

ROSALY M. C. LOPES

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JPL websites: <http://science.jpl.nasa.gov/people/Lopes/>
<https://women.jpl.nasa.gov/rosaly-lopes.html>

NATIONALITIES: U.S., U.K., and Brazil

EDUCATION:

Ph.D.: Planetary Science (Board of Physics), 1986, University College (University of London, UK).
"Comparative Studies of Volcanic Features on Earth and Mars".

B.Sc. (Hons Lon): Astronomy, 1978, University College (University of London, UK).

PRESENT POSITION:

Senior Research Scientist, JPL, Earth and Space Sciences Division

Major current roles:

Manager, Planetary Science Section
Investigation Scientist, Cassini Radar Team
Principal Investigator, Cassini Data Analysis Program
Co-Investigator, JANUS camera on JUICE

Main current responsibilities:

Editor-in-Chief for the planetary science journal *Icarus*

Investigation Scientist for the Cassini Titan Radar Mapper instrument on the Cassini Project.

Research on Titan's geology and cryovolcanism in particular using data from Cassini.

Research on Io's volcanic activity using Galileo and New Horizons infrared and imaging data.

Main fields of expertise: Planetary geology and volcanology, with particular expertise on Io and Titan and analysis of data from flight projects (Galileo, Cassini, New Horizons).

Approach to research: Use of remote sensing data collected from spacecraft to further develop theoretical models of surface processes, in close collaboration with instrument investigations. Recent research efforts have been directed towards:

- (i) Analysis of Io's infrared spectra obtained by Galileo's Near-Infrared Mapping Spectrometer (NIMS)
- (ii) Analysis of geologic features on Titan using the Cassini Radar Mapper, with particular emphasis on cryovolcanic features.

COMMITTEES AND OTHER EXPERIENCE:

Current:

President-Elect, AGU Planetary Section (2017-2019)

Member, Space Studies Board (and Executive Committee), the National Academies (2016-present)

Vice-Chair, International Academy of Astronautics Commission 1 on Space Physical Sciences
2017-2019

Nominating Committee member, COSPAR (Committee on Space Research), elected August 2014.

Chair, Outer Solar System Task Group (IAU Working Group for Planetary System
Nomenclature), 2006-present (Member, 2005-2006)

Member, JPL Student Programs Advisory Council (2013-present)

Member, Advisory Council, The Planetary Society (2007-present)

Member, Editorial Board, Praxis-Springer Publishing Company (2004-present)

Research Advisor for the National Research Council's postdoctoral NASA Research Associateship Program (1994-present, advised four postdocs to date).

Harlow Shapley Visiting Lecturer, American Astronomical Society (2006-present).

Previous:

Deputy Program Chair, COSPAR General Assembly 2018 (2014-2018)

Guest Investigator, INPE, Brazil (2012-2016)

Member, Program Committee, AGU (2015-2016)

Member, Program Committee, joint DPS-EPSC meeting in Pasadena, California, October 2016

Co- Convener, Io: Interaction between Volcanic Activity and Jupiter's Magnetosphere: a Workshop
at INPE, Sao Paulo State, Brazil, April 4-8, 2016

Project Scientist, Kuiper Discovery proposal, 2015

Member, Perlman Award Committee, AGU (2010-2013)

Past Chair and Chair of Prize Committee, Division for Planetary Sciences of the American Astronomical Society (October 2013-October 2014)

Co-organizer, 48th ESLAB Symposium: New Insights into Volcanism across the Solar System, June 2014, ESTEC, The Netherlands.

Chair, Division for Planetary Sciences of the American Astronomical Society (October 2012-2013)

Speaker, Outer Planets Colloquium Series, NASA/JPL, 2009-2013.

Lecturer, Ciclo de Cursos Especiais, Observatorio Nacional, Rio, Brazil (2013 and 2015)

Member, Senior Research Scientist Council, JPL (2010-2013)

Member, Visiting Committee for 7-year review, Florida Space Institute (2013).

Vice-Chair, Division for Planetary Sciences of the American Astronomical Society (October 2011-October 2012)

Board Member, The National Academies Committee on Planetary Protection Standards for Icy Bodies in the Outer Solar System (2010-2012)

Member (elected), Division for Planetary Sciences, AAS, Committee (2007-2010)

Associate Graduate Faculty, University of Nevada Las Vegas, 2009-2010

Member, Scientific Organizing Committee, Division for Planetary Sciences meeting, 2010.

