PHILIP R. CHRISTENSEN

Education

B.S.	Geology	1976	University of California, Los Angeles
M.S.	Geophysics and Space Physics	1978	University of California, Los Angeles
Ph.D.	Geophysics and Space Physics	1981	University of California, Los Angeles

Professional Employment

2004-present *Regents Professor*, Arizona State University
2000-present *Ed and Helen Korrick Professor*, Arizona State University.
1995-2000 *Professor*, Department of Geology, Arizona State University
1990-1995 *Associate Professor*, Department of Geology, Arizona State University
1986-1990 *Assistant Professor*, Department of Geology, Arizona State University
1981-1986 *Faculty Research Associate,* Department of Geology, Arizona State University

Selected Funded Research Projects

Principal Investigator, NASA, E-THEMIS, Mars Europa Mission, 2015-present.
Instrument Lead, UAE, EMIRS, Emirates Mars Mission, 2015-present.
Co-Investigator, NASA, OSIRIS-REx New Frontiers Mission, 2010-present.
Principal Investigator, NASA, Thermal Emission Imaging System, Mars 2001 Orbiter Mission, 1997-present.
Principal Investigator, NASA, Miniature Thermal Emission Spectrometer for Mars 2001/2003 Rover Mission, 1997-present.
Principal Investigator, NASA, Mars Instrument Develop. Program 2008-present.
Principal Investigator, NASA, THEMIS Imaging Facility and Student Imaging Project 2000-present.
Principal Investigator, NASA, JMARS Data Analysis Tool, 2005-present
Co-Investigator, NASA, Eos ASTER investigation 1990-present
Principal Investigator, NASA, Thermal Emission Spectrometer, Mars Observer/Global Surveyor Mission, 1986-2007.
Principal Investigator, NASA, Mars Fundamental Research Program, 2007-present.
Principal Investigator, NASA, Planetary Geology Program, 1986-present.
Principal Investigator, NASA, Mars Data Analysis Program, 1999-present.
Principal Investigator, NASA, Planetary Instrument Definition and Development Program, 1084-1987; 1996-1998.

Selected National Service

Co-Chair, Committee on Astrobiology and Planetary Science, NRC, 2011-present
Chair, Mars Panel, National Research Council Planetary Science Decadal Survey, 2010-2011
Chair, NASA Mars Architecture Tiger Team (2008-2010)
MEPAG Executive Committee, 2007-present
Chair, NASA Mars Reconnaissance Orbiter MOS/GDS Review Board (2003-2006)
NASA Mars Reconnaissance Orbiter Science Definition Team (2001)
Lunar and Planetary Institute (LPI) Science Council (2001-2002)
Chair, NASA Planetary Geology and Geophysics Review Panel (1994-1995)
National Academy of Sciences Committee on Planetary and Lunar Exploration (1994-1997)
NASA Mars Exploration Program Assessment Group (1999-205)
NASA Mars Science Working Group (1994-1996)
NASA Planetary Geology and Geophysics Review Panel (1989-1990); (1993-1995)

NASA Earth Observing System Science Steering Committee (1985-1987)

Professional Societies

American Geophysical Union
American Astronomical Society, Division of Planetary Science
Geological Society of America

Selected Honors and Awards

ASU Zebulon Pearce Distinguished Teaching Award, 2014
Fellow, Geological Society of America, 2009
G.K. Gilbert Award, Geological Society of America, 2008
NASA Public Service Medal, 2005
Fellow, American Geophysical Union, 2004
NASA Exceptional Scientific Achievement Medal, 2003
ASU College of Liberal Arts and Science Distinguished Faculty Award, 2002
ASU Alumni Association Distinguished Faculty Award for Research, 1998
ASU Liberal Arts and Sciences Alumni Association Outstanding Faculty Award, 1995
21 NASA Group Achievement Awards, 1993-present

Selected Recent Publications

Salvatore, M. R., M. D. Kraft, C. S. Edwards, and P. R. Christensen (2016), The geologic history of Margaritifer basin, Mars, *J. Geophys. Res*, DOI: 10.1002/2015JE004938.

Salvatore, M., and P. Christensen (2014), On the origin of the Vastitas Borealis Formation in Chryse and Acidalia Planitiae, Mars, *Journal of Geophysical Research: Planets*.

Klug-Boonstra, S., and P. R. Christensen (2013), Mars Student Imaging Project: Real research by secondary students, *Science*, *339*, 920-921.

Edwards, C., and P. Christensen (2013), Microscopic emission and reflectance thermal infrared spectroscopy: instrumentation for quantitative in situ mineralogy of complex planetary surfaces, *Applied Optics*, *52*(11), 2200-2217.

Ryan, A. J., and P. R. Christensen (2012), Coils and Polygonal Crust in the Athabasca Valles Region, Mars, as Evidence for a Volcanic History, *Science*, *336*(6080), 449-452.

Christensen, P. R., J. L. Bandfield, R. L. Fergason, V. E. Hamilton, and A. D. Rogers (2008), The Compositional Diversity and Physical Properties Mapped from the Mars Odyssey Thermal Emission Imaging System (THEMIS), in The Martian Surface: Composition, Mineralogy, and Physical Properties, edited by J. F. Bell, III, Cambridge University Press.

Christensen, P. R., J. L. Bandfield, A. D. Rogers, T. D. Glotch, V. E. Hamilton, S. W. Ruff, and M. B. Wyatt (2008), Global Mineralogy Mapped from the Mars Global Surveyor Thermal Emission Spectrometer, in The Martian Surface: Composition, Mineralogy, and Physical Properties, edited by J. F. Bell, III, Cambridge University Press.

Geophys. Res, *116*, E00F23.

Rogers, A. D., and P. R. Christensen, Surface mineralogy of martian low-albedo regions from MGS TES data: Implications for crustal evolution and surface alteration, *J. Geophys. Res.*, *112*, E01003, doi:01010.01029/02006JE002727, 2007.

Kieffer, H. H., P. R. Christensen, and T. N. Titus, CO2 jets formed by sublimation beneath translucent slab ice in Mars' seasonal south polar ice cap, Nature, 442, 793-796, doi:710.1038/nature04945, 2006.

Christensen, P.R., et al., Evidence for igneous diversity and magmatic evolution on Mars from infrared spectral observations, *Nature, 436*, doi:10.1038/nature03639, 2005.