



# Sean C. Solomon

GRFP Recipient: 1966

*Undergraduate Institution:*  
B.S. 1966, California Institute of  
Technology

*Graduate Institution:*  
Ph.D. 1971, Massachusetts Insti-  
tute of Technology (MIT)

*Graduate Field of Study:*  
Geophysics

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*Current Position:*  
Director, Lamont-Doherty  
Earth Observatory, Columbia  
University

## RESEARCH INTERESTS //

Sean C. Solomon is a geophysicist and planetary scientist who has balanced participation in spacecraft missions to the planets with oceanographic expeditions and fieldwork to investigate the active tectonics and seismic structure of oceanic plate boundaries and mid-plate hotspots. Solomon currently heads a multi-institutional team that operates the MESSENGER spacecraft, now in orbit about Mercury in March 2011. For ten years Solomon also led one of the inaugural teams within the NASA Astrobiology Institute, which seeks to understand the chemical underpinnings required for the origin of life on Earth and possibly other worlds. Solomon writes, "The NSF Graduate Research Fellowship gave me extraordinary freedom as a young graduate student. My thesis research was in seismology, but I was also able to participate in a marine geophysics cruise and to work on early geophysical models of the Moon in anticipation of results from the Apollo program. I owe it to NSF that I could try my hand at a mix of research problems. The themes of that early work continued to guide much of my later research career."

## AWARDS/ HONORS //

- NSF Postdoctoral Fellow (1971-1972)
- Alfred P. Sloan Research Fellow (1977-1981)
- John Simon Guggenheim Memorial Foundation Fellow (1982-1983)
- Fellow, American Academy of Arts and Sciences (1995)
- President, American Geophysical Union (1996-1998)
- Grove Karl Gilbert Award, Geological Society of America (1999)
- Arthur L. Day Prize and Lectureship, National Academy of Sciences (1999)
- Member, National Academy of Sciences (2000)
- Public Service Medal, NASA (2004)
- Harry H. Hess Medal, American Geophysical Union (2005)

## POSITION PROFILE //

1972-1992, Assistant Professor to Professor of Geophysics, Department of Earth, Atmospheric, and Planetary Sciences, MIT

1992-2011, Director, Department of Terrestrial Magnetism, Carnegie Institution of Washington

2012-present, Director, Lamont-Doherty Earth Observatory, Columbia University