Co-Lead, Cassini Satellites Orbiter Science Team (2003-2010)

Guest Editor, Icarus, Cassini Icy Satellites, vol. 193, 2008

Collaborator on New Horizons mission for studies of Io during the Jupiter flyby in 2007.

Member, AAAS Annual Meeting Program Committee (representing planetary sciences, astronomy, education, public outreach, and diversity), 2007-2010

Member (elected), American Astronomical Society's Astronomy Education Board, 2006-2009

Board member, National Academy of Sciences/National Research Council's Space Studies Board: Committee to study the next announcement of opportunity (AO) for NASA's New Frontiers missions, 2007-2008.

Member, NASA's Titan Saturn System Mission, Science Definition Team Study (published January 2009)

Member, NASA Titan Explorer Flagship Mission Science Definition Team (2007)

Chair, Nominating Committee, American Astronomical Society's Division for Planetary Sciences, 2005-2006 (Member 2003-2005).

Member, DPS 2006 Program Committee

Member, Program Committee, Demeter International Symposium, Toulouse, 14-16 June, 2006.

Advisor to Local Organizing Committee, American Astronomical Society's Division for Planetary Sciences Annual Meeting, 2006.

Member, Subcommittee on Diversity, American Geophysical Union, 2001-2003

Member, Steering Committee of the Commission for Large-Volume Basaltic Provinces, International Association of Volcanology and Chemistry of the Earth's Interior, 2000-2004.

Member, Committee for Minorities and Women in Geosciences, Geological Society of America (1996-1999).

Co-chair for Local Organizing Committee, American Astronomical Society Division for Planetary Sciences 2000 meeting

Chief organizer for Cassini-Huygens session at the American Association for the Advancement of Science meeting, Washington, DC, February 2005.

Co-organizer, United Nations/European Space Agency workshops on Basic Space Science, 1992 (San Jose, Costa Rica) and 1994 (Cairo, Egypt).

Convener of numerous meeting sessions, including American Geophysical Union (2000, 2002, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013, 2014), International Association of Geomorphologists (2011), American Association for the Advancement of Science (2005), International Association of Volcanology and Chemistry of the Earth's Interior (2008), AGU Western Pacific Geophysics Meeting (2008), International Geological Congress (2000), European Planetary Science Congress (2013), SBIR, Brazil (2013).

Member, JPL Director's Advisory Committee for Women, 1992-1994.

CAREER HISTORY:

February 2009- present	Senior Research Scientist, JPL
March 2013-January 2018	Manager, Planetary Science Section
August 2011-March 2013	Deputy Manager, Planetary Science Section, JPL
March 2005- July 2011	Group Supervisor, Geophysics and Planetary Geosciences, JPL
Sept. 2004-February 2009	Principal Scientist, Earth and Space Sciences Division, JPL

Sept. 2002-Sept. 2004	Research Scientist, Senior A, Earth and Space Sciences Division, JPL.
Sept. 1995-2002	Research Scientist, Earth and Space Sciences Division, JPL.
July 1991-Sept.1995	Scientist, Earth and Space Sciences Division, JPL.
July 1989-July 1991	National Research Council Resident Research Associate, JPL.
Feb. 1989-July 1989	Visiting Researcher, Osservatorio Vesuviano, Naples, Italy.
March 1988-Jan. 1989	Acting Curator of Astronomy and Acting Head of the Astronomy Section, Old Royal Observatory, Greenwich, U.K.
June 1985-March 1988	Curator of Modern Astronomy and Deputy Head of Astronomy Section, Old Royal Observatory, Greenwich, U.K.
Oct. 1978-Dec. 1984	Teaching and Research Assistant: University College London; teaching Planetary Geology, Observational Astronomy and Introductory Astronomy courses.

