



## **Earth Sciences mega-conference a ‘must attend’ for planetary scientists**

### **2008 Australian Earth Sciences Convention**

*New generation advances in geoscience*

**20-24 July 2008, Perth**

[www.iceaustralia.com/aesc2008](http://www.iceaustralia.com/aesc2008)

With only weeks to go until the 2008 Australian Earth Sciences Convention, planetary scientists are being urged to register quickly to secure a place at this major event.

To be held in Perth from 20-24 July 2008, the Convention is Australia’s premier geoscience conference and a major event on the international geosciences calendar.

Mass extinctions on Earth, asteroid impacts, what 3.5 billion year old fossils can tell us about evolution, and exciting information being gathered by NASA’s current mission to Mars will be among a wide range of planetary science topics on offer at the mega-conference.

Hosted by the Australian Institute of Geoscientists and the Geological Society of Australia, the conference is expected to attract more than 1000 Australian and international delegates and will feature more than 135 presenters and 450 papers.

Essentially several major conferences wrapped into one, the Convention boasts five key streams:

- Evolution of life and the Solar System
- Resources – foundation for our future
- Geoscience in the service of society
- Earth’s environments – past, present and future
- The dynamic Earth – from crust to core

The *Evolution of Life and the Solar System* stream will include cutting-edge commentary on planetary science from leading Australian and international experts.

“The timing of NASA’s latest mission to Mars – and the exciting information it is beaming back to Earth – means our stream at the Convention is well placed to provide analysis of what the mission is uncovering” said the co-ordinator of the stream, Dr Marc Norman, from the Research School of Earth Sciences at the Australian National University.

“We are extremely lucky to have Dr Jeffrey Taylor, Research Professor at the Hawai`i Institute of Geophysics and Planetology, as a keynote speaker. Dr Taylor is an internationally-renowned expert on Mars and has a keen interest in the exploratory missions to the planet. He will be speaking on *New views of the chemistry and geology of the crust of Mars*.

“We also have papers being presented by representatives from NASA, the Mars Society of Australia, Mt Stromlo Observatory, the Jet Propulsion Laboratory, the Institut De Physique Du Globe De Paris, and many other universities and planetary research organisations.”

Just some of the many presentations in the *Evolution of Life and the Solar System* stream will consider:

- meteorite and asteroid impacts in Australia, and their geodynamic consequences
- 3.5 billion year old fossils and micro-fossils, and what they can tell us about Earth’s evolution
- evidence of mass extinctions on Earth
- the impact of impacts: impact as a geological process and its significance in economic geology
- the formation of the inner Solar System: new insights revealed by spacecraft data
- what we can learn about comets and the Sun from samples collected by recent spacecraft missions
- early planetary differentiation – the formation of crust, mantle and core on the Earth, Moon and Mars
- Martian landforms and processes
- international geoscientific drilling projects, including in Western Australia’s Pilbara region
- a new perspective on the lunar cataclysm from crater density populations

“Given Western Australia is a treasure trove when it comes to asteroid and meteorite impacts, this Convention is also well-placed to consider the ‘big issues’ of planetary science from a local perspective” Dr Norman said.

The Convention’s mega-program will also feature an enormous range of other topics including Australia’s future energy mix, what parts of Australia are most likely to be affected by tsunamis (and what is being done to minimise this risk), climate change and global warming, groundwater exploration in Australia, groundwater contamination in the Himalayas and the USA, and risks to food production.

The conference will also focus on hundreds of other topics including marine eco-systems, geohazards like earthquakes and landslides, carbon sequestration, clean coal technologies, salinity, environmental degradation, uranium deposits and their production in a global

context, alternative energy sources like geothermal energy, geo-tourism and even the geochemistry of termite mounds!

With the Convention being held in Perth, there is also a strong focus on minerals and energy exploration, cutting-edge technologies and potential discoveries in Western Australia, Australia and internationally.

“There are not many conferences where you can listen to a mining company executive in one session and then a representative from NASA in the next” Dr Norman said. “But that is exactly what is happening at the Australian Earth Sciences Convention. This really is a must-attend conference for geoscientists from all walks of life.”

The full program for the 2008 Australian Earth Sciences Convention can be found at [www.iceaustralia.com/aesc2008](http://www.iceaustralia.com/aesc2008). A program overview can be found in the Media section of the website.