



AUSTRALIAN MARS EXPLORATION CONFERENCE

UNIVERSITY OF SYDNEY – FACULTY OF ENGINEERING - JULY 12TH – 14TH 2002

"Exploring the Red Planet"

Registration Pack

The Australian Mars Exploration Conference will bring together engineers, scientists and all those with an interest in Mars exploration, research and science from around Australia and overseas.

HIGHLIGHTS



"An Evening with an Apollo Astronaut"

Gala 3 course Dinner with Apollo 17 Astronaut - **Dr Harrison Schmitt**



Discussion Panel: Lessons for Mars Missions from Apollo

Featuring scientists who analyzed the original lunar samples – and the only scientist who helped collect them – Dr. Harrison Schmitt!



Experts from various space- related disciplines



The Latest on Mars Research in Australia & Overseas

What's happening worldwide to advance exploration of the Red Planet



Proceedings will cover space-related disciplines relevant to Mars such as:

- Engineering
- Astrobiology
- Psychology/Human Factors
- Geology
- Physics
- Communications
- Robotics
- Biomedicine
- Spacesuit Technology

Hear about Mars Society Australia's exciting technical program:



Mars-OZ

Australia's own Outback Mars Research Facility

Project Marsupial

The Australian Mars Analogue Rover Vehicle

MarsSkin

An innovative new Space Suit with a Difference!

Project Jarntimarra

The highly successful search for Australian sites useful for Mars related research

PLUS Exhibition area, Workshops on Mars related issues + more!

Find out more about Australia's role in the future human exploration of Mars

AMEC2002 is proudly sponsored by:



Faculty of Engineering
The University of Sydney

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Keynote Speaker

Dr Harrison Schmitt

FIELD GEOLOGY: ITS ROLE ON THE MOON AND MARS APOLLO 17 ASTRONAUT



Selected for the Scientist-Astronaut program in 1965, Dr Harrison Schmitt organized the lunar science training for the Apollo Astronauts, represented crews during the development of hardware and procedures for lunar surface exploration, and oversaw the final preparation of the Apollo Lunar Module Descent Stage. He was designated the Mission Scientist in support of the Apollo 11 mission. After training as backup Lunar Module Pilot for Apollo 15, Schmitt served in that same capacity on Apollo 17 – the last Apollo mission to the moon. On December 11, 1972, he landed in the Valley of Taurus-Littrow as the only scientist and the last of 12 men to step on the Moon.

Dr Schmitt is Chair Emeritus of The Annapolis Center (risk assessment evaluation) and holds an appointment as Adjunct Professor in the Department of Engineering, University of Wisconsin-Madison, teaching "Resources from Space". He is a founder and the Chairman of Interlune-Intermars Initiative, Inc., advancing the private sector's acquisition of lunar resources and He-3 fusion power and broad clinical use of medical isotopes produced by fusion-related processes.

Plenary Speakers from various space-related disciplines include ...

Emeritus Professor Stuart Ross Taylor

AUSTRALIAN NATIONAL UNIVERSITY



Professor Stuart Ross Taylor has degrees in chemistry and geology and completed his PhD in geochemistry at Indiana University. He lectured at Oxford University and as Emeritus Professor and Visiting Fellow at the Dept of Geology at ANU he is currently working with colleagues at NASA and ESA on the New Views of the Moon Project. He has worked on the composition and evolution of the Moon, the continental crust, tektites and impact glasses and many other topics involving trace element geochemistry. He was involved in the study of lunar samples from the first sample return in 1969, when he was a member of the Preliminary Examination Team at NASA Johnson Space Centre and carried out the first analysis of the first lunar sample returned to Earth. As a NASA Principal Investigator, he worked on models for lunar composition, evolution and origin. Professor Ross Taylor has published 230 papers in scientific journals and nine books and Asteroid 5670 is named Rosstaylor in his honour. He is also a Fellow of the Australian Academy of Science.

Professor Rod Boswell

AUSTRALIAN NATIONAL UNIVERSITY

Rod Boswell is head of the Space Plasma and Plasma Processing group of the Plasma Research Laboratory at the Australian National University. He is active in the fields of plasma processing of surfaces for microelectronics and optoelectronics as well as basic linear and non-linear processes in plasmas, and over the past 15 years has published over 70 papers in major international journals, been granted 7 patents, given about 50 invited lectures in international conferences and presented his group's work to many industrialists in many countries. In recent years, Professor Boswell has become interested in communications, particularly planar optical waveguides, which his group fabricates and tests in collaboration with Prof. John Love at ANU.

