Richard A. Simpson

Education

B.S Electrical Science and Engineering, Massachusetts Institute of Technology (1967)
M.S. Electrical Engineering, Stanford University (1969)
Ph.D. Electrical Engineering, Stanford University (1973). Thesis: "Lunar Radar Echoes: An Interpretation Emphasizing Characteristics of the Leading Edge"

Employment

1967: (summer)	Engineer: Instrumentation Laboratory (now Charles Stark Draper Laboratory), Massachusetts Institute of Technology, Cambridge, MA.
1967-1973:	Research Assistant/Graduate Student: Center for Radar Astronomy, Stanford University, Stanford, CA.
1973-2012:	Research Associate/Senior Research Associate: Center for Radar Astronomy, Stanford Univ., Stanford, CA.
1983-1985:	Lecturer: Department of Electrical Engineering, Stanford University, Stanford, CA.
2012-present:	Radio Scientist: Electrical Engineering Department, Stanford University, Stanford, CA
2020-present:	Data Manager, SETI Institute, Mountain View, CA.

Professional Affiliations

Institute of Electrical and Electronics Engineers (professional groups: Antennas and Propagation; Geoscience and Remote Sensing).
American Geophysical Union.
American Association for the Advancement of Science.
American Astronomical Society (Division for Planetary Science).
United States National Committee - International Scientific Radio Union (Commission J).

Special Panels and Committees (since 2000)

Planetary Data System: Management Council (1992-2015)
Radio Science Advisor (1995-present)
Discovery and New Frontiers Review Panels (2001, 2009, 2010-12, 2019)
Mars Reconnaissance Orbiter Review Panel (2001)
70m Long-Term Equivalent Capability Science and Future Mission Workshop (2001)
Mars Telecommunications Orbiter Review Panel (2003)
Lunar Reconnaissance Orbiter Review Panel (2004)
National Astronomy and Ionosphere Center Visiting Committee (2006-2007)

Professional Interests and Areas of Expertise

Theoretical and experimental research on scattering of radio waves by planetary surfaces. Study and experimental work on the effect of inhomogeneous distributions of surface statistics on radar echoes. Theoretical analysis of electromagnetic wave propagation through spatially variable dielectric media with application to planetary models. Pursuing geophysical interpretation of observed radio wave behavior. Investigation of future radio techniques for planetary exploration. Management and archiving of radio science data.