



AESCC
australian earth sciences
convention



The Australian Earth Sciences Convention is held every two years in a different city of Australia and run by the Geological Society of Australia with the help of local organisations. This year's theme is 'Sustainable Australia'. The convention will be based around the themes of energy, basin geology, geodynamics, resources, the environment, the geological record of life, and the role of the earth sciences in the community.

In conjunction with the convention, a geoscience display 'The Earth Beneath Our Feet' is being organised by the Geological Survey of New South Wales and will be hosted by the Newcastle Museum, Honeysuckle from July 7–14.



PUBLIC LECTURES AT NEWCASTLE MUSEUM

Monday 7 July

12.30–1.00 pm

Searching for other Earths

Dr Craig O'Neill (Macquarie University)

How are planets made? How do they evolve? And how do you form a planet like Earth with plate tectonics, a breathable atmosphere, and life?

1.10–1.40 pm

Making the sky blue: The early history of Earth and the rise of complex life

Professor Martin Van Kranendonk (UNSW)

An overview of the history of early Earth and how ancient life gained a foothold and then evolved over the aeons to transform our planet to the one we know and love.

Tuesday 8 July

12.30–1.00 pm

The wonderful world of gems

Dr Ian Graham (UNSW)

Gemstones have long fascinated humankind but what makes them so special and how do they form?

1.10–1.40 pm

Earthquakes – will we ever be able to predict them?

Mr David Love (Geological Survey of South Australia)

Seismic activity in Australia — how much do we really know about our earthquakes and how will we learn more?

Wednesday 9 July

12.30–1.00 pm

Newcastle coast – tales of Gondwana

Roz Kerr

The local coastal cliffs and rock platforms reveal what the landscape and climate were like here 250 million years ago. We can find evidence of extensive Gondwanan wetlands and rainforests, interrupted by explosive volcanic eruptions and surging, fast-flowing rivers.

1.10–1.40 pm

What is there in coal?

Professor Colin Ward (UNSW)

What is coal made of and how does it form; what geological processes make coals different from each other?

2.30–3.00 pm

Geology and WWI – The Tunnellers

Dr Janece McDonald (University of Newcastle)

The story of the Australian WWI Tunnellers and the role of geology in warfare are unfamiliar to most of us. This talk overviews the inception and feats of 'the Tunnellers' and of the geology of the Western Front.

Thursday 10 July

12.30–1.30 pm

Evolution of Australia's animals

Professor Mike Archer (UNSW)

The 'Guinness Book' of extraordinary moments in the history of life, from the origin of life itself to the origins of sex, the first animals, the conquest of land and even the world's biggest dinosaurs is a celebration of things Australian!



2–5pm

Roaming dinosaur

T Rex will be terrorising the museum!
<http://www.earth.com.au/>
Sponsored by SMEDG (Sydney Mineral Exploration Discussion Group)