Dr Rob Hart

CURTIN UNIVERSITY OF TECHNOLOGY

Dr Rob Hart qualified as a radiographer at Curtin University of Technology. With five years' clinical experience at Royal Perth Hospital he specializes in trauma and emergency radiography. Dr Hart undertook postdoctoral training at the Department of Surgery and Molecular Oncology at the University of Dundee in Scotland for which he developed a new technique using ultrasound to quantify the changes in tissue stiffness associated with breast cancer. In 2001 he took up the position of Research Coordinator at the Department of Medical Imaging Science at Curtin. With colleagues from NASA's Johnson Space Centre (JSC), he wrote the first paper discussing medical imaging on the International Space Station (Digital radiography in Space, Aviation, Space and Environmental Medicine). He now serves as a subject matter expert with the Medical Informatics and Health Care Systems (Advanced Projects) team at JSC, and holds editorial review board membership of Aviation, Space and Environmental Medicine and the Journal of Biomechanics.

Dr Maurice Castro

RMIT UNIVERSITY



Dr Maurice Castro is currently a Senior Research Fellow in the Software Engineering Research Centre at RMIT University in Melbourne working in partnership with the Smart Internet Technology CRC. While at SERC Maurice has worked on projects in the telecommunications, networking, Internet, software engineering and computer architecture areas. In addition to these projects he is the maintainer of a number FreeBSD ports and has developed a number of programs for the Psion hand-held computer. He holds a PhD from Monash University, Melbourne for work on the development of a capability-based operating system under the supervision of Professor Chris Wallace. Dr Castro is also one of the lead researchers on MSA's Tools and Applications for Mars Exploration and Research (TAMER) project which aims to produce infrastructure, tools and devices that can be used in the Mars Analog Research programs of the Mars Society worldwide.

PLUS – Speakers from the Australian Centre for Field Robotics, the University of Queensland's Translife Mars Gravity Biosatellite team, RMIT University's School of Aerospace Engineering & project managers from MSA's exciting technical program – **OPERATION RED CENTRE**

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Activities



GALA DINNER – AN EVENING WITH AN APOLLO ASTRONAUT

Your chance to hear from one of the last two humans to walk on another world! Thirty years on, **Apollo 17 astronaut, Dr Harrison Schmitt**, has been brought to Australia by MSA as part of an initiative to promote the past, present and future of space exploration, focusing attention on the potential for greater Australian involvement in space activities. Dr Schmitt, who has a Ph.D. in geology and has served as a US Senator, holds the unique distinction of being the only scientist to have set foot on the moon. Enjoy a three-course dinner and drinks in style at the Corus hotel, Sydney, and share some fascinating insights with a living legend of the space age.

CONFERENCE PROCEEDINGS

Conference tracks include:

- Australian Mars Analogue Research
- Robotics and Engineering
- Understanding the Martian Environment
- International Mars Analogue Research
- Mars - The Human Perspective
- Mars Society Australia - The Road Ahead

EXHIBITION AREA

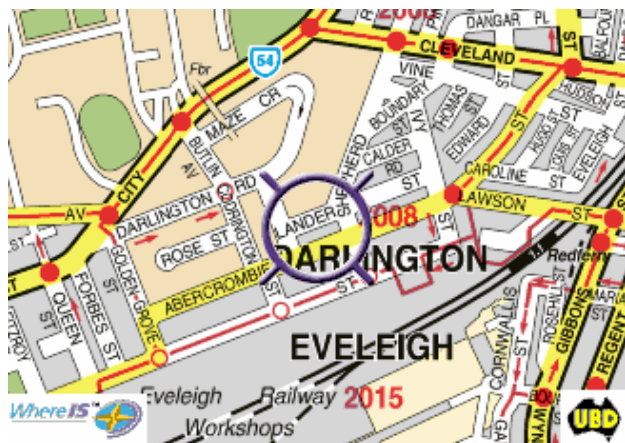
An exhibition area will feature information, displays and souvenirs from space-related organizations across Australia. A limited range of **Mars and Apollo-related memorabilia** will be available for purchase, including T-shirts, books and posters.

