

**JUNE 2004 ICE INITIATION WORKSHOP**  
**NCAR, Foothills Laboratory, Building 2**  
**Room 1022, Auditorium**

**AGENDA**

**Monday 7 June**

- 8:00 - 8:30 Registration and Continental Breakfast Cafeteria Atrium  
8:30 - 8:40 Welcome (Killeen/Winter)  
8:40 - 8:50 Workshop Goals (Heymsfield)  
8:50 - 9:30 Ice observations in the atmosphere, 1949-2004 (Vali)  
9:30 - 10:00 Laboratory results and future needs (DeMott)

*10:00 - 10:15 Break (Room 1002)*

- 10:15 - 10:45 Ice formation processes in cloud-scale to global scale models and current needs (Cotton)  
10:45 - 11:15 European Studies (Kaercher)  
11:15 - 12:15 Mixed-phase clouds (Isaac/Hallett)

*12:15 - 1:30 Lunch (on your own)*

Proposed Field Experiments:

- 1:30 - 2:00 Wave/Layer Clouds (Rogers)  
2:00 - 2:30 Convection (Stith)

Position Papers by Attendees:

- 2:30 Tinsley Contact Ice Nucleation near Cloud Tops due to Electroscavenging  
2:40 Liu A model look at heterogeneous ice nucleation on mineral dust  
2:50 Gultepe Ice crystal number concentration versus temperature relationships and models  
3:00 Tsemekhman Toward Understanding of the Homogeneous Nucleation of Ice

*3:10 - 3:30 Break (Room 1002)*

- 3:30 Jensen Large Ice Supersaturations Measured in the Tropical Tropopause Region  
3:40 Sherwood Satellite retrievals relevant to cloud glaciation and electrification  
3:50 Mayor Eye-safe depolarization lidar at 1.54 microns  
4:00 Knight The use of radar in studying the first formation of precipitation in cumulus  
4:10 Blyth UK Field campaign to study the initiation and development of ice in cumulus clouds  
4:20 Lawson Ice Formation and Development in Wave Clouds  
4:30 Woodley On the Initiation and Growth of Ice in Argentine Hailstorms  
4:40 - 5:00 Other speakers as time allows

## Tuesday 8 June

8:00 - 8:30 Continental Breakfast in Room 1002  
8:30 - 9:00 NSF perspective - future field programs (Cooper)  
9:00 - 9:30 DOE perspective – future field programs (Ackerman)

9:30 - 11:15 Presentations by participants (cont.)

9:30 Cziczo Single Particle Studies of Atmospheric Ice Formation  
9:40 Sassen Arctic aerosol layers and ice nucleation  
9:50 - 10:00 Other speakers as time allows

*10:00 -10:20 Break (Room 1002)*

10:20 Korolev Lifetime of mixed phase clouds (theoretical consideration)  
10:30 Cantrell Ice nucleation by long chain alcohols  
10:40 Shaw Aspects of heterogeneous nucleation from laboratory studies  
10:50 Bailey The Habit Transition at -40 C and Its Effect on In Situ Observations  
11:00 Magee Ice crystal growth in a quadrupole levitation wind tunnel

11:15- 11:30 Charge to break-out sessions (Heymsfield):

1. Develop scientific plans for SOD
2. Identify contributors to SOD
3. What kind of lab/model/field programs are possible and most productive?
4. List likely participants and resources.
5. Draft Outline for each sub-group (lab/modeling/field)
6. Other (field locations, synergy with international programs,w..)?

*11:30 - 1:00 Lunch (on your own)*

1:00 - 3:15 Break-out session groups to include  
-Lab Experiments (Rogers/Moehler) – Room 1003, FL 2  
-Modeling (Jensen/Seifert) – Room 1002, FL 2  
-Field studies (Stith/Vali) – Room 1001, FL 2

*3:15 - 3:30 Break (outside Room 1002)*

3:30 - 5:00 Plenary (Heymsfield)  
-Working group reports (15 min. each)  
-Draft outline for SOD  
-Schedule  
-Next steps

END OF WORKSHOP