Faculty of Science and Technology HDR Information Session



Charles Darwin University acknowledges all First Nations people across the lands on which we live and work, and we pay our respects to Elders both past and present.

Agenda

- 1. Welcome by the Pro Vice-Chancellor FST (Suresh)
- 2. Introduction to the Faculty Research Committee Members(Vinuthaa)
- 3. Information on HDR Allocation and grants (Dani)
- 4. Resources available to FST HDRs through Institutes/Centres
- RIEL (Sam) , NACAS (Mariana)
- ERI and AMA (David) ACCI (Sami)
- 5. Additional Resources (Vinuthaa)
- 6. HDR Buddy System Open Discussion (Vinuthaa / Allyson)
- 7. Research Integrity (Erica)
- 8. Research Data Management (Vinuthaa)
- 9. Milestones (Steven)
- 10. Questions
- Lunch and networking

Office of Research and Innovation

Current HDR candidates | Charles Darwin University (cdu.edu.au)

Information for HDR Students

Read more





Find out more about all of information in relations



Read more

Faculty of Science and Technology

Read more

https://www.cdu.edu.au/science-technology/research/current-hdr-students



Faculty Research Committee Members

Committee Chair	Vinuthaa Murthy
FST Associate Dean of Research	
Committee secretary	Dani Choveaux
HDR Coordinator	
DISCIPLINE	FST Research Committee representative
Engineering	Milad Bazli
IT	Sami Azam
Environment	Erica Garcia
RESEARCH INSTITUTE / CENTRES	
Research Institute for Environment and Livelihoods	Brett Murphy
Energy & Resource Institute	David Ompong
North Australia Centre for Autonomous Systems	Mariana Campbell
NT Academic Centre for Cybersecurity & Innovation	Sami Azam
OTHER	
ECR representative	Hooman Mehdizadeh
HDR student representative	Allyson Malpartida
Research Integrity Advisor	Erica Garcia
Human Ethics Advisors-	
Environment	Sam Banks and Vinuthaa Murthy
Engineering &IT	

Student Allocations

Funds available for research expenses.

Masters: up to 2 years full-time or 4 years part-time PhD: up to 3 years full-time or 6 years part-time

High cost (full-time student) \$1800 per semester High cost (part-time student) \$900 per semester Low cost (full-time student) \$800 per semester Low cost (part-time student) \$400 per semester

Grants

Additional Financial Assistance to HDR Candidates.

HDR Grants are available upon funding. Eligibility criteria must be met to be considered for the grants.

HDR International Conference Travel Grant

HDR Domestic Conference Travel Grant

HDR Supplementary Funding Grant

External HDR Travel Grant

Current FST HDR students website

Resources available to FST HDRs through Institutes/Centres

Research Institute for the Environment and Livelihoods (RIEL) NACAS, BNA, RINA ..

Energy and Resources Institute (ERI) AMA, ACCI..



RIEL

Research Institute for the Environment and Livelihoods

https://www.cdu.edu.au/riel

https://www.cdu.edu.au/riel/consultancy-services

Existing service centres

Darwin Centre for Bushfire Research (DCBR)

Bioscience North Australia

Aboriginal Research Practitioners Network

Other services

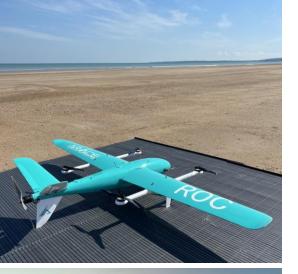
Aquatic and terrestrial ecology

Industry and environment

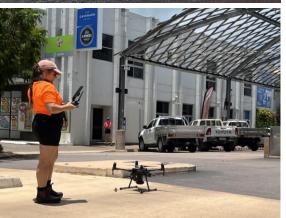
Participatory management and enterprise development

Technologies and methods

Water quality and quantity









Capabilities

Facilities

nacas.net

- Long-range drone operations for remote sensing, surveillance, and environmental sampling.
- Advanced composite 3D printing of anything.

