

MECA Workshop "The Evolution of the Martian Atmosphere"
August 9-10, 1985

P R O G R A M

Friday, August 9, 1985

8:00 Registration (coffee & danish)

8:45 Introduction to Workshop/Announcements

SESSION I - VOLATILE INVENTORY
9:00 - 12:30

- K. Goettel
Rigorous constraints on the bulk composition and volatile
inventory of Mars. (15 minutes)
- R. Pepin
Volatile inventory of Mars. (15 minutes)
- J. Yatteau
Mars: Atmospheric escape of major volatiles. (15 minutes)
- T. Owen
Update of the Anders-Owen model for martian volatiles. (30 minutes)
- J. Pollack
Update of the Pollack-Black model for martian volatiles. (30 minutes)

LUNCH BREAK

SESSION I CONTINUED
2:00 - 5:45

- H. Wänke
Can a high abundance of moderately volatile and even
some highly volatile elements on Mars be reconciled
with its low abundance of primordial rare gases? (30 minutes)

- G. Dreibus
Comparison of Cl/Br and Br/I ratios in terrestrial
samples and SNC meteorites. (15 minutes)
- R. Huguenin
Accreted H₂O inventory on Mars. (15 minutes)
- J. Lewis
Early volatile element inventories on Mars. (30 minutes)
- T. Ahrens
Accretional constraints on Mars' volatile budget. (15 minutes)
- H. Watkins
Evolution of the atmosphere of Mars as the result
of asteroidal and cometary impacts. (15 minutes)
- P. Schultz
The martian atmosphere before and after the Argyre impact. (15 minutes)
- 6:00 - SOCIAL
7:00 (Robert Louis Stevenson Room)

Saturday, August 10, 1985

SESSION II - EVOLUTION OF THE ATMOSPHERE
8:30 - 12:00

- J. Walker
Early evolution of the terrestrial atmosphere. (30 minutes)
- G. North
Terrestrial paleoclimate modeling. (15 minutes)
- R. Kahn
The evolution of CO₂ on Mars. (30 minutes)
- J. Spencer
Valles Marineris as karst: Feasibility and implications
for martian atmospheric evolution. (15 minutes)
- J. Pollack
Greenhouse requirements for early dense atmospheres. (15 minutes)

LUNCH BREAK

SESSION II CONTINUED
1:30 - 5:00

- M. Carr
Climatic implications of channels. (30 minutes)
- J. Gooding
Martian weathering products: Response to climate changes and effects on volatile inventories. (15 minutes)
- C. Leovy
Present atmosphere: Evolutionary implications. (30 minutes)
- A. Zent
Near-surface ice and brines on Mars. (15 minutes)
- D. Paige
Non-linear frost albedo feedback on Mars: Observations and models. (15 minutes)
- L. Martin
Major dust storm activity and variations in the recessions of Mars' south polar cap. (15 minutes)
- B. Jakosky
Reversible and irreversible changes in martian climate. (15 minutes)

ADJOURN

LISTED TIMES ARE ALLOCATED TO THE SPEAKERS FOR PRESENTATION.
APPROXIMATELY EQUAL TIMES ARE AVAILABLE FOR DISCUSSION.