AWARDS AND HONORS:

From the Adler Planetarium, Chicago
2018 Women in Space Science Award

From the National Science Foundation:
Antarctica Service Medal, 2017

From the International Academy of Astronautics
Full Member, elected 2017 (Corresponding Member elected 2015)

From the International Astronomical Union:
Asteroid (22454) Rosalylopes (1996 VU17 Discovered 1996 Nov. 6 by Spacewatch at Kitt Peak), 2016

From the Geological Society of America
Fellow, elected 2015

From International Students House, London
Notable Alumni, one of “50 Notable Alumni in 50 Years”, 2015

From the Explorers Club:
Lowell Thomas Award, 2014

From the International Academy of Astronautics
Corresponding Member, elected 2014

From Wings WorldQuest:

Women of Discovery Award, Air and Space, 2009

From city of Juarez Tavora, Brazil:
Honorary citizen, 2009

From NASA:
Exceptional Service Medal, 2007

From the Girl Scouts of America:
WINGS (Women Inspiring Next Generations) Award, 2007

From City of Bezerros, Brazil:
Experimental rocket launch site for high school and college students named “Dr. Rosaly Lopes”, 2007

From the American Association for the Advancement of Science:
AAAS Fellow, elected 2006

From Women at Work and JPL’s Diversity and Inclusion Committee:
Women at Work Medal of Excellence, 2006

From the American Astronomical Society, Division for Planetary Sciences:
Carl Sagan Medal, 2005

From the Guinness Book of World Records (2006 edition):
Discoverer of the greatest number of active volcanoes

From Grove of Hope (Education charitable organization):
Angel Award (for outreach efforts in Morocco in 2005)

From GEMS Television, Miami:
GEMS Woman of the Year in Science and Technology, 1997

From the Comision Feminil Mexicana Nacional:
Latinas in Science Award, 1990

From the Jet Propulsion Laboratory:
Explorer Award, August 2018
Team Bonus Award, March 2017
Voyager Bonus Award, 2016
Mariner Bonus Award, 2014
Mariner Bonus Award, 2013
Mariner Bonus Award, 2012
Team Bonus Award, Flagship Study Scientists, 2008
Team Bonus Award, Cassini Science Team, 2005
SPOT Award, Discovery Core Review Panel, 2004
Bonus Award, Cassini Science Planning Tour Integration Team, 2004
Bonus Award for Outstanding Accomplishment, 2002
Exceptional Technical Excellence, Galileo Science Planning and Operations Team, 2002

Bonus Award for Outstanding Accomplishment, 2001
Bonus Award for Outstanding Accomplishment, 1999

NASA Group Achievement Awards:

Group Achievement Award, Galileo Gaspra Encounter Team, 1993
Group Achievement Award, Project Galileo Team, 1996
Group Achievement Award, Galileo Ida Encounter/Dactyl Discovery Team, 1995
Group Achievement Award, Galileo Orbital Operations Recovery Team, 1997
Group Achievement Award, Galileo Project Team, 1998
Group Achievement Award, Galileo Orbital Operations Recovery Team, 2000
Group Achievement Award, Galileo Millenium Mission Operations Team, 2003
Group Achievement Award, Cassini Flight Team, 2005
Group Achievement Award, MER 3rd and 4th Extended Mission Team, 2008
Group Achievement Award, Cassini RADAR Team, 2009
Group Achievement Award, Cassini Satellite Orbiter Science Team, 2009
Group Achievement Award, Cassini Saturn Target Working Team, 2009
Group Achievement Award, Cassini Titan Orbiter Science Team, 2009
Group Achievement Award, Cassini Saturn Tour Flight Team, 2009

PROFESSIONAL SOCIETIES:

Fellow (elected 2015), Geological Society of America
Fellow (elected, 2006), American Association for the Advancement of Science
Elected Member, International Academy of Astronautics
Member, International Astronomical Union
Member, American Geophysical Union (President-Elect of Planetary Section)
Member, Geological Society of America
Member and Past Chair, American Astronomical Society, Division for Planetary Sciences
Member, International Association of Volcanology and Chemistry of the Earth's Interior
Fellow, Royal Geographical Society
Fellow, Explorers Club

SELECTED INVITED TALKS

Asia Oceania Geosciences Society, June 2018
European Planetary Science Congress, September 2017
International Association of Volcanology and Chemistry of the Earth's Interior, August 2017
Asia Oceania Geophysical Society meeting, Singapore, August 2017
European Planetary Science Congress, Nantes, France, September 2015
XV EANE (Encontro de Astronomia do Nordeste), Brazil, June 2015
William Bennett Munro Memorial Lecture Series: The Globe and Beyond, Caltech, May 2015.
X COLAGE (Tenth Latin American Conference on Space Geophysics), September 2014
European Planetary Science Conference (EPSC), September 2013.
Simposio Brasileiro de Sensoriamento Remoto, Iguassu Falls, Brazil, April 2013.
American Geophysical Union Fall Meeting, 2011, Planetary Radars session, December 2011.
Geological Society of America Annual Meeting, Special Session: Planetary Geology 30th