in 🕨

RPAS@cdu.edu.au





Drone Lab: Purple 16
3D Printers: Yellow 2.1.07



https://www.cdu.edu.au/eri

https://www.cdu.edu.au/eri/consultancy-services/equipment-list

	ltem	Brand	Function
1	FTIR- Fourier-transform infrared spectroscopy	Bruker INVENIO	Analysis of solids, liquids and gases using Infrared Spectroscopy Equipped with comprehensive range of accessories; e.g., DRIFT
2	STA (TGA/DSC)- Simultaneous thermal analyser	Netzsch F3 Jupiter	Thermogravimetric analysis: measurement of mass changes and thermal effects between -150°C and 1600°C. Equipped with the specialised water-vapour furnace
3	Elemental analyser	Thermo Fisher FlashSmart	Elemental composition of samples: carbon, hydrogen, nitrogen, sulfur and oxygen (CHNS/O)
4	DCAT – Dynamic Contact Angle measuring devices and Tensiometer	Dataphysics	Universal measuring devices for the force-based measurement of interfacial parameters and phenomena.
5	Turbidity meter	INESA WZS-188	Measurement of attenuation of light by insoluble particulate matter suspended in transparent liquid.
6	PAT-Profile Analysis Tensiometer	Sinterface PAT1M	Analysis of the shape of pendent and sessile drops or buoyant and captive bubbles.
7	ISE pH meter	Hanna Instrument	pH measurement
8	Ross Miles apparatus		Foam analysis
9	Modular Compact Rheometer	MCR302e	with a torque range from 0.5 nNm to 230 mNm and integrated active thermal management

10	GC-FID x 2	PerkinElmer Clarus 580/680	One system with FID and TCD for refinery gas analysis such as H ₂ , N ₂ , O ₂ , methane, ethane, and olefins. Another system with FID and FPD for volatile compounds analysis such as fatty acids, essential oils and pheromones.
11	GC-MS	Agilent 8890-5977	With two channels: 1-FID, 2-MS. for volatile compounds analysis such as fatty acids, essential oils and pheromones.
12	Horizontal furnace	Labec HTF50/12-3	
13	SEM-scanning electron microscope	Thermo Scientific™ Phenom™ XL G2	Focused beam of electrons to scan the surface of a specimen and generate images at a much greater resolution compared to optical microscopy
14	X-ray diffractometer or XRD machine	Malvern Panalytical Empyrean	Analyzing and measuring the structure of materials.
15	ICP-OES (Inductively coupled plasma - optical emission spectrometry)	Shimadzu ICPE-9000	Industry-standard technique for the elemental analysis of a range of metals and alloys.
16	LightSPEE3D printer	SPEE3D	Metal 3D printing

Contact : Dr Hao Wang (hao.wang@cdu.edu.au) for lab induction and booking instruments



Multi-disciplinary research centre that delivers a real-world impact in Information and Computing Sciences in particular: <u>Cyber Security</u>, <u>Data Science</u> and <u>Artificial Intelligence</u>.

- ACCI work closely with the Australian government, industry partners, NGO and universities, and has a strong international network and partners to stay at the forefront of innovation and address society's most pressing challenges.
- <u>CDU IT CodeFair</u>: advocates student's talents showcasing their work more broadly to the University and industry communities. <u>https://itcodefair.cdu.edu.au/</u>

Cyber Territory Skills Hub

Virtual centre bringing together the University, the Northern Territory and Federal Governments and industry partners in the training of people to improve cyber awareness and management, and contribute to industry capability.



Other resources

Statistics Support : Mirjam Kaestli

FST-support : <u>fst-support@cdu.edu.au</u>

CDU Wellbeing Support Line <u>1300 933 393</u> and SMS <u>0488 884 144</u>

CDU offers short-term individual counselling sessions and regular group wellbeing sessions

<u>Counselling | Charles Darwin University (cdu.edu.au)</u>

CDU Security

Free call: <u>1800 646 501</u> (Australia-wide 24/7) T: <u>+61 8 8946 7777</u> (Casuarina 24/7) E: <u>security@cdu.edu.au</u>

RESPECT. NOW. ALWAYS

Consent Matters: a free online course

How to access the course

- CDU students can find the free online course in their <u>Learnline units</u>.
- CDU staff can find the free online course in <u>eCentre</u> under 'staff induction items'.
- Click on the course to begin.

