# **David Allan Randall**

#### A. PROFESSIONAL PREPARATION:

B.S., 1971, Aeronautical and Astronautical Engineering, The Ohio State University.

M.S., 1971, Aeronautical and Astronautical Engineering, The Ohio State University.

Ph.D., 1976, Atmospheric Sciences, University of California, Los Angeles (Professor A. Arakawa, advising).

#### **B. APPOINTMENTS:**

07/88 - Present: Professor, Department of Atmospheric Science, Colorado State University 09/79 - 06/88: Meteorologist, Global Modeling and Simulation Branch, NASA/Goddard Space Flight Center. 09/76 - 09/79: Assistant Professor, Department of Meteorology, Massachusetts Institute of Technology.

### C. TEN SELECTED REFEREED PUBLICATIONS:

- Randall, D. A., M. Khairoutdinov, A. Arakawa, and W. Grabowski, 2003: Breaking the cloud-parameterization deadlock. *Bull. Amer. Meteor. Soc.*, 84, 1547-1564.
- Heikes, R. P., and D. A. Randall, 1995: Numerical integration of the shallow water equations on a twisted icosahedral grid. Part I: Basic design and results of tests. *Mon. Wea. Rev.*, **123**, 1862-1880.
- Khairoutdinov, M., C. A. DeMott, and D. A. Randall, 2008: Evaluation of the simulated interannual and subseasonal variability in an AMIP-style simulation using the CSU Multiscale Modeling Framework. J. Climate, 21, 413 - 431.
- Randall, D. A., and M. J. Suarez, 1984: On the Dynamics of Stratocumulus Formation and Dissipation. J. Atmos. Sci., 41, 3052 3057.
- Randall, D. A., and D.-M. Pan, 1993: Implementation of the Arakawa-Schubert cumulus parameterization with a prognostic closure. In *Cumulus Parameterization*, a Meteorological Monograph published by the American Meteorological Society, K. Emanuel and D. Raymond, Eds., pp. 137 - 144.
- Randall, D. A., M. E. Schlesinger, V. Galin, V. Meleshko, J.-J. Morcrette, and R. Wetherald, 2006: Cloud Feedbacks. In "Frontiers in the Science of Climate Modeling," J. T. Kiehl and V. Ramanathan, Eds., Cambridge University Press, pp. 217-250.
- Randall, D. A., 1987: Turbulent Fluxes of Liquid Water and Buoyancy in Partly Cloudy Layers. J. Atmos. Sci., 44, 850-858.
- Fowler, D. A. and D. A. Randall, 1996: Liquid and ice cloud microphysics in athe CSU General Circulation Model. Part 2: Simulation of the Earth's radiation budget. *J. Climate*, **9**, 530-560.
- Benedict, J. J., and D. A. Randall, 2007: An analysis of the MJO based on TRMM rainfall data. J. Atmos. Sci., 64, 2332-2354.
- Lappen, C.-L, and D. A. Randall, 2001: Towards a unified parameterization of the boundary layer and moist convection. Part I. A new type of mass-flux model. J. Atmos. Sci., 58, 2021-2036.

## D. SYNERGISTIC ACTIVITIES:

- 1. Director, NSF Science and Technology Center for Multiscale Modeling of Atmospheric Processes, 2006 -.
- 2. Chair, External Advisory Panel, Center for Climate Systems Research, University of Tokyo.
- 3. Member, External Advisory Panel, Max Planck Institute for Meteorology, Hamburg, Germany.
- 4. Chief Editor of the Journal of Climate, 1995-2005.
- 5. Active participant in and former Chair of the GEWEX Cloud Systems Study (GCSS).
- 6. Co-Chair of the FIRE Science Team continuously for 19 years, and Chair of the ARM Science Team for 3 years.
- 7. Member, Biological and Environmental Research Advisory Committee, U.S. Dept. of Energy.
- 8. Coordinating Lead Author, Chapter 8, IPCC Fourth Assessment, 2007.