Anniversary. Minneapolis, October 2011.
 European Planetary Society Congress/Division for Planetary Sciences annual meeting, Nantes, France, October 2011
 SPIE (International Society for Optics and Photonics) Conference, Instruments, Methods and Missions for Astrobiology Symposium, San Diego, August 2011
 Geological Society of America Annual Meeting, November 2010
 Collapse Calderas Workshop, La Reunion, France, October 2010.
 Cities on Volcanoes 2010 meeting, Tenerife, Spain, June 3, 2010.
 3rd International Reunion of Astronomy and Astronautics, Campos dos Goytacazes, Brazil, April 21, 2010.
 IAU Symposium “Galileo’s Medicean Moons: 400th Anniversary Discovery”, Padova, January 7, 2010
 European Geosciences Union meeting, Vienna, April 2009
 AGU Fall Meeting, December 2008
 Sykes Memorial lecture, University of British Columbia, September 2008
 Panel member, Space Studies Board/National Academy of Sciences “Forging the Future of Space Sciences” colloquium, June 2008
 European Geosciences Union meeting, Vienna, April 2008
 American Geophysical Union Fall Meeting, San Francisco, December 2007.
 Asia Oceania Geosciences Society, Bangkok, Thailand, August 2007 (2 invited talks)
 American Geophysical Union, Spring meeting, Acapulco, Mexico, May 2007
 American Association for the Advancement of Science, San Francisco, February 2007
 American Geophysical Union Fall Meeting, San Francisco, December 2006.
 Geological Society of America annual meeting, Pardee Keynote Symposium “Celebrating 25 Years of Solar System Exploration”, Philadelphia, November 2006.
 Geological Society of America annual meeting, Pardee Keynote Symposium, “Geosciences and the Media”, Philadelphia, November 2006.
 Asia Oceania Geosciences Society, Singapore, July 2006 (2 invited talks)
 Geological Society of America annual meeting, Pardee Keynote Symposium, October 2005
 European Geosciences Union meeting, Vienna, April 2005
 Jupiter After Galileo and Cassini, A Euroconference about the Giant Planets, Lisbon, June 2002
 American Geophysical Union Fall Meeting, San Francisco, December 2001
 Jupiter: Planet, Satellite & Magnetosphere Conference, Boulder, Colorado, June 2001
 American Geophysical Union Fall Meeting, San Francisco, December 2000
 Division for Planetary Sciences of the American Astronomical Society, Pasadena, October 2000
 International Geological Congress, Rio de Janeiro, August 2000

SELECTED SEMINARS

University of California, Los Angeles, February 2018
 University of Wisconsin, Stevens Point, May 2017
 INPE, (Instituto Nacional de Pesquisas Espaciais), Brazil, September 2016
 Indian Institute of Technology, Varanasi, India, March 2016
 INPE (Instituto Nacional de Pesquisas Espaciais), Brazil, November 2015
 Oklahoma University, October 2015
 Observatorio Nacional, Rio de Janeiro, Closing Colloquium for the XX Ciclo de Cursos Especiais, October 2015
 2014 H.H. Woodward lecture, Beloit College, October 2014

