

Curriculum Vitae: Professor Kuo-Nan Liou

<http://www.jifresse.ucla.edu/>; <http://www.atmos.ucla.edu/~liougst/>

Appointments

- UCLA: Founding Director, Joint Institute for Regional Earth System Science and Engineering (JIFRESSE), UCLA, 2006-; Distinguished Professor of Atmospheric Sciences, 2004-; Chair, Department of Atmospheric and Oceanic Sciences, 2000-2004; Director, Institute of Radiation and Remote Sensing (IRRS), 1997-2006; Professor, Atmospheric and Oceanic Sciences, 1997-; Mechanical and Aerospace Engineering, 2003-; Electrical Engineering, 2011-
- University of Utah: Chairman, Department of Meteorology, 1996-1997; Director, Center for Atmospheric and Remote Sounding Studies (CARSS), 1987-1997; Professor, 1980-1997; Associate Professor, 1975-1980; Adjunct Professor, Meteorology, 1997-2007; Physics, 1992-2006; Geology and Geophysics, 1992-1997
- Others: Assistant Professor (Res), U of Washington, 1972-74; Visiting Professor-Scientist: Caltech/JPL, 2004; U. of Arizona, 1995; Taiwan U., 1995; Peking U., 1991; Harvard U., 1985; UCLA, 1981; NASA/Ames, 1980/81; NCAR, 1975/76; Research Associate, GISS/Columbia U, 1970-1972
- Ph.D., New York University, 1970
- B.S., National Taiwan University, 1965

Recognitions and Awards

- Delivered an invited Distinguished Lecture in Atmospheric Sciences at the Asia Oceania Geosciences Society 8th annual meeting, Taipei, Taiwan, 8/2011
- Received the 2010 COSPAR (Committee on Space Research, ICSU) Biennial William Nordberg Medal for “outstanding contribution to the application of space science,” 2010
- Shared the Nobel Peace Prize bestowed upon the Intergovernmental Panel on Climate Change (IPCC) for “substantial contributions to the work of IPCC,” 2007
- Elected a Fellow of the Meteorological Society of the Republic of China in Taiwan, 2006
- Elected a Member of the Academia Sinica (Chinese Academy of Sciences, Taiwan, ROC), 2004
- Received a Distinguished Achievement Award from the Chinese American Engineers and Scientists Association of Southern California, 2004
- Received a Distinguished Visiting Scientist appointment from JPL/Caltech, 2003
- Received an Honorary Professorship, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China, 2002
- Elected a Fellow of the American Association for the Advancement of Science, 2000
- Elected a Member of the National Academy of Engineering, 1999
- Received the Jule G. Charney Award from the American Meteorological Society for “pioneering work in the theory and application of radiative transport and its interaction with clouds,” 1998
- Elected an Honorary Member of the Chinese American Oceanic and Atmospheric Association, 1998
- Received a Creativity Award from the Atmospheric Sciences Division of the National Science Foundation for “Light Scattering by Ice Crystals: Theory and Experiment,” 1996
- Elected a Fellow of the American Geophysical Union, 1996
- Elected a Fellow of the American Meteorological Society, 1987
- Elected a Fellow of the Optical Society of America, 1983
- Received the David P. Gardner Fellow Award from the University of Utah, 1978
- Received the Founder's Day Award from New York University, 1971

Committee & Conference Affiliations

- Chair, Section 12, Special Fields and Interdisciplinary Engineering, National Academy of Engineering, 2008-2010 (Vice Chair, 2006-2008; Peer Committee, 2003-2006); Member, Committee on Membership, 2008-2011; Nominating Committee, 2011-2013
- Chair, Selection Committee, Mathematics and Physical Sciences, Presidential Science Prize of Taiwan, 2011
- Chair, Search Committee for Director, Res. Center for Environmental Changes, Academia Sinica, 2011-2012
- Member, Visiting Review Committee, Departments of Atmospheric Sciences: University of Washington, 11/2010; Texas A&M University, 3/2009; and National Taiwan University, 3/2009 (Chair)
- Invited Discussion Leader, “Absorbing Aerosols: Asian Monsoon and Climate Sensitivity,” Gordon Research Conference on Radiation and Climate, New London, New Hampshire, 7/2009
- Report Review Monitor and Coordinator, Division of Earth and Life Studies, NRC/NAS, 2002-2008

