



Characterisation is essential across natural, agricultural, physical, life and biomedical sciences, and engineering.

Characterisation refers to the process of measuring the structures and properties of materials at the micro, nano and atomic scales. It has become an area where informatics infrastructure, expertise and best practice are critical. Together with the Australian Characterisation community, we plan to implement strategies to overcome a number of significant informatics challenges. This proposal is to develop an Australian Characterisation Data Capture, Collection, and Collaboration Outline, that forms a strategic link between characterisation facilities, the standards and best practices they apply, and the research communities using instrument data to create domain-specific collections.

Start date

3 June 2019

Expected completion date

8 October 2019

Investment by ARDC

\$50,000

Co-investment partners

[Monash University](#)

[Australian Characterisation Informatics Committee](#)

Lead node



2. Presentation

Project outcomes will be presented at an ARDC Infrastructure Summit in October 2019.



1. Planning document

The Australian Characterisation Data Capture, Collection, and Collaboration Plan.

3. Project completion

The Australian Characterisation Data Capture, Collection, and Collaboration Plan will be published.

Core features



Analysis

Understanding Data Capture Requirements.



Policy

Developing and implementing data collection standards and best-practice.



Community engagement

Developing an open coordinated plan will help institutions to learn from each other, collaborate over

Who is this project for?

Australian Characterisation Informatics Committee, which is composed of members representing:

- ANSTO
- Microscopy Australia
- National Imaging Facility
- Monash University
- University of Queensland
- University of Sydney
- University of Western Australia
- University of Wollongong
- MASSIVE



What does this project enable?


The proposed project activities will allow the Australian Characterisation community to articulate:

- The scope of challenges, drawing on an analysis of current and future instruments and the communities that use them to generate data collections.
- A high-level multi-year outline for addressing these challenges, defining challenges and the way they can be addressed through coordinated programs. This will draw on existing initiatives and resources, already committed by the partners, as well as new funding opportunities.
- Estimate the level of resourcing required to meet these challenges, based on the advice of international experts and key stakeholders.
- Opportunities offered through international collaboration.



Handy resources

- [Final Project & FAIR](#) [PDF 837KB]
- [Presentation](#) [PDF 358KB]
- Characterisation Informatics [Strategy](#)



MONASH
University

Monash University

[VISIT](#)

Australian Characterisation Informatics Committee