INPE (Instituto Nacional de Pesquisas Espaciais), Brazil, September 2014
 Optical Society of America, Minnesota Section, March 2014
 INPE (Instituto Nacional de Pesquisas Espaciais), Brazil, August 2013
 UCLA, iPLEX, May 2013
 Buffalo State College, March 2013
 Conference for Undergraduate Women in Physics, Caltech, January 2013
 INPE (Instituto Nacional de Pesquisas Espaciais), Brazil, September 2012
 National and Kapodistrian University of Athens, May 2012
 Optical Society of America, Rochester Chapter, March 2012
 Laboratory for Laser Energetics, University of Rochester, March 2012
 University of Rochester, New York, March 2012
 Universidade Federal de Brasilia, Brazil, November 2011
 Instituto Federal de Educação, Ciência, e Tecnologia, Alagoas, Brazil, April 2011
 Mount St. Antonio College, Walnut, California, April 2011
 Centro de Astrobiologia, CSIC-INTA, Madrid, Spain, July 2009
 MDSCC, Spain, July 2009
 Politecnica Universidad de Madrid, July 2009
 Arizona State University, September 2008
 Citrus College, Glendora, California (Shapley Lecture), March 2008
 Université Sidi Mohamed Ben Abdellah, Fes, Morocco, November 2007
 George Washington Academy, Casablanca, Morocco, November 2007
 Mauricio de Nassau University, Recife, Brazil, November 2007
 Recife Catholic University, Recife, Brazil, November 2007
 Mt. San Antonio College, Walnut, California, November 2006
 University of Wyoming Anadarka Distinguished Lecturer Series, September 2006
 University of Southern California, April 2006
 University of California, Santa Cruz (IGPP), April 2006
 University of Illinois, Walgreen Lecture, March 2006
 University of Nevada, Las Vegas, October 2005
 University of California at Los Angeles (IGPP), June 2005
 Jet Propulsion Laboratory, Division 31, Science System Engineering Group March 2005
 Cassini Tour Science Talk, JPL, December 2004
 California State University, Los Angeles, May 2004
 California State University, Northridge, April 2004
 Foothill College, San Francisco, December 2003
 University of Southern California, November 2002
 University of Coimbra, Portugal, June 2002
 University of California at Berkeley, April 2002
 Jet Propulsion Laboratory, Division 32, July 2001
 University of Arizona, February 2001
 Sonoma State University, January 2000

SELECTED OUTREACH ACTIVITIES:

Public lectures: Over 200 (U.S., England, Canada, Brazil, Italy, Portugal, Mexico, Morocco, Singapore, Bermuda, Spain, and aboard several Princess cruise line ships).

Media: Over 450 interviews (U.S., England, Brazil, Portugal, Mexico, France, Italy, Morocco, Canada, Bermuda, Spain, New Zealand, South Africa, China, Bulgaria), including press (e.g. New York Times, Los Angeles Times), radio (e.g. BBC, NPR's Science Friday, The Space Show), and TV (e.g. Nightline, evening news, talk shows, documentaries). Top science tweet of the day on October 16, 2012 (Titan science paper at DPS meeting).

TV Documentaries and shows (selected, mainly US):

BBC-2 and Discovery Science "Volcanoes of the Solar System" (2017)
Brazil's "Planeta Extremo", Vanuatu Volcanoes (2015)
Weather Channel "How the Earth Works: Volcanoes" (2013)
PBS "Earth: The Inside Story" (2012)
History Channel "Secret Access: US Monuments" (2012)
History Channel "Ancient Aliens: Aliens and Mega-Disasters" (2012)
History Channel "Civilizations Lost" (2011)
NBC/The Weather Channel's "Caught on Camera" (volcano episode), 2011
National Geographic's "Storm Worlds: Alien Winds" (2010)
National Geographic's "Known Universe: Cosmic Fury" (2009)
Discovery Channels' "Galactic Storms" (2010)
Discovery Channel's "Sci-Trek: Volcanoes" (2009)
National Geographic's "Naked Science: Jupiter" (2009)
"Heads Up" Science Series, Knowledge TV, Canada, episode on New Horizons (2008)
History Channels' "Search for E.T.", in "The Universe" series (2007)
PBS "Wired Science" interview on volcanoes (2007)
Discovery Channel's "Titan: Rendezvous with Saturn's Moon" (updated version, 2007)
National Geographic Television's "Naked Science: Deadliest Planets" (2006)
History Channel's "Ask Mr. Know-It-All", pilot episode (as expert on volcanic dust), 2006
History Channel's "Inside the Volcano" (2006)
Discovery Channel's "Rewind 2006" (science stories of 2006, December 2006)
National Geographic Television's "Hollywood Science: Forces of Nature" (2006)
Nightline's "Galileo" (2003)
Discovery Channel's "Planet Storm" (2001)
Discovery Channel's "95 Worlds and Counting" (2001)

Films/software:

JPL's "Journey to the Planets and Beyond", 2006
"2020 Vision" film, Institution