



AESC

australian earth sciences
convention

**Sustainable
Australia:**

7-10 July 2014

NEWCASTLE, NSW, AUSTRALIA



AESC 2014 will be held in Newcastle, a vibrant port city that is characterised by its working harbour, beautiful surf beaches and proximity to many of Australia's most prestigious wineries.

It is the gateway to the Hunter Valley – heart of the Sydney Basin coalfields, centre of power generation for New South Wales, and home of the NSW Institute for Frontier Geoscience, a joint initiative of the University of Newcastle and the NSW Department of Trade and Investment. Combined with the city's focus on energy efficiency via the Federal Government's Smart Grid, Smart City initiative and the CSIRO Energy Centre, Newcastle is an ideal site for our convention – **Sustainable Australia.**

The convention will be based around the themes of energy, basin geology, geodynamics, resources and the environment. Dedicated symposia include the 39th Symposium on the Advances in the Study of the Sydney Basin and Comparisons & Contrasts in Circum-Pacific Orogens.

AESC 2014 offers all geoscientists a unique opportunity for professional development and a chance to hear firsthand the latest developments in geosciences.

Plan your trip to Newcastle

Call for Abstracts:
October 2013

Abstracts Deadline:
March 2014

The website is coming soon,
in the interim please contact:
info@gsa.org.au

Presentation: Oral and poster

Registration: early 2014

Workshops and field trips:

The convention invites proposals for short courses, workshops and field trips.

Exhibition:

The convention will host an exhibition. We welcome companies and businesses to participate so they can promote the emerging opportunities in their organisation, state or territory.

Supporters:

The organising committee invites companies, institutions and technology providers to support this meeting.

Expressions of interest:

info@gsa.org.au

Convention location:

Newcastle City Hall

T + 61 2 9290 2194

F + 61 2 9290 2198

Email: info@gsa.org.au

Convention Website: coming soon



Coalfield Geology Council
of New South Wales



AESC

australian earth sciences
convention

**Sustainable
Australia:**
7-10 July 2014

NEWCASTLE, NSW, AUSTRALIA



Earth scientists recognise that the key to sustaining the Australian society, economy and environment into the future lies in an understanding of the make-up, structure and deep-time history of the continent, and its setting in an evolving planet.

THEMES

Energy

Increases in the global demand for energy has been driving advances in the efficiency of coal and conventional hydrocarbon extraction, while also urging the rapid growth of interest in unconventional hydrocarbons. Future energy supplies are likely to include all fossil fuels, nuclear sources, and significant increases in the use of renewable energy and cleaner alternatives. Building on the public debate to be stimulated by the 'Energy 2050' public forum, the Energy theme will encompass Earth Science perspectives on energy sources, exploration and extraction methods, and environmental consequences and solutions.

Resources

In an era of increasing demand for mineral resources from the developing Asian economies, and declining rates of discovery of new deposits, new mineral exploration strategies are vital. Discovery will be stimulated by new technologies, new methods of data interpretation and dissemination, refined and novel understandings of mineral systems and ore environments, and the strength of the pre-competitive geological and geophysical data sector, all addressed under the Resources theme.

Environment

Earth's environment is a dynamic and responsive system with a long geological record of change and an immediate and future impact on society, particularly in an Australian context. High-resolution records of past climates (including outcome of the International Ocean Drilling Program), assessments of the state and future of our ground- and surface-water resources, predictions of the response of the Australian environment to climate change, and studies specific to the Australian arid and semi-arid zones, will be major elements of the Environment theme.

Service and Community

The Earth Sciences have an ongoing role of service by informing, influencing, and supporting Australian society, and a proud history of education and research. The Service and Community theme will address the geoscience response to distributed grid computing and cloud storage, the dissemination of geoscience information in a high-bandwidth environment, the continuing and evolving role of geoscience outreach and education, geohazard studies and their role in protecting the community, the contributions of geotourism and geoheritage, and the historical record and influence of Earth scientists.

Dynamic Planet

Today's Earth is the sum of 4.5 billion years of geological processes. The Dynamic planet theme will address: the geodynamic evolution of Australia and other continents from the Hadean to the present; the evolution of the Earth-Moon system and the meteoritic impact record; the expression of the circulation driven by the Earth's heat engine in lithospheric plate tectonics, mantle dynamics and differentiation, and core evolution; the processes that govern deposition and deformation in intracratonic settings; processes of crustal growth and recycling, at convergent margins and in other settings; geophysical and geochemical evidence of the structure and composition of the deep subsurface; and the influence of all of these elements on the formation and distribution of mineral and energy resources.

Living Earth

Life has fundamentally influenced the development of the Earth, making it unique with respect to its planetary neighbours. The Living Earth theme will investigate: the evolution of life as witnessed in the fossil record; consider novel methods to supplement traditional palaeontological approaches; investigate the major events in the evolution of life, the hydrosphere and atmosphere; and draw contrasts and comparisons with other planets.

SYMPOSIA

39th Symposium on the Advances
in the Study of the Sydney Basin
Comparisons & Contrasts
in Circum-Pacific Orogens



Coalfield Geology Council
of New South Wales

T + 61 2 9290 2194
F + 61 2 9290 2198

Email: info@gsa.org.au
Convention Website: coming soon