



Media Statement: 26 June 2010

Melbourne Mars Conference to Open With Free Public Lecture

Members of the public and the research community interested in how humans will live and work on Mars are invited to attend the tenth Australian Mars Exploration Conference, which is being held from 9-11 July at the Victorian Space Science Education Centre (VSSEC), Strathmore Secondary College, Melbourne.

The curtain-raiser for *AMEC2010: Living and Working on the Martian Frontier* is a free public lecture delivered by NASA scientists Dr Jennifer Heldmann and Dr Adrian Brown at VSSEC at 6.30pm, Friday 9 July. Drs Brown and Heldmann, from NASA's Ames Research Centre, contributed to recent water-seeking missions on the Moon and on Mars.

Dr Heldmann studies both the Moon and Mars. Her Mars research focuses on landforms indicative of recent liquid water activity on the planet and she has a lead role in NASA's planning for the future human exploration of Mars. Dr Heldmann studies the Moon with a focus on human exploration through the identification of water and other lunar resources that can be used in future campaigns. She recently served as the Observation Campaign Coordinator for NASA's *Lunar Crater Observation and Sensing Satellite* (LCROSS) mission. LCROSS successfully impacted the Cabeus crater at the lunar south pole and confirmed the presence of water ice as well as numerous other resources important to living and working on the Moon.

Dr Brown is analysing spectroscopic data gathered by the recent *Mars Reconnaissance Orbiter* mission for evidence that large bodies of water once covered the northern regions of this now dry world. In addition to his search for water on Mars, the Australian-born Dr Brown also hunts for clues to volcanic activity in these same northern realms, because the energy provided by such eruptions could fuel microscopic life. This ground-breaking research uses knowledge he gained as an undergraduate at the Australian Centre for Astrobiology at Macquarie University working on hydrothermal systems in the 3.5 billion year old rocks in the Pilbara region in Western Australia.

Living and working on the red planet is also the topic of a new book <u>Mars: A Survival Guide</u> being launched at the conference. Written by Mars Society Australia member, Guy Murphy, this must-have guide for all aspiring interplanetary travellers covers: travel to Mars; suiting up; finding air and water; finding air and water; building shelter; growing food in Martian soil; and a host of other aspects of living and working on the planet.

In a paper titled 'An Intravehicular Skinsuit to Reduce Bone Loss on Long Duration Spaceflight' Australian spacesuit researcher and Mars Society Australia member Dr James Waldie will

update AMEC2010 delegates on a new spacesuit technology he investigated while recently at MIT in the United States.

Other papers being presented by Australian and International researchers at AMEC2010 on 10 and 11 July include:

- Dr Jennifer Heldmann, NASA Ames Research Center'Studies of Buried Snow and Ice Deposits in the Dry Valleys of Antarctica as a Mars Analog'.
- Michael Paine, Planetary Society Volunteers' Potential for Microbe Colonisation of Mars by Rocks Launched into Space by the Chicxulub Impact'.
- Dr Kimberley Clayfield, Executive Manager, CSIRO Space Sciences and Technology, CSIRO Astronomy and Space Science'An Overview of CSIRO's Space Activities'.
- Dr Adrian Brown, NASA Ames Research Center'Mars Science Laboratory Mission and the Search for Carbonates and Methane on Mars'.
- Dr Jonathan Clarke, Mars Society Australia'Mars Desert Research Station Crew 92 Mission Report'.

AMEC2010 Registration:

- Friday 9 July 6.30pm: free public lecture.
- Saturday 10 July or Sunday 11 July: \$60.00 per day/\$30.00 conc. (includes lunch).
- Saturday 10 and Sunday 11 July: \$120.00/ \$60.00 conc. (includes lunch both days).

Registration form: http://www.marssociety.org.au/

Conference Banquet: \$65.00

A truly stellar three-course conference dinner is being held in the function room on the first floor of the iconic <u>Young and Jackson's Hotel</u> (Y&J's) on 10th July, commencing 8pm. Advance booking for the conference dinner using the conference registration form is essential. Y&J's is located in the heart of the Melbourne CBD on the corner of Flinders and Swanston Street, opposite Flinders Street railway station.

Getting there:

VSSEC, situated in the grounds of Strathmore Secondary College, is easily accessible on foot, by bike, car or public transport. Strathmore Secondary College is located in Melbourne's inner north-west 9kms from Melbourne CBD. Reference Melways: Map 16, J 11 or see http://www.vssec.vic.edu.au/about-us/getting-to-vssec/getting-to-vssec-map/ On-site parking is available.

Media Contact

For further information or interviews-

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