GRADUANDS

Jai Bahadur PRADHAN

Shah Bir RAI

Shane RICHARDSON

Nowshin Sharmin RITU

Muhammad Husnain SAJID

Undrasonip Edna  
SPACKMAN

Chorten Tshering TAMANG

Tshering TASHI

TENAI Erick Kipkemoi

Pem TENZIN

Kinley TSHERING

Ugyen WANGCHUK

Tshering YANGKI

Lobzang YESHEY

Thinley YOEZER



## School of Information Technology

### **Graduate Certificate in Information Technology**

Rinchen CHOGYEL

Pema DECHEN

Ke LIU

Anderson  
QUINONEZ GOMEZ

SILISILON John Alfred III

Lahey TSHERING

Chhimi WANGMO

Pema YANGDEN

### **Graduate Diploma in Information Technology**

Dipesh JOSHI

Xiaozhen LU

SIMIYU Hilary Wafula

Rehar SUBBA

Lahey TSHERING

Andrew Mosese TU'ITUPOU

Tshering WANGDI

Chhimi WANGMO

Damchoe YEZER

### **Bachelor of Information Technology**

Aishwarya ARUN

Kishor ARYAL

Mubashir ASLAM

Faizan AZAM

Arogya BADAL

Bradley BALES

Max Marshall BALL

Louise Antoinette  
BARJAKTAREVIC

Matthew BRADFORD

Sonam CHODEN

Jasper Alexander  
COOMBES-WATKINS

Adam DABRE

Daniel Luke DE AZEVEDO

Sonam DEKAR

Joshua DELLA-SALE

Sarah Anne Marie-  
Dominique Pierre-  
Yves DEMEUSE

Aarati DHUNGANA

Jaiden Aaron DI LANZO

Justin Christoforo DJAUHARI

Nim DORJI

Passang DORJI

Amber Renee

DORLANDT-CHANDLER

Kabita GHALLEY

Zaid Naveed GHORI

Rhys William GILLHAM

GOURAV

Lachlan GRUMBALL

Clinton Jeremy HART

Muhammad Abu  
HURAIRAH

JOEL THOMAS MANNOOR

Natthasha Joey KENNEDY

Obaidullah KHAN

James KING

Lana May KOMAROMI

Jianchen KUANG

Mahekash KUMAR

LHAMO

Pelden LHAMO

Tenzin LHAMO

Barnabas MADAI

Jiten Vikas MALKANI

Andrew Alexander MASAR

Shaun Ashley MATTHEWS

Nur Omayah  
MOHAMAD HASHIM

Keanan MOODLEY

Uzair MUSTAFA

Jan Hendrik MYBURGH

Hassan NAWAZ

Aayush NEUPANE

Tanjina Khanom NIRJONA

Nathan O'GRADY

Theo James PASCOE

Andrew James PERCY

Carlos Enrique  
PEREDA MIESES

Jacob Sebastian PETTIT

PHAN Tran Anh Huy

Dananjay PRABHAHAR

PRAKASH Ambrishkumar

Numan Javed SAYYED

Muhammad Rehan SHAKEEL

Arsh SHARMA

Prasanna SHRESTHA

Cameron Isaac SIMS

Joshua Antony Ian SMITH

Abhijeet Singh SODHI

Sharmeen Akter SOHA

Jared STANBROOK

Eren Tanah STANNARD



# GRADUANDS

Niwesh SUBEDI

Buket SWAIN

Ronish TAMANG

Kin Lam TANG

Joshua Mark TAYLOR

Sudarshan UPADHYAY

Andrew James  
VLEESCH DU BOIS

Joshua Michael WALLER

Ziming WANG

Namgay WANGCHUK

Niamh WILSON

Shenxing XIE

Kinley YANGCHEN

Chimmi YANGDON

Rinchen ZANGMO

Sonam ZANGMO

Zeyu ZHAO

Zanele Paidamoyo ZULU

## **Bachelor of Information Technology and Business**

Michael Dixon LAWI

Caelan Simon RANKIN

Tawananyasha Reign  
TAKAENDISA

