# VITA

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**ACADEMIC DEGREES:**

Bachelor of Science (Engineering Mechanics)
Cornell University, 1976

Master of Engineering (Engineering Mechanics)
Cornell University, 1977

Master of Arts (Earth and Planetary Sciences)
Washington University (St. Louis), 1979

Doctor of Philosophy (Geological Sciences)
Cornell University, 1984

**EMPLOYMENT EXPERIENCE:**

7/84 - 9/86: Faculty Research Associate
Department of Geology
Arizona State University

9/86 – 12/05: Research Scientist
Laboratory for Atmospheric and Space Physics
University of Colorado (Boulder)

12/01 – present: Curator of Planetary Science
Denver Museum of Nature and Science
Denver, CO

9/03 – present: Chairman, Department of Space Sciences
Denver Museum of Nature and Science
Denver, CO

1/06 – present: Research Scientist
Space Science Institute
Boulder, CO

**PROFESSIONAL SOCIETIES:** American Astronomical Society (Division for Planetary Sciences)
American Geophysical Union

**RESEARCH INTERESTS:** Educational outreach: incorporating space science into museum exhibits and K-12 curricula; Development of computer techniques for analysis and correlative study of multiple remote-sensing data sets; Digital image processing techniques; Physics of atmosphere/surface interactions; Mechanisms and rates of eolian sediment transport; Effects of topography on regional atmospheric circulation.

**RESEARCH EXPERIENCE:**

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| 1/90 - 12/94: | Principal Investigator, NASA Planetary Data System Project |
| 3/90 - 3/92: | Project Scientist, NASA Planetary Data System Project |
| 11/90 - 12/94: | Principal Investigator, MSATT (Mars Surface and Atmosphere Through Time) |
| 11/90 – 12/02: | Co-Investigator, Hubble Space Telescope General Observer Program |
| 10/95 – 9/99: | Co-Investigator, Mars Color Imager (MARCI), Mars Surveyor '98 |
| 6/96 – 12/01: | Science Content Coordinator, MarsQuest museum exhibit |
| 6/00 – present: | Principal Investigator, NASA Mars Data Analysis Program |
| 11/01 – present | Co-Investigator, Mars Color Imager (MARCI) and Context Imager (CTX), Mars Reconnaissance Orbiter |

**RELEVANT PUBLICATIONS:**


Lee, S.W. (1991). The Planetary Data System, *IUGG U.S. National Report, Planetology, 1987 — 1990, Rev. Geophys., Supplement,* 338-341.

Clancy, R.T. and Lee, S.W. (1991). A new look at dust and clouds in the Mars atmosphere: Analysis of emission-phase-function sequences from global Viking IRTM observations, *Icarus*, *93,* 135-158.

Greeley, R., Lancaster, N., Lee, S., and Thomas, P. (1992). Martian Aeolian Processes, Sediments, and Features, in *Mars* (H. Kieffer, B. Jakosky, C. Snyder, and M. Matthews, eds.), Univ. Arizona Press, Tucson, AZ., 730-766.

Kahn, R.A, Lee, S.W., Martin, T.Z., and Zurek, R.W. (1992). The Martian Dust Cycle, in *Mars* (H. Kieffer, B. Jakosky, C. Snyder, and M. Matthews, eds.), Univ. Arizona Press, Tucson, AZ., 1017-1053.

James, P.B., R.T. Clancy, S.W. Lee, L.J. Martin, R.B. Singer, E. Smith, R.A. Kahn, and R.P. Zurek (1994). Monitoring Mars with the Hubble Space Telescope: 1990-1991 Observations, *Icarus*, *109*, 79-101.

Clancy, R.T., S.W. Lee, G. R. Gladstone, W. McMillan, and T. Roush (1995). A New Model for Mars Atmospheric Dust Based upon Analysis of Ultraviolet through Infrared Observations from Mariner 9, Viking, and Phobos, *J. Geophys. Res., 100*, 5251-5263.

Clancy, R.T., A. Grossman, M. Wolff, P. James, J. Rudy, Y. Billawala, B. Sandor, S. Lee, and D. Muhleman (1996). Water Vapor Saturation at Low Altitudes Around Mars Aphelion: A Key to Mars Climate?, *Icarus*, *122*, 36-62.

James, P.B, J.F. Bell, R.T. Clancy, S.W. Lee, L. Martin, and M. Wolff (1996). Global imaging of Mars by Hubble Space Telescope during the 1995 opposition, *J. Geophys. Res., 101*, 18883-18890.

Wolff, M.J., S.W. Lee, R.T. Clancy, L.J. Martin, P.B. James, and J.F. Bell (1997). 1995 observations of Martian dust storms using the Hubble Space Telescope, *J. Geophys. Res., 102,* 1679-1692.

Bell, J.F, M.J. Wolff, P.B. James, R.T. Clancy, S.W. Lee, and L.J. Martin (1997). Mars surface mineralogy from Hubble Space Telescope imaging during 1994-1995: observations, calibration, and initial results. *J. Geophys. Res., 102,* 9109-9123.

Lee, S.W (1998). Mars: Coming to a Museum Near You!, *EOS, 79*, 115.

Wolff, M.J., J.F. Bell III, P.B. James, R.T. Clancy, and S.W. Lee (1999). Hubble Space Telescope observations of Mars prior to the Mars Pathfinder mission: Water ice cloud and dust optical depths, *J. Geophys. Res.*, 104, 9027-9042.

James, P.B., J. Hollingsworth, S.W. Lee, and M.W. Wolff (1999). North Polar Dust Storms in Early Spring on Mars, *Icarus*, 138, 64-73.

James, P.B.and S.W. Lee (1999). Hubble Space Telescope Observations of Planets and Satellites, *Annual Review of Earth and Planetary Sciences,* 27, 115-148.

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James, P.B., J. Hollingsworth, S.W. Lee, and M.W. Wolff (1999). North Polar Dust Storms in Early Spring on Mars, *Icarus*, 138, 64-73.

Bell, J.F, M.J. Wolff, T.C. Daley,D. Crisp, P.B. James, S.W. Lee, J.T.Trauger, and R.W. Evans (1999). Near-infrared imaging of Mars from HST: Surface reflectance, photometric properties, and implications for MOLA data", *Icarus*, 138, 25-35.

Jakosky, B.M., Mellon, M.T., Kieffer, H.H., Christensen, P.R., Varnes, E.S., Lee, S.W. (2000). The thermal inertia of Mars from the Mars Global Surveyor Thermal Emission Spectrometer, *J. Geophys. Res.*, 105, 9643-9652.

Malin, M. C.; Bell, J. F., III; Calvin, W.; Clancy, R. T.; Haberle, R. M.; James, P. B.; Lee, S. W.; Thomas, P. C.; Caplinger, M. A. (2001). The Mars Color Imager (MARCI) on the Mars Climate Orbiter, *J. Geophys. Res.*, 106, 17651-17672.

Malin, M. C., J.F. Bell III, B.A. Cantor, M.A. Caplinger, W.M. Calvin, R.T. Clancy, K.S. Edgett ,L. Edwards, R.M. Haberle, P.B. James, S.W. Lee, M.A. Ravine, P.C. Thomas, and M.J. Wolff, (2007). The Context Camera Investigation onboard the Mars Reconnaissance Orbiter. *J. Geophys. Res.*, 112, E05S04.