UCAR Membership Committee Review of
University of Houston

The University of Houston has been a UCAR member since 2005. The primary UCAR-related organization at the University of Houston is the Atmospheric Sciences Division within the Department of Earth & Atmospheric Sciences. It conducts instruction and research in the fields of atmospheric chemistry, atmospheric modeling, remote sensing, climate change, hydrology, and planetary atmospheres.

The renewal packet demonstrates that the University of Houston is committed to its UCAR-related program of education and research and provides service within UCAR. The program consists of seven full-time tenure track faculty members and four research staff. In the next three to five years, the Atmospheric Sciences Division is to be augmented with two to three new tenure-track hires at the assistant professor level with expertise in climate modeling, applied meteorology, and analytical chemical instrumentation. It currently has averaged 46 undergraduate majors and 17 graduate students. Over the last 5 years, the Atmospheric Sciences Division has granted 29 B.S. degrees, 7 M.S. Degrees, and 7 PhD degrees in the Atmospheric Sciences. Students actively participate and present their research results at National (e.g., AGU and AMS) and international meetings (e.g., EGU). Each Ph.D. student submits at least three papers for publication to peer reviewed journals while in residence. Graduates are employed at national laboratories and in faculty positions.

Research in UCAR-related science at the University of Houston spans the fields of applied mathematics, atmospheric chemistry, biogeochemical science, earth’s outer atmosphere, interdisciplinary research, meteorology/weather, observing the atmosphere and solar structure and impacts, astrophysics with particular emphasis on atmospheric chemistry and observing the atmosphere and solar structure and impacts. These efforts are funded at annual levels of approximately 5.2M by agencies including NSF, NASA, EPA, TCEQ and NOAA. The resulting publications include 174 major journal articles over the past 5 years. The University of Houston as played a major role in several large field experiments over this period as well.

Within the past 5 years, the Atmospheric Sciences Division has routinely sent representatives to the annual UCAR Membership meetings and provided members to the Observing Facilities Assessment Panel (OFAP) advisory committee. The Atmospheric Sciences Division’s research includes frequent collaborations with NCAR scientists and occasional use of NCAR facilities. This participation includes official NCAR paid visits by graduate students and a faculty member to NCAR’s Atmospheric Chemistry Division. The Division has also sent undergraduate students to participate in UCAR’s Summer Undergraduate Leadership Workshop.

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