## **Bachelor of Science**

Dane Nazim AKTEPE

Meg Ellin ATCHESON

Andrew GILL

William Damian IVEY

Sakariye Abdul MOHAMUD

Jose Miguel NAVARRO

Shaun SEARLE

Ananta Raj SHRESTHA

## **Master of Information Technology**

Yoshika ABEYWARDHANA  
DAHANAYAKE

Tanvir Ahmed ABIR

Muhammad ABRAR

Muhammad ABU BAKAR

Roshan ADHIKARI

Talha AFZAL

Fahad AHMAD

Hafiz Muneeb AHMED

Hassan AHMED

Furqan AKRAM

Usama AKRAM

Mohamed Fasrin ALEEM

Junaid ALI

Numan ALI

Kashif ALTAF

AMINGA Brian Moturi

Bruhathi ANDRA

Hosne ARA AKTER RUNA

Ahsan ARSHAD

Muhammad Danyal  
ASHRAF

Umair ASHRAF

Muhammad Faisal ASLAM

Kenula Bandara

Hashir AZEEM

Soban BAIG

Supantha BAPPY

Rohit BHATIA

Muhammad BILAL

Deekshith Kumar BUSSA

Muhammad Abdullah BUTT

Dylan CABREROS

Khushiben Kiritkumar  
CHAUHAN

Kezi CHEN

Tashi CHENING

Karma Tshering CHODEN

Kinzang CHODEN

Pema CHODEN

Sonam CHODEN

Thinley CHODEN

Yeshi CHODEN

Rinchen CHOGYEL

Sonam CHOKI

Karma CHOPHEL

Trisha Antoinette COSTA



Rashmita DANGOL  
 Sonam DARGAY  
 Vishwani Ranodya  
 DAYARATHNA  
 Marikku Fernandulage  
 Abhishi Eyeshani DE SILVA  
 Md Nazmul Ahamed DEEP  
 Cheten DEMA  
 Kencho DEMA  
 Kezang DEMA  
 Md Sabbir DEWAN  
 Bronwyn DICKSON  
 Shams Ud DIN  
 Mubashir Mahmood  
 DOGAR  
 Karma Tshering DOLKAR  
 Sonam Chhimi DOLKAR  
 Cheten DORJI  
 Ngawang DORJI  
 Phuntsho DORJI  
 Tashi DORJI  
 Ugyen DORJI  
 Ugyen DORJI  
 Chunxi DU  
 Bilal FAROOQ  
 Syeda Gohar FATIMA  
 Muhammad FEZAN  
 Luiz Felipe FIUZA SIMAO  
 Yash Rajubhai GADHIYA

Shailesh GAUTAM  
 Nirdesh GHIMIRE  
 Chador GYELTSHEN  
 Tandin GYELTSHEN  
 Muhammad Bilal HASAN  
 Rafid Jaouad HASAN  
 Sardar Muhammad  
 HASSAAN  
 Ali HASSAN  
 Muneeb HASSAN  
 HASSAN Nafees Ul  
 Iftihaj Muhammed  
 Naquib HOSSAIN  
 Afzaal HUSNAIN  
 Shan Ali HUSSAIN  
 Raees IBRAHIM  
 Ammar IFTIKHAR  
 Muhammad  
 Sameed Bin IJAZ  
 Sikandar IMTIAZ  
 Waheed IQBAL  
 Hassan IRFAN  
 Faisal IRSHAD  
 Shaharyar JALALUDDIN  
 Aqib JAVED  
 Sherin Mary JOSEPH  
 Dipesh JOSHI  
 Nasla JOSHI  
 Hari Chandana

KANKANALA  
 Monali Anjana Jayalath  
 KANKANAMGE  
 Jenish Pareshbhai KAPADIYA  
 Rose Wambui KARIUKI  
 Aavash KARKI  
 Rabina KARKI  
 Saud KHADIM  
 Nishan KHADKA  
 Hamza KHALID  
 Mansoor Ahmad KHAN  
 Salman Ayub KHAN  
 Sangay KHANDU  
 Smit Jagdishbhai KHUNT  
 Hillary Kibiwott KIMUTAI  
 Patrick Kipmutai KIPKOECH  
 Avnish KUMAR  
 Mashal LARAIB  
 Deki LHAZOM  
 Bibek MAHARJAN  
 Rabindra MAHATO  
 Kenneth Kipkorir MAIYO  
 Talha MANAN  
 Ravidil Dharirathna Sri  
 MANDAWALA  
 KANKANAMALAYA  
 Rohma MARYAM  
 Danish MATEEN  
 Ahmet MENEVSE

