Georgia Institute of Technology

The Georgia Institute of Technology has been a UCAR member since 1983. The School of Earth and Atmospheric Sciences (EAS) is the primary UCAR affiliation. They conduct instruction and research in the fields of atmospheric chemistry, aerosols, and clouds; biogeochemistry; oceanography and climate; paleoclimate; dynamics of weather and climate; remote sensing; space and planetary science; and geophysics.

The renewal application packet demonstrates EAS’s continued commitment to its UCAR-related program of studies and research. EAS has 28 tenure-line faculty members engaged in UCAR-related work, 19 research staff, 30 undergraduates, and 81 graduate students. The Department occupies generous instructional and research space, with the latter well-suited to interdisciplinary collaborations with faculty from other departments including Chemical Engineering, Chemistry, Biology and Environmental Engineering. In the last five years, EAS has granted 64 B.S. degrees, 60 M.S. degrees, and 57 Ph.D. degrees. During that time their graduate students have won two best student presentation awards and had 20 student posters and 12 student oral presentations at AMS meetings. They have had 50 student posters at AGU meetings in the same period and received five student awards. Two EAS graduate students have participated in UCAR summer programs and two have been awarded postdoctoral fellowships at NCAR through the Advanced Study Program.

The renewal application packet provides evidence of EAS’s continued commitment to progress in the atmospheric sciences. EAS conducts research in UCAR related fields including atmospheric chemistry, climate dynamics, meteorology, paleoclimate, and aerosols. EAS researchers have been very active in a series of field campaigns organized by NCAR or using NCAR aircraft. In the past five years the faculty have continued a strong record of refereed publications (500), which are well-cited (7000 citations), with sponsored research well above $5M per year from NSF, NASA, NOAA, DOE and a variety of state agencies. A textbook on the thermodynamics, kinetics, and microphysics of clouds was authored by Dr. Judith Curry.

EAS faculty and researchers continue specific collaborations with NCAR colleagues in the use of NCAR facilities. Use has been made of UCAR/NCAR supercomputing facilities and instrument deployment on the NCAR C-130. Service on UCAR committees by individual faculty and researchers is extensive and is cited in the renewal application. They have routinely sent representatives to the UCAR Annual Meeting.

The renewal application packet shows that the EAS faculty is heavily invested in participation in the activities of UCAR. Several have given summer colloquia at
NCAR during visits and participated in workshops sponsored by UCAR, including the NOAA Climate and Global Change Postdoctoral Summer Institute in July 2014.

The UCAR Membership Committee concludes that the membership criteria are fulfilled, and recommends to the Members’ Representatives that the membership of the Georgia Institute of Technology be continued as provided by the bylaws.