Link : <u>https://www.cdu.edu.au/about-cdu/values-and-culture/respect-now-always/consent-matters-</u> <u>free-online-course</u>

FST - HDR Buddies

CDU GLOBAL – International students

RIEL & Co Postgraduate Society - CDU



- Friday fancy once a fortnight
- Welcome bbq and Christmas party once a year
- Email <u>rielcps@groups.cdu.edu.au</u> to join the mailing list and become a member



Research Ethics and Integrity

https://www.cdu.edu.au/research-andinnovation/research-ethics-and-integrity

Charles Darwin University places great value on the knowledge, expertise and integrity of its research students and staff and on their commitment to conduct research with high standards of integrity and ethics.

The University works to build a responsible research culture underpinned by the Australian Code for the Responsible Conduct of Research and based on respect for human research participants, animals and the environment.





Human research ethics

The Charles Darwin University Human Research Ethics Committee (CDU-HREC) oversees all human research

Animal ethics

CDU has a strong commitment to research excellence and integrity. Through our world-class teaching and

Research Integrity

https://www.cdu.edu.au/research-and-innovation/research-ethics-and-integrity/research-integrity

What does the RIA do?

1. Promotes the responsible conduct of research.

2. Develops and promotes of a culture of research ethics and integrity.

3. Provides advice to researchers regarding any aspect of research integrity and the Australian Code for the Responsible Conduct of Research.

4. Discusses concerns and complaints in relation to potential breaches of the Code.

5. Recognize that situations may be complex, and particular cases may be referred to other CDU policies, such as staff or student misconduct, or bullying.

Home > Research and Innovation > Research Ethics and Integrity > Research integrity

RESEARCH AND INNOVATION Research integrity

Support and services

RESEARCH AND INNOVATION	CDU expects the highest standards of integrity across all aspects of research conducted by		
	CDU researchers. These standards are reflected in the concept of the Responsible Conduct		
Partnership and collaboration	 of Research Policy. CDU operates in accordance with the <u>Australian Code for the</u> 		
Research Impact and Excellence	Responsible Conduct of Research (2018) (The Code). The University and its staff and students are bound by The Code.		
Apply for a Higher Degree by Research	v		
Research and Innovation events	Staff in supervisory positions have a responsibility to ensure that staff and students engaged on research projects have the appropriate skills, experience, training, advice and support to		
The Research and Innovation team	 conduct quality research, safely and responsibly. 		
Current HDR candidates	 The University appoints a number of Research Integrity Advisors (RIA) across all Faculties. 		
nformation for Research Supervisors	RIAs are the first contact for staff and students with questions or concerns about the responsible conduct of research.		
Research Ethics and Integrity	^		
Defence trade controls	CDU take seriously all concerns, complaints, and allegations, including those that are made anonymously. We ask that allegations be made in good faith, confidentially and without		
Human research ethics	malice. Complainants will, as far as practicable, be kept updated about the process of		
Human ethics policies and legislation	investigating and responding to their complaints.		
Desearch integrity	CDU strongly encourages reporting, and recommend reading your responsibilities and rights		

Australian Code for the sponsible Conduct of Research



Research Data Management



"RESEARCH DATA MANAGEMENT PROCEDURE"

Governance Document Library

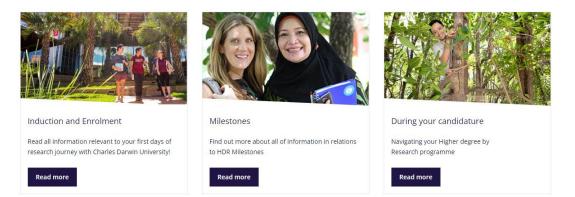
• Link- <u>Research Data Management Procedure / Governance Document Library (cdu.edu.au)</u>.

The library website has a storage guide with information regarding the policies and strategies for storing your research data.

 Link - <u>Data Storage - Research Data Management (RDM) - Subject guides at Charles Darwin</u> <u>University (cdu.edu.au)</u>

Library had launched 'Researcher' Page, outlining all services and guides that are provided by the library to researchers, including HDRs: <u>https://www.cdu.edu.au/library/researcher</u>. The page features <u>Research Data Management guide</u>, which contains links to the <u>RDM and Primary Materials</u> <u>Checklist</u> and the <u>Data Management Plan online tool</u>.

Information for HDR Students





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HDR Milestones and updates

Dean of Graduate Studies: Prof Steven Greenland