MEREDHODDI Manish  
 Sadia Farin MIM  
 Pooria MOHAMMAD  
 DOUST  
 Amber Bahadur MONGER  
 Senuka Nethmin  
 MUNASINGHE  
 Shehryar MUNEER  
 Syed Zohaib MUNIR  
 Syed Ali MURTAZA  
 MUSKAAN  
 MUTAI Emmanuel Kipkosgei  
 Vamsidhar MUTCHU  
 Jackson Mulinge MUTUA  
 Titus Kariuki MWAURA  
 Muhammad Moaz NADEEM  
 Md NAHID  
 Legzin NAMGYAL  
 Syed Ehtsham Haider NAQVI  
 Hassam Bin NASIR  
 Salman NASIR  
 Muhammad Kamran NAZIR  
 Muhammad Usman NAZIR  
 Drukwang NORBU  
 Tashi NORBU  
 Abdul NOUMAN  
 OGOLA Marvin Martin

# GRADUANDS

Krishna Shantibhai PADSALA

Dechen PELDEN

Kinley PENJOR

Sangay PENJOR

Liyanage Thushara  
Ruwan PERERA

Tashi PHUNTSO

Shreejana PRADHAN

Raja Hamza QAMAR

Saif Ur Rehman QURESHI

Obaid Ur RAHMAN

Praba RAI

Samal RAI

Amna Kaleem RAJA

Ahmad RASHEED

Hurraira RASHID

Sumaiya RASHID

RATU

Awais Ur REHMAN

Sabih Ur REHMAN

Shovon Datta RONY

Brian Kibet RUGUT

Harvi Sanjeevbhai  
RUPAVATIA

Sharif SADIQUE

Rain SAENCHAIWONG

Adeel SAFDAR

Muhammad Ashar SAJID

Azeem SARWAR

Fahad Bin SARWAR

Safeer SARWAR

Rohan Mukeshbhai SAVANI

Muhammad  
SAVEED UL HASSAN

Muhammad Sarfraz SHAHID

Khuram SHAHZAD

Sparsh SHARMA

Muhammad Umer SHEIKH

Bipana SHRESTHA

Chitra Lal SHRESTHA

Raman SHRESTHA

Ritesh SHRESTHA

Akriti SIMKHADA

Harminder SINGH

Muhammad SOHAIB

Munkhzul SUKHBAATAR

Birju SUNWAR

Ali Hassan TAHIR

Rameez TAHIR

TALLAM Kennedy Kimutai

Bijay TAMANG

Muhammad Uzair TARIQ

Salman TARIQ

Zain TARIQ

TARUNA

Pema TASHI

Jurmi TENZIN

Sangay TENZIN

Ugyen TENZIN

Bipin THAPA

Sanjeep THAPA

TSHERING

TSHERING

Dendup TSHERING

Ngawang TSHERING

Muneeb ULLAH

Anup UPADHAYA

Navjot Singh VIRK

Cheki WANGCHUK

Kinley WANGCHUK

Tashi WANGCHUK

Sonam WANGDA

Sonam WANGDI

Chhimi WANGMO  
Choki WANGMO  
Ugyen WANGMO  
Ugyen WANGMO  
Muhammad WAQAS  
WICKRAMANAYAKA  
ARACHCHIGE  
Vinod Madusanka  
Wickramanayake  
Vinuri Udara WIJEKOON  
WIJESUNDARA  
MUDIYANSELAGE  
Nuwani Samankumari  
Wijesundara

Tshering YANGDON  
Tshering YANGKI  
Shehar YAR  
Adnan YOUSAF  
Muhammad Adnan YOUSAF  
Fatir ZAIB  
Nidup ZANGMO  
Ali Ahsan ZARYAB