- Chair, Fellows Committee, Meteorological Society of the Republic of China, 2007-2009
- Member, Union Fellows Committee, American Geophysical Union, 2002-2006
- Chair, Advisory Panel, Research Center for Environmental Changes, Academia Sinica, Taiwan, 2004-2010
- Member, Advisory Panel, China Meteorological Administration, Beijing, China, 2005
- Member, Atmospheric Sciences Section Executive Committee, American Geophysical Union, 1996-2005
- Chair, Visiting Review Com., School of Earth and Atmospheric Science, Georgia Institute of Tech., 10/2003
- External Reviewer, Chinese Academy of Sciences, Beijing, China, 2004
- Member, Atmospheric Sciences Program Reconfiguration Panel, Department of Energy, 11/ 2003
- Member, Advisory Committee, Center for Clouds-Chemistry-Climate, Scripps, UCSD, 1997-2003
- Member, Scientific Committee, Chapman Conf. on Atmospheric Absorption of Solar Radiation, AGU, 2001
- Convener, Radiative Transfer Theory, International Radiation Symposium, Saint Petersburg, Russia, 7/2000
- Member, Visiting Review Committee, CIRES, University of Colorado, 10/1999
- Chair, First International Asia-Pacific Symposium on Remote Sensing, Beijing, China, 9/1998
- Convener, Radiative Properties of Clouds, International Radiation Symposium, Fairbanks, Alaska, 8/1996
- Member, International Radiation Commission/IAMAS, 1992-2000
- Chair, Scientific Committee, Inner Mongolia Grassland Surface-Atmosphere Exp (IMGRASS), 1992-97
- Chair, U.S. Steering Committee, Heihe Basin Field Experiment (HEIFE), Western China, 1986-1989
- Chair, Beijing International Radiation Symposium, Beijing, China, 8/1986
- Member, ISCCP Panel, Climate Research Committee, National Research Council/NAS, 1984-1987
- Member, Committee on Clouds and Radiation, IAMAP/IAPSO Joint Assembly, 1985
- Chair, Fifth Conf. on Atmospheric Radiation (Clouds, Radiation/Climate), AMS, Baltimore, 11/1983
- Chair, Committee on Atmospheric Radiation, AMS, 1982-1984; Member, 1977-82, 1992-95

Editorial Affiliations

- Editor, *Journal of the Atmospheric Sciences*, American Meteorological Society, 1999-2005
- Review Editor, the Intergovernmental Panel on Climate Change (IPCC) Report, 1998-1999
- Advisory Editor, *Journal of Terrestrial, Atmospheric and Oceanic Sciences*, 1998-2009
- Associate Editor, *Journal of Quantitative Spectroscopy and Radiative Transfer*, 1997-2008; 2011-2013
- Associate Editor, *Journal of Geophysical Research-Atmospheres*, 1997-2001
- Editor, *Theoretical and Applied Climatology*, and *Meteorology and Atmospheric Physics*, 1985-2008
- Member, Editorial Board, *Advances in Atmos. Sci.*, 1984-2004; *Acta Meteorologica Sinica*, 2004-2013
- Guest Editor, Special Volume on Clouds and Radiation, *Journal of Geophysical Research*, 1987
- Editor, *Atmospheric Radiation Progress and Prospects*, Science Press, Beijing and AMS, 699 pp, 1987
- Chief Editor (with M.D. Chou), *Recent Progress in Atmospheric Sciences: Applications to the Asia-Pacific region*. World Scientific Publishing Co., 486 pp, 2008

Authorial and Other Activities

- Authored and co-authored more than 215 peer-reviewed papers, invited book chapters, and review articles on the subjects of light scattering by ice crystals and aerosols, radiative transfer theory and application, satellite remote sensing, and the impacts of clouds and aerosols on climate. The total number of citations of his publications (Web of Knowledge-All Databases, LIOU KN), excluding books, book articles, and missing citations, is 5991 (as of 3/2012) with an H-index of 41.
- Author of “*An Introduction to Atmospheric Radiation*,” 1980, Academic Press, 392 pp (531 citations), translated into Russian, Chinese, and Arabic; 2nd Edition, 2002, 583 pp (339 citations), translated into Chinese, 2005, 614 pp; second printing, 2006. Author of “*Radiation and Cloud Processes in the Atmosphere: Theory, Observation, and Modeling*,” 1992, Oxford University Press, 487 pp (352 citations).
- Liou, K. N., and P. Yang: 2013: *Radiative Transfer and Light Scattering by Ice Crystals: Fundamentals and Applications*. Cambridge University Press (in preparation).
- Supervised 30 PhDs in Atmospheric Sciences.
- Presented more than 100 scientific papers. Three recently invited talks: Fall AGU http://www.atmos.ucla.edu/~liougst/Group_Papers/AGU-12-2010.pdf, Prospect Foundation Symposium http://www.atmos.ucla.edu/~liougst/Group_Papers/Liou_Regional_Climate_Change.pdf, and AOGS 8th annual meeting <https://jifresse.ucla.edu/events/LiouAOGSLecture.pdf>