CONFERENCE BANQUET

For a Saturday night you won't forget, relax in Sydney's historical Rocks enjoying a **three-course Italian banquet** (drinks extra) with your fellow delegates. To make the night really memorable, why not start the evening with an optional visit to the Sydney Observatory, which we can arrange on your behalf? Details for booking visit will be provided to delegates on registration.

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Location



FACULTY OF ENGINEERING – UNIVERSITY OF SYDNEY

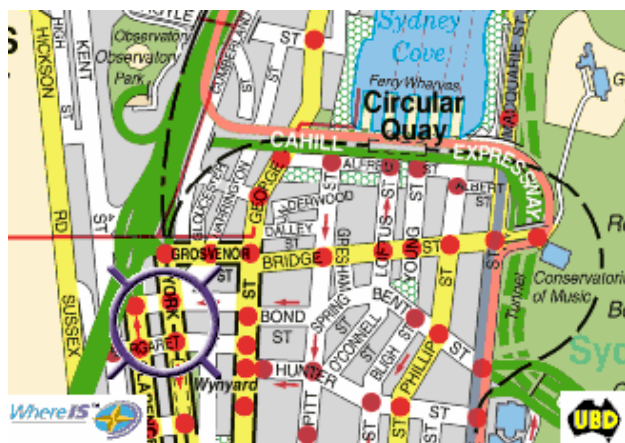
Located in the beautiful surrounds of Sydney's oldest university, the Faculty of Engineering is close to public transport and can be reached in less than half an hour from our conference hotel, the Corus hotel Sydney.

Conference proceedings will be held in the P.N. Russell Lecture Complex within the Faculty of Engineering University of Sydney near Maze Cr and Lander St.

Nearest Railway Station: Redfern 10-minute walk.

Buses: Stop at City Road near the Wentworth Building.

Parking: Street parking in Shepherd St & Darwin Rd or \$6 all day parking Cnr Shepherd St & Cleveland St.



CORUS HOTEL SYDNEY

Within easy walking distance of Circular Quay and the Rocks district, the Corus hotel Sydney is close to everything you will need in central Sydney and will host the Gala Dinner with Dr Harrison Schmitt.

Address: 7-9 York St, Cnr York St & Margaret St.

Nearest Railway Station: Wynyard Station is a 100-metre walk with direct rail link to Sydney Airport & Redfern.


Buses: Leave regularly from stops near railway station.

Parking: Guests can enjoy 2 levels of underground security carparking at \$15 per vehicle per day. The carpark entrance is accessed via Margaret Street.

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Airfares

AMEC 2002 SPONSOR – QANTAS

We are pleased to announce that  has been appointed official airline for AMEC 2002. As a special conference fare has been negotiated for AMEC delegates, we suggest you contact Qantas Association Sales (details below) to avail yourself of this offer.

A discount of up to **40%*** off the full economy airfare (excluding taxes) at the time of booking has been negotiated for this conference. These discounts are valid on Qantas domestic scheduled services subject to group class availability at the time of booking. Should the 40% discount economy fare not be available on a required flight, the fare may be upgraded to the next available economy class conference fare ie: 30% and 10% discounts. The Qantas Association Sales telephone number for Australian delegates is: **TOLL FREE: 1800 684 880**. Please quote the AMEC2002 code, which is "**2936911**" and destination and date of conference when making your reservation.

Please note that the applicable discount is available for domestic travel within Australia only and is subject to payment & ticketing conditions. International delegates can contact their local Qantas office for the best available fare of the day. Note: Conference Airfares are not available on Qantaslink (Sunstate Airlines) to/from the following ports: Thursday Island, Whitsunday Connections (South Molle, Daydream, Shute Harbour, Hayman Island).

Qantas is proud to be a part of AMEC 2002 and know that you will enjoy flying with them!