**Master of Science in  
Information Technology**  
Mathymukan JEYAKUMARAN

## School of Mathematics, Statistics, Chemistry and Physics

### **Graduate Diploma in Extractive Metallurgy**

Louise ABRAHAM  
Matthew Leslie BORDAS  
Andrew Marcus FARIA  
Nikki Tara HENSEN  
Skyla Jade MURRAY



# HIGHER DEGREES BY RESEARCH



## Master of Data Science (Research)

**Rio Rifqi Syah AKBAR**

### ***Individual Feral Cat Identification in Camera Trap Imagery using Deep Learning***

Manually identifying feral cats in low-quality camera-trap images for management efforts is time-consuming and limits scalability for large monitoring programs. To address this, a deep learning pipeline that automatically detects multiple cat features across different body parts and combines them for identification is presented. The pipeline performs well and serves as a practical proof of concept. However, performance was constrained by issues inherent to camera-trap datasets, such as poor image quality and dataset imbalance, indicating the need for more flexible pipelines.

*Professor Ferdous Sohel (Murdoch University), Professor Patricia Fleming (Murdoch University)*

## Master of Philosophy

**Fadhil AL-MAWALI**

### ***Extraction of Lithium directly from $\alpha$ -spodumene concentrate***

This thesis presents an investigation of lower temperature alkaline roast leach process for extracting lithium from spodumene. The developed process achieves significant lithium recovery without the high energy demands of conventional phase transformation steps, and lowers greenhouse gas emissions. The findings identify reagent dosage and temperature as dominant factors and demonstrate the feasibility of a safer, more sustainable and potentially economically efficient approach to lithium extraction.

*Professor Aleksander Nikoloskim (Murdoch University), Dr Rorie Gilligan (Murdoch University)*

**CAI Chang**

### ***Artificial Intelligence Models for Risk Analysis of Carbapenem-Resistant *Klebsiella pneumoniae*: A Comparative Performance Analysis Towards Logistic Regression***

This research explores how Artificial Intelligence (AI) can improve the prediction and management of Carbapenem-resistant *Klebsiella pneumoniae* (CRKP) infections. By comparing several AI models with traditional methods, the study shows that Random Forest and Artificial Neural Networks significantly enhance predictive accuracy. Key risk factors, such as ST11 strain carriage and ICU admission, were identified. The findings support using AI to improve clinical decision-making and antimicrobial resistance (AMR) control.

*Dr Guanjin Wang (Murdoch University), Professor Kevin Wong (Murdoch University)*

# HIGHER DEGREES BY RESEARCH

**Gideon Mawuli Kobla GBEDEMAH**

## ***Effect of Additives on The Performance of Vanadium Redox Battery using Generation 1-Vanadium Electrolyte***

This research highlights the potential of ionic and phosphate-based additives for advancing VRFB technology. The findings in this research provide valuable insights for optimising VRFB electrolyte formulations with additive concentrations to achieve superior performance, supporting the transition towards a sustainable energy future.

*Professor Aleksandar Nikoloski (Murdoch University), Dr Touma Issa (Murdoch University), Emeritus Professor Pritam Singh (Murdoch University)*

## **Master of Renewable Energy Systems (Research)**

**Rowel DE PAZ**

## ***Techno-Economic Analysis on Zero-Emission Electricity Supply for Remote Communities in Western Australia (WA)***

The main focus of this paper is to identify the gap landscape, issues and solution options for the SPS. This study includes selecting cost-effective, reliable, and resilient to climate disruption SPS options for remote off-grids in Western Australia. HOMER Pro simulations used Western Power stand-alone power systems (SPS) actual load profiles, component sizes, and technical specifications to model and evaluate system performance. Root Cause Analysis and survey also used methods.

*Professor Tania Urmee (Murdoch University), Associate Professor Jonathan Whale (Murdoch University), Principal Engineer Nigel Wilmot (Western Power)*

## **Doctor of Philosophy**

**Behnam AMANNA**

## ***Application of Computational Fluid Dynamics in Optimizing Flat Plate microalgal Photobioreactor***

My research focused on optimizing inclined flat plate photobioreactors for microalgal cultivation, specifically *Arthrospira platensis*. By integrating experimental and computational approaches, I developed and validated a CFD model to improve reactor design, energy efficiency, and biomass productivity. The findings identified optimal aeration rates, sparger configurations, and baffle designs, providing scalable recommendations for industrial applications in bioenergy and nutraceuticals. This work contributes to advancing sustainable microalgal cultivation technologies and enhances their commercial viability.

