

Biographical Sketch

Wayne F. J. Evans

NorthWest Research Associates
4118 148th Ave NE, Redmond, WA 98052 USA
ph.: 425-556-9055, *fax:* 425-556-9099, *wayne@nwra.com*

Dr. Evans at NorthWest Research Associates in Redmond is an American citizen and resides in the Seattle area. He was a professor of Environmental Science and Physics at Trent University in Peterborough, Ontario for 15 years. He has a D.Sc. and a Ph.D. from the University of Saskatchewan and is a Fellow of the Royal Society of Canada. He taught courses on climate change, air pollution, thermodynamics and energy technology. His primary research interests include the study of the climate radiative forcing responsible for climate change and the depletion of the Arctic stratospheric ozone layer, in both of which, he has conducted pioneering measurements. His work has led to the development of a number of novel atmospheric remote sensing techniques from satellites and from the ground. As a member of six satellite science teams, he has extensive space experience. He is the author of over 200 publications with 138 in peer reviewed journals. He was a reviewer of the IPCC 2001 and 2007 Assessment Reports and is an expert on the interaction of the energy industry with the Kyoto accord.

EDUCATION

- D. Sc., May 1997, Physics, University of Saskatchewan, Saskatoon, SK.
- Ph.D., February 1968, Physics, University of Saskatchewan, Saskatoon, SK.
- M.A., 1963, Physics, University of Saskatchewan, Saskatoon, SK.
- B.A. Honors, 1961, Physics, University of Saskatchewan, Saskatoon, SK.

PROFESSIONAL EXPERIENCE

- Visiting Scientist (2005 – 2009), North West Research Associates, Redmond, WA.
- Adjunct Professor (Sept.1976 - Present), Center for Research in Earth and Space Science, York University, Toronto, ON
- Professor of Environmental Science, (May 1990 – July 2006), Trent University, Peterborough, ON.
- Chief, Experimental Studies Division, (Sept.1976 – April, 1990), Atmospheric Environment Service /Environment Canada, Toronto,ON.
- Research Scientist, Experimental Studies Division, (Sept.1972 – Sept.1976), Atmospheric Environment Service /Environment Canada, Toronto, ON.
- Sessional Lecturer/Research Associate, (March,1969 – August,1972) University of Saskatchewan, Saskatoon, SK
- Post Doctoral Fellow, NRC Post-Doctoral Fellowship Program, (Feb.1968 – Feb.1969), host: J. Blamont, Service d’Aeronomie, Space Laboratory, Centre National de Recherche Scientifique (France).

HONORS AND AWARDS

- Canadian Research Council Tier One Senior Chair Award, 2002
- Fellow of Royal Society of Canada, 1989
- DRIE Award for Excellence in Technology Transfer, 1986
- Research Scientist Level 4 (Senior Scientist) 1982
- President's Prize, CMOS, 1977
- Public Service Merit Award, Federal Government, 1975
- E.L. Harrington Prize in Physics, Univ. of Saskatchewan

SYNERGISTIC ACTIVITIES

- Reviewer, more than 60 journal articles and more than 30 proposals
- Member, American Geophysical Union, American Meteorological Society, Canadian Meteorological and Oceanographic Society (CMOS).
- Contract research on clouds and radiative forcing of global warming by GHG for Enbridge Gas
- Co-investigator on ACE/SCISAT science team
- Co-Investigator on OSIRIS/ ODIN and on WINDII/UARS science teams.

MOST RELEVANT PUBLICATIONS

W.F.J. Evans, "Observations of Climate Radiative Forcing from Ground and Space," in *Fourier Transform Spectroscopy*, OSA Technical Digest (CD) (Optical Society of America, 2009), paper FWA4 (2009).

<http://www.opticsinfobase.org/abstract.cfm?URI=FTS-2009-FWA4>

E. Puckrin, **W.F.J. Evans**, Jiangnan Li and H Lavoie, Comparison of Clear-Sky Greenhouse Fluxes Simulated With Radiative Transfer Models, *Can. J. Remote Sens.*, **30**, pp 903-12, (2004).

W.F. J. Evans and E. Puckrin, Comparison of Solar Variability Effects with Surface Radiative Forcing of CO₂, *Adv. Space Res.*, **33**, pp. 1073-1076, (2004).

W.F.J. Evans and E. Puckrin, New Global Warming Potentials Modified for Surface Radiative Forcing for use in Surface Energy Balance Models, *Atmos. Sci. Lett.*, **1**, 001 (2001).

W.F.J. Evans and E. Puckrin, The Wintertime Surface Radiative Forcing Associated with Nitric Acid, *Atmos. Environment*, **35**, 71-77 (2001).

W.F.J. Evans and E. Puckrin, Remote Sensing Measurements of Tropospheric Ozone by Ground-Based Thermal Emission Spectroscopy, *J. Atmos. Sci.*, **56**, pp 311-318, (1999).

W.F.J. Evans and E. Puckrin, A Wintertime Measurement of the Greenhouse Radiation from Nitrous Oxide (N₂O), *Can. J. Analyt. Sci. Spect.*, **42**, pp 141-145, (1998).

W.F.J. Evans, and E. Puckrin, A Measurement of the Greenhouse Radiation Associated with CCl₄, *Geophys. Res. Lett.*, **23**, pp 1,769-1,772, (1996).

W.F.J. Evans, and E. Puckrin, The Extraction of the Thermal Emission Band of Methane from the Longwave Spectrum of the Atmosphere, *Journal of Climate*, **8**, pp 3,091-3,095, (1995).

W.F.J. Evans, and E. Puckrin, The Measurement and Extraction of the ν_6 Atmospheric Emission Band of CFC-12 from Interfering Emission Features, *Annales Geophysicae*, **13**, pp 969-972(1995)

W.F.J. Evans, and E. Puckrin, An Observation of the Atmospheric Thermal Emission Spectrum of Trichlorofluoromethane (CFC-11), *Geophys. Res. Lett.*, **21**, pp 2,381-2,384, (1995).