Accommodation

AMEC 2002 SPONSOR – CORUS HOTEL SYDNEY

corus
hotels



For bookings, contact directly:

Penny Crewe, Sales Executive, Corus hotel Sydney,
Ph: (61 2) 9274 1319, email: pcrewe@corushotels.com

We have negotiated a **special rate on hotel rooms** for our delegates and speakers as follows:

- \$154.00 Single Executive Deluxe Room including Fully Cooked Breakfast in Features Restaurant
- \$165.00 Double Executive Deluxe Room including Fully Cooked Breakfast in Features Restaurant
- \$132.00 Executive Deluxe Room (Room only)

Located within easy walking distance of all major tourist attractions, including the Rocks and Circular Quay, shopping and restaurant districts. Amenities include 268 bedrooms, 'Features' Restaurant, Lobby bar, Gymnasium, Laundry, 50 parking spaces.

Terms & Conditions: The above rates all include GST. Rates are only valid by booking direct to the hotel contact above and are not commissionable.

Registration

Registration fees cover:

- Entry to all sessions in the program, including the **Opening Address by Dr Harrison Schmitt, Discussion Panel: Lessons for Mars Missions from Apollo & Workshops**
- Priority booking and seating for **"AN EVENING WITH AN APOLLO ASTRONAUT"** Gala Dinner on July 12.
- All lunches, morning and afternoon teas are included.
- Souvenir Conference Program booklet & Delegate Kit
- Entrance to Exhibition Area
- Option to attend Conference Banquet & Observatory Visit (function open to delegates only)
- Post-Conference CD of Conference Proceedings



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Registration Form

Please complete your details below

NAME		
EMAIL		
STREET ADDRESS		
TOWN/CITY	STATE	POSTCODE
HOME PHONE	WORK PHONE	MOBILE
OCCUPATION/INSTITUTION/ORGANISATION		



Register **BEFORE June 12th** to enter the draw to **WIN** a special piece of Space Memorabilia

SO DON'T DELAY!!

All Prices are in Australian Dollars

SECTION A - REGISTRATION FEES

AMEC 2002 will feature:

- **Dr Harrison Schmitt – Apollo 17 Astronaut**
- Numerous experts from space-related disciplines
- Presentations on MSA projects & workshop sessions
- The latest on Mars research in Australia & overseas

More info at www.marssociety.org.au

CLASS	FEE	TICK ONE
FULL	\$85	[]
STUDENT CONCESSION	\$65	[]
MSA MEMBER	\$65	[]
MEMBER & CONCESSION	\$50	[]
TOTAL SECTION A	\$	

NOTE: Members of the National Space Society of Australia will receive registration at the concession rate (\$65)

SECTION B (OPTIONAL) – MSA MEMBERSHIP

I'm not already a member of Mars Society Australia but would like to receive a discounted rate for AMEC 2002 & the other benefits of membership of MSA including the opportunity for involvement in *Operation Red Centre*

CATEGORY	DUES	TICK ONE
REGULAR	\$40	[]
FAMILY	\$50	[]
STUDENT	\$25	[]
TOTAL SECTION B	\$	

SECTION C (OPTIONAL) – AN EVENING WITH AN APOLLO ASTRONAUT

Yes! I want to enjoy the Gala Dinner with guest speaker

Dr. Harrison Schmitt at the Corus Hotel Sydney on

Friday 12th July at 7.30pm (max. 2 tickets per person)

Register before June 12th to guarantee your tickets

TICKETS	QTY
\$75 EACH	[]
TOTAL SECTION C	\$

SECTION D (OPTIONAL) – MSA ANNUAL BANQUET

Socialize with fellow delegates over dinner in the heart of Sydney's famous Rocks district on Saturday 13th July

TICKETS	QTY
\$35 EACH	[]
TOTAL SECTION D	\$

SECTION A + B + C + D = TOTAL COST **\$**

PLEASE MAKE CHEQUES OR MONEY ORDERS PAYABLE TO: 'MARS SOCIETY AUSTRALIA INC'

CREDIT CARD PAYMENTS ARE ACCEPTED:

TYPE (CIRCLE): Amex Diners M/Card Visa CARD#: _____

NAME ON CARD: _____ EXPIRY: ____ / ____

I hereby give permission for Mars Society Australia Inc to charge my credit card the above amount

SIGNATURE: _____ DATE: ____ / ____

POST REGISTRATION FORM ALONG WITH PAYMENT TO:

AMEC 2002 Registrations C/O Box 142, Wentworth Building, University of Sydney, NSW 2006

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