*Professor Navid Moheimani (Murdoch University), Professor Parisa Bahri (Murdoch University)*

**Tobias George BAMFORTH**

***Natural and Experimental Insights into the Formation, Preservation and Composition of Rhabdophane ( $\text{REEPO}_4 \cdot x\text{H}_2\text{O}$ ,  $\text{REE} = \text{La} - \text{Lu}$ ,  $x = 0 - 1$ ) in Rare Earth Element Deposits***

This thesis outlines the formation conditions and compositional nuances of rhabdophane - a common mineral in natural deposits of the rare earth elements (REEs), which are critical metals for the development of renewable technologies. It summarises and describes some of the natural geochemical conditions that precipitate rhabdophane, how these might infer the nature of REE deposit formation, and how they may assist in exploring for these metals that are so essential for the green energy transition.

*Associate Professor Fang Xia (Murdoch University), Professor Andrew Putnis (Curtin University), Dr Mark Pearce (CSIRO)*

**Owen HOROCH**

***Novel Materials for Improving Grain and Sandy Soil Qualities***

This thesis investigates the application of novel clays and mesoporous silica nanoparticles (MSNs) for two agricultural challenges: non-wetting soils and micronutrient-deficient grains. The research found that modified hydrotalcite clay greatly improved soil water absorption in sandy soils, while functionalised MSNs boosted foliar zinc delivery to wheat grain. These results advance the understanding of how innovative materials can help overcome multiple soil constraints faced by the Western Australian grains industry.

*Professor David Henry (Murdoch University), Professor Richard Bell (Murdoch University)*

**Michael James HOUGH**

***Engineering Nanoporous Carbon Beads for Enhanced Adsorption of Pharmaceuticals and Industrial Ions***

This research aimed to understand how pore structure influences adsorption by designing and characterising tunable nanoporous carbon beads. Using a novel ultrasonic spray nozzle reactor and supercritical steam activation, the study enhanced hierarchical pore networks that significantly increased adsorption performance. Advanced characterisation and machine-learning modelling demonstrated improved recovery of gold ions, effective adsorption of pharmaceuticals, and accurate machine-learning prediction of paracetamol uptake. The findings provide new strategies for optimising porous carbons for targeted environmental and biomedical applications.

*Associate Professor Piotr Kowalczy (Murdoch University), Professor Gerd Shroeder-Turk (Murdoch University), Associate Professor Artur Deditius (Murdoch University)*



# HIGHER DEGREES BY RESEARCH

**Kingsley Igenepo JOHN**

***Synthesis of modified graphitic carbon nitride for the remediation of emerging organic contaminants***

This research aims to boost the photocatalytic performance of polymeric graphitic carbon nitride through various modification routes and the incorporation of environmentally sustainable materials. The study's outcome was the development of novel synthesis pathways and green, low-cost organic waste materials that significantly enhance the photodegradation performance of graphitic carbon nitride in removing organic pollutants from synthetic and real wastewater.

*Dr Linda Li (Murdoch University), Professor Goen Ho (Murdoch University)*

**Tania Sabnam Binta MONIR**

***Stability of soil organic carbon under different amendments in sandy soils***

This research investigated how different amendments affect soil organic carbon in sandy agricultural soils. A fast and efficient analytical method was developed to determine changes in the molecular composition of organic matter in treated soils. The main finding was that amendment effects are time-dependent, and that combining organic and inorganic amendments can improve carbon retention and biomass production. This work will support more productive and sustainable farming on sandy soils.

*Professor David Henry (Murdoch University), Dr Damian Laird (Murdoch University)*

**Kofi Ampaw NYARKO**

***A Multi-Stage Framework for the Sustainable Deployment of Decentralized Hybrid Mini Grids in Marginalized Rural Communities***

This research examines why many renewable-energy mini grids in rural communities struggle to remain sustainable and how they can be improved. Using literature reviews, field data from a Ghanaian mini grid, expert interviews, and system modelling, it identifies key barriers such as affordability, regulation, design limitations, and weak community engagement. The research presents a new three-stage framework that will help governments and developers plan, finance, and manage mini grids more effectively to support universal electricity access.

