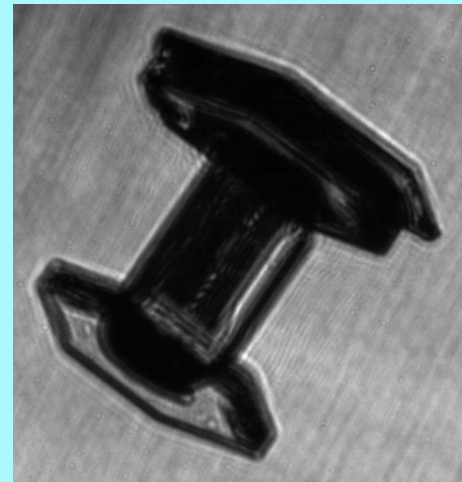


# Ice in Clouds Experiment (ICE)

Organizers: Andy Heymsfield, Jeff Stith and Dave Rogers, NCAR

## Workshop Organizing Committee:

- Will Cantrell, Michigan Tech
- Bill Cotton, Colorado State University
- Paul DeMott, , Colorado State University
- Andrew Detwiler, SDSMT
- Paul Field, UK Met Office
- Charlie Knight, NCAR
- Sharon Lewis, NCAR
- Ottmar Moehler, Forschungszentrum Karlsruhe
- Kenneth Sassen, Univ. of Alaska
- Axel Seifert, NCAR
- Gabor Vali, Univ. of Wyoming



# Early Ice Initiative

- In 1998, Jim Dye organized an effort to develop to an ice initiative

<http://www-das.uwyo.edu/~vali/nucl/>

- An Ice Nucleation Working Group was formed

Marcia Baker  
Al Cooper  
Andy Heymsfield  
Dave Rogers  
Harry Ochs  
Roy Rasmussen  
Ray Shaw  
Paul DeMott  
Gabor Vali  
Neil Bacon  
Lane Seeley  
Dave Covert  
Steve Wood  
\*George Isaac



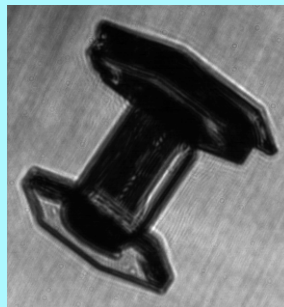
- Their work was summarized in a white paper  
*“An Initiative to Advance Studies of Ice Formation in the Atmosphere”*

<http://cooper.asp.ucar.edu/ICE/>

- In 1999, an NCAR/ASP Colloquium was held  
*“Ice Formation In the Atmosphere”*

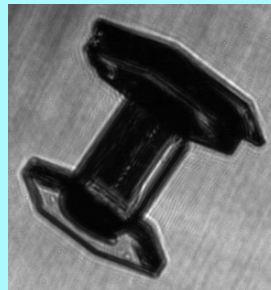
<http://www.asp.ucar.edu/colloquium/1999/index.html>

- New tools (observing tools, cloud models, cloud chambers, theory) and interest (weather prediction and climate) present the opportunity to move this initiative forward



# ICE

- In September 2003, Heymsfield/Stith/Rogers were funded by the NCAR Opportunity Fund to develop an NCAR and community-wide initiative to study ice initiation
- The purpose of this workshop is to develop the foundation for preparing an NSF Scientific Overview Document (SOD) to provide an umbrella for future US studies on ice initiation and to develop links with the international community
- This SOD is intended to describe one or more field programs, laboratory and modeling studies to further the knowledge of how ice forms in clouds



# SOD Outline

1. Introduction

2. Justification

3. Fundamental problems of ice formation

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4. Timeliness of an initiative

5. Some Objectives of the Initiative

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6. Approaches

6.1 Field Experiments

6.2 Laboratory experimentation

6.3 Modeling Experiments

