

## DANIEL ROSENFELD - CURRICULUM VITAE (October 2018)

### PERSONAL

Born: June 21, 1952, Kfar Saba, Israel  
Marital Status: married, two sons

### LINKS

Google Scholar: <https://scholar.google.com.tr/citations?user=9fiJbzUAAAAJ&hl=en>

ResearcherId: <http://www.researcherid.com/rid/F-6077-2016>

ResearchGate: [https://www.researchgate.net/profile/Daniel\\_Rosenfeld](https://www.researchgate.net/profile/Daniel_Rosenfeld)

URL for web site: <http://en.earth.huji.ac.il/people/daniel-rosenfeld>

### EDUCATION

1986            PhD, Dept. of Atmospheric Sciences, The Hebrew University, Israel  
1980            M.Sc, Dept. of Atmospheric Sciences, The Hebrew University, Israel  
1977            B.Sc, Dept. of Geology, The Hebrew University, Israel

### ACADEMIC APPOINTMENTS

1977-1986:    Teaching Assistant, Atmospheric Sciences, The Hebrew University  
1986-1988:    Post-doctoral Research Fellow, NASA/GSFC  
1988-1991:    Lecturer, Atmospheric Sciences, The Hebrew University  
1991-1998:    Senior Lecturer, Atmospheric Sciences, The Hebrew University  
1998-2001:    Associate Professor, Atmospheric Sciences, The Hebrew University  
2001-present: Professor, Atmospheric Sciences, Hebrew University, Jerusalem  
2014-present: Adjunct Professor, Dept. of Atmospheric Sciences, Texas A&M University, College Station.  
2018- present: Adjunct Professor, Dept. of Atmospheric Sciences, Nanjing University, Nanjing, China.

### HONORS AND AWARDS

1988-1991: **Alon Fellowship**, awarded by the Israeli Council for Higher Education.  
2000: The **R. Froind Award** for popular writing in sciences. Awarded by the Hebrew University of Jerusalem.  
2001: The **Verner Suomi Medal**, of the American Meteorological Society, "*for key contributions to remote measurement and interpretation of rainfall, cloud optical properties, and cloud microphysical properties*".  
2001: The **Thunderbird Award**, of the Weather Modification Association.  
2003: **Fellow** of the American Meteorological Society.  
2006: The **WMO/UAE Prize** for Excellence in Weather Modification "*for contributions to world-wide WM experiments and their advocacy of the aerosol pollution/precipitation link*".  
2006: The **Michael Landau Prize for Sciences**, in the area of Ecology and Environment, granted by the Israeli Mifal-Hapayis to Israeli scientists *for outstanding achievements in their field and for the advancement of science in Israel*.

- 2007: The **Schaefer Award**, of the Weather Modification Association "*For scientific and technological discoveries that have constituted a major contribution to the advancement of weather modification*"
- 2009: The **Friendship Award**, of the People's Government of China, "*in appreciation to outstanding contribution to the economic construction and society development of China*", in recognition of the cooperation on cloud-aerosol interactions impacts on weather modification.
- 2013: Elected as a Member of "**The European Academy of Sciences and Arts**".
- 2015: The **EMET prize** for sciences, art and culture, awarded "*for his leading research in the field of cloud and rain physics and the effect of natural and man-made aerosols on rainfall levels and distribution*".
- 2015: **Fellow** of the American Geophysical Union "*For seminal advances in discovering and understanding aerosol-cloud-precipitation-climate interactions*".
- 2016: Editors' Citation for Excellence in Refereeing for *JGR-Atmospheres*.
- 2018: The American Geophysical Union **Yoram J. Kaufman Outstanding Research and Unselfish Cooperation Award** "*for his unselfish collaboration in research, his broad influence on atmospheric sciences, and, in particular, for describing the role of aerosol effects on convection and rainfall.*"

#### **ACADEMIC ACTIVITIES AND COMMUNITY SERVICES**

- 1988- Member, the steering committee of the Israeli Rain Enhancement Program.
- 1988-2000: Member, Science team of NASA's Tropical Rainfall Measuring Mission satellite.
- 1990-1999: Provided scientific guidance to the U.S. Agency for International Development (USAID) on the design, conduct and evaluation of the Cloud Seeding Demonstration Project in Thailand.
- 1994-1996: Provided scientific guidance to the dynamic cloud seeding project, in west Texas, with cloud physics aircraft campaigns.
- 1996: Chairperson of the MEDREP (the Middle East and Mediterranean Rain Enhancement Program) steering committee.
- 1996-1999: Member of the American Meteorological Society's committee for Advertent and Inadvertent Weather Modification.
- 1996-2004: Member, Science team of NASDA (Japanese space agency) ADEOS-2 (Advanced Earth Observing Mission).
- 2000- Member of the applications expert group on nowcasting and very short range forecasting. EUMETSAT.
- 2003-2008: Member of Integrated Land Ecosystem – Atmosphere Processes Study (iLEAPS) science steering committee.
- 2008- Honorary Member of Integrated Land Ecosystem – Atmosphere Processes Study (iLEAPS) science steering committee.
- 2005: PI for the aircraft field campaign in Texas, aimed at testing the impact of hygroscopic aerosols on precipitation development in convective clouds.
- 2005-2006: Representative of Israel in the COST office for Meteorology, the European Commission.
- 2005-2006: PI for the aircraft field campaign SUPRECIP in February-March 2005 and 2006, validating the satellite inferences of air pollution suppressing precipitation in the Sierra Nevada.
- 2006-2012: Chair of the American Meteorological Society's committee for Advertent and Inadvertent Weather Modification.

- 2007- A visiting member of the Chinese Academy of Meteorology, Beijing, China.
- 2007- Co-founder of the Aerosol-Cloud-Precipitation-Climate initiative, which has been co-sponsored by iLEAPS, IGAC and GEWEX.
- 2008-2013: Member, Advisory Council, European Severe Storms Laboratory.
- 2009-2011: Lead scientist for the aircraft field campaign CAIPEEX (Cloud-Aerosol Interactions and Precipitation Enhancement Experiment) during the 2009 and 2010 monsoon seasons in India, with the Indian Institute of Tropical meteorology.
- 2009-2012: Chair of the American Meteorological Society (AMS) Committee for planned and inadvertent weather modification. In this capacity lead the writing of policy statements, and convene the AMS conference on planned and inadvertent Weather Modification, held in Seattle on January 2011.
- 2010-2012: Co-chair the Remote Sensing Aerosol-Cloud-Precipitation-Climate initiative, which has been sponsored by the International Space Science Institute, Bern, Switzerland.
- 2010- Science team of CALWATER, and flight scientist for the aircraft campaigns January-February 2011 and 2014, for measuring cloud-aerosol interactions and impacts on precipitation over California, for the California Energy Commission.
- 2010- Founding member and Co-Chair of the Aerosol-Clouds-Precipitation-Climate science initiative, supported by iLEAPS and endorsed by GEWEX and IGAC.
- 2013- Science Steering Committee for the CalWater project – 5 year program for research of impacts of cloud dynamic and aerosol interactions on precipitation in California, by aircraft, UAV and ship, funded by NOAA, DOE, NASA and the State of California.
- 2013- Founding member of AEROSAT – International Satellite Aerosol Science Network.
- 2016-2018: Member of the International Review Team on the meteorological products of Geo-Kompsat-2A (GK-2A), the second meteorological satellite of Korea.
- 2017- Member of the Advisory Committee of the NSF Center for Aerosol Impacts on Chemistry of the Environment, at the University of California San Diego.
- 2017: Participant in the IPCC scoping team for the 6th Assessment, WG1.
- 2017- PI of the satellites mission of the French and Israeli space agencies for measuring cloud updrafts, lightning, vapor and trace gases: Clouds- $\mu$ Spectro-Zeus.
- 2018- Lead Author of the chapter in changes in the water cycle in the IPCC 6<sup>th</sup> Assessment, WG-1.
- 2018- Member of the Advisory Committee of the Joint international research Laboratory of Atmospheric and Earth SysTem sciences. (*JirLATEST*), Nanjing University, Nanjing, China.

## MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 1980-present: Member of the Israeli Meteorological Society
- 1988-present: Member of the American Meteorological Society
- 1988-present: Member of the American Geophysical Union
- 2013-present: Member of "The European Academy of Sciences and Arts".

## **SUPERVISION OF GRADUATE STUDENTS**

The pool of potential graduate students in atmospheric sciences in Israel is very small compared to most other countries. Therefore I accepted several excellent foreign students that sought my mentorship. Most of them spend part time at the Hebrew University. Since the students address the various components of my research, they all belong to my greater research team, communicate and cooperate among themselves around the world.

## **TEACHING ACTIVITIES**

1988 – present: Professor of atmospheric sciences. Teaching courses in cloud physics, radar meteorology, synoptic meteorology and climate change at the Institute of Earth Sciences of the Hebrew University of Jerusalem, Israel

## **INTERNATIONAL ADVANCED SCHOOLS**

- 2018/08/13-17 Beijing Normal University: Summer school of "Remote Sensing Applications for Weather, Climate, Environment and Aerosol-Cloud-Precipitation Interactions".
- 2016/08/11-15 Nanjing University: Summer school of "Applications of satellite remote sensing in numerical weather and climate prediction".
- 2015/11 EUMETSAT advanced training of using satellites for nowcasting. Prague, Szech Republic.
- 2014/07 Advanced training module on aerosol indirect effect. University of Leipzig, Germany.
- 2013/06 Advanced colloquium on cloud-aerosol interactions. Beijing Normal University, Beijing, China.
- 2011/01 International Training Workshop on "Remote Sensing of Atmospheric Aerosols and Their Impacts". Sharda University, Delhi, India.
- 2010/03 Forum on Aerosols and Climate, Yale University, Boston, USA.

## **ORGANISATION OF SCIENTIFIC MEETINGS (selected)**

- 2018 Co-Convenor, Aerosol-Cloud-Precipitation-Climate Workshop, Boulder, CO, USA.
- 2017 Co-Convenor, Aerosol-Cloud-Precipitation-Climate Workshop, Bad-Honef, Germany.
- 2015 Co-Convenor, Aerosol-Cloud-Precipitation-Climate Workshop, Columbia Univ NY, USA
- 2015 Convenor, Session on Cloud-Aerosol-Precipitation-climate Interactions at the AMS annual meeting, Phoenix, USA
- 2014 Convenor, Session on Cloud-Aerosol-Precipitation Interactions in California at the AGU fall meeting, San Francisco, USA
- 2011 Convenor of the 18<sup>th</sup> Conference on Planned and Inadvertent Weather Modification, Seattle, USA. Sponsored by the American Meteorological Society.
- 2009 SSC of the 2<sup>nd</sup> Integrated iLEAPS Science Conference, Melbourne, Australia.
- 2006 Scientific Committee of the 1<sup>st</sup> Integrated Land Ecosystem-Atmosphere Study (iLEAPS) Science Conference, 21-26 January 2006, Boulder, Colorado, USA.