*Professor Tania Urmea (Murdoch University), Associate Professor Jonathan Whale (Murdoch University)*

**Masoud REZAEI**

***Deep Neural Network for Data Sparsity Scenarios in Plant Disease Detection***

This thesis presents an advanced AI-driven framework for intelligent crop health monitoring, given the data scarcity issue in agriculture. The research contributes to AgTech by constructing a benchmark dataset, developing a few-shot learning pipeline to address the limited data challenge, designing a minimally supervised deep learning method to overcome data annotation challenges, and innovating feature engineering in deep learning models for plant disease detection and severity estimation.

*Professor Ferdous Sohel (Murdoch University), Professor Dean Diepeveen (Murdoch University), Professor Hamid Laga (Murdoch University), Professor Michael G. K. Jones (Murdoch University)*





# UNIVERSITY AWARDS

## University Medallists

University Medals recognise outstanding academic achievement by undergraduate students across all disciplines of Murdoch University. The University awards ten medals each year. Recipients will be announced during the ceremony.

## Valedictorian Address

Valedictorian is awarded to one exceptional student. The recipient will be announced during the ceremony and invited to deliver the Valedictorian Address.



## Murdoch University Alumni

As a graduate of Murdoch University, we welcome you to the Murdoch Alumni Family - a growing international community of over 116,000 alumni.

Recent graduates studying at one of Murdoch's Western Australian campuses may be eligible for a 25% discount on select postgraduate courses. Also, alumni who are not recent graduates, can enjoy a 10% discount from their course.

There are many opportunities to be an active and engaged Murdoch alumnus through activities such as joining your local alumni network, mentoring current students, volunteering on University Boards and Committees or at Murdoch events.

After 50 years as a leading educational institution, Murdoch University has a wealth of incredible graduates. From leaders in politics, business and research, to alumni working for the environment, or on the coalface of community development, our graduates are making a difference across the globe.

With many local, national and international events and reunions held every year, our e-newsletter Echoes, and the alumni magazine Murmur, there are many reasons to stay connected with Murdoch University.

For full details of the benefits and services available to you as a Murdoch alumnus, and to update your contact details so we can stay in touch, please visit our website: [www.murdoch.edu.au/alumni](http://www.murdoch.edu.au/alumni)  
We also encourage you to join our alumni social media group: [www.linkedin.com/company/murdoch-university-alumni/](https://www.linkedin.com/company/murdoch-university-alumni/)

Congratulations on achieving a big milestone.

Welcome to the Murdoch alumni family!

# Murdoch University Philanthropy

Murdoch University is committed to making our world a better place through outstanding research and educational opportunities. As one of our talented alumni, you too can have an impact when partnering with your university.

Our alumni are all at different stages of both their lives and careers, and contribute to their community in both big and small ways. As they mature, many choose to invest in our students and research through philanthropic support.

The Office of Alumni and Philanthropy works to link alumni, leading businesses, individuals, and community-minded groups with opportunities at Murdoch. Avenues for support can be via bequests, major gifts, annual and regular giving or sponsorships and can contribute to advancing world leading research, providing academic positions, purchasing equipment, further capital development and funding life changing scholarships for our students.

Our Philanthropy team is here to help you explore opportunities, connect to the University, and realise joint aspirations through financial and in-kind donations. They cultivate and steward key relationships by uniting individuals and organisations with Murdoch's philanthropic priorities, to use our academic strength and resources to make the world a better place together.

We invite you to become involved in your community's future by reaching out to our office at any time for an exploratory conversation.

If you are ready to support now, contact the Philanthropy Team via phone **(+61) 8 9360 6211** or email **[philanthropy@murdoch.edu.au](mailto:philanthropy@murdoch.edu.au)**

To support one of our impactful initiatives scan the QR code opposite.



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Ngala kwop biddi.  
Building a brighter future, together.