



Program Announcement



Climate and Global Change Geoscience Education Workshop

July 22 – August 2, 2002

National Center for Atmospheric Research, Boulder, Colorado

Earth's climate has evolved in remarkable ways since our planet's origin. It also changes over shorter time periods in response to natural processes and human actions. These changes can impact our lives on a daily basis, now and in the future. Scientists draw upon many different, yet interrelated, fields of the geosciences as they strive to understand climate and global change. The National Center for Atmospheric Research (NCAR) is offering teachers an opportunity to learn about state-of-the-art research in these important collaborative research efforts that are of interest to governments and citizens around the world.

In the summer of 2002, NCAR is sponsoring the first annual Climate and Global Change Geoscience Education Workshop. The goal of the workshop is to provide standards-relevant science content, training on easy to implement inquiry-based classroom activities, and a broad overview of the geosciences to educator-leaders who are teaching sciences at the middle and high school levels.

Workshop Topics

- Atmospheric structure and chemistry
- Plate tectonics
- Ocean currents
- The cryosphere
- Ecology
- Biogeochemical cycles
- The water cycle
- The role of the biosphere
- Ocean-atmosphere interactions
- Solar cycles
- Climate cycles
- Volcanic effects
- Global warming
- Greenhouse effect
- Climate scenarios on other planets
- Anthropogenic and natural contributions to global change
- Societal impacts, mitigation opportunities, and public policy

Workshop Focus: This 12-day workshop (including one day off) will explore all aspects of the geosciences related to climate and global change. Participants will experience presentations by leaders in scientific research, training in hands-on and computer-based activities, field trips, project work, and discussions about pedagogy, educational standards, dissemination, and follow-up.

Participant Support: NCAR will provide support for participants' travel from their home to and from Boulder, as well as a \$700 stipend, lodging, and meals while at the workshop. Participants will also receive an extensive set of educational resources. A non-refundable¹ registration fee of \$100 will be required upon acceptance to the workshop.

Credit: Approval for 4 graduate-level relicensure credits is pending with the Colorado School of Mines at an anticipated total cost of \$130 to be paid by the participant.

Selection Criteria: Our goal is to select a diverse group of participants, balanced between middle and high school educators, with a commitment to sharing the information and resources that they receive through this workshop with colleagues in their home school districts. Participants will be selected based on the content and grade levels taught; geographic, gender, and ethnic diversity; professional experience; and demonstrated leadership in training other teachers. The signature of a supervising school administrator is required on the application form acknowledging that the participant's experience will be shared with teachers within and/or outside the school district in the ensuing year.

Application process: **The deadline for receipt of applications is April 5, 2002.** Up to 20 participants will be notified of acceptance by April 15. Cancellations will be filled from a list of alternates on a first-come, first-served basis. Application forms and additional information can be downloaded from [here](#), or call Dr. Sandra Henderson at (303) 497-8108 (Email: sandrah@ucar.edu).

¹ The registration fee will be refunded ONLY if the participant must withdraw due to illness or emergency OR if there is a cancellation for some other reason and the vacancy can be filled by an alternate.