

AGES 2025 Special Session Series

University of Adelaide/NTGS/Industry/Australian Research Council Collaboration - Greater McArthur Basin Special Session Monday 7 April | 3:00pm - 5:00pm

Come and hear some of the latest research on the mineral and energy resource powerhouse that is the greater McArthur Basin from the wild west Birrindudu Basin through the Beetaloo Sub-basin to the Tomkinson Province, the McArthur Basin sensu stricto and the South Nicholson Basin.

The University of Adelaide has been the foundation research provider for two successive Australian Research Council Linkage projects that have partnered with the NTGS and a range of Industry partners including Santos, Empire Energy, Origin, Teck Resources and BHP, with collaboration with CSIRO.

Hear about how the basin formed, its tectonic geography and how the structure and water chemistry of the basin reveal what middle Proterozoic Australia was like! And perhaps more importantly, shed some light on why it contains so many resources.

3.00 - 3.15 pm	Prof Alan Collins: The University of Adelaide/NTGS/Industry/Australian Research Council Collaboration - Greater McArthur Basin.
3.15 - 3.30 pm	Dr Morgan Blades: The Deep South: Disentangling the Stratigraphy of new Core from the Southern Beetaloo Sub-basin Using Sedimentology, Geochemical and Novel Geochronological Approaches.
3.30 - 3.45 pm	Mr Yaser Noorian: Primary productivity and redox dynamics in the Mesoproterozoic Velkerri Formation (Amungee Member), McArthur Basin, Australia: Insights from δ^{114} Cd Isotopes.
3.45 - 4.00 pm	Mrs Ananyaa Khanna: Touching Base with NTGS 82/68: Insights into the Basal Birrindudu succession, the Tolmer Group.
4.00 - 4.15 pm	Ms Dana Imbrogno: Sedimentary Geochemistry of the Batten Fault Zone; foundational facies analysis and chemostratigraphy for future mineral systems analysis.
4.15 - 4.30 pm	Dr Darwinaji Subarkah: The geology of the middle packages of the greater McArthur Basin, northern Australia.
4.30 - 4.45 pm	Ms Lois Greenfield: Understanding the reservoir characteristics of the Kalkarindji volcanic sequence and potential for in-situ CO2 sequestration.
4.45 - 5.00 pm	Dr Angus Nixon: Low-temperature thermal evolution of the McArthur Basin and adjacent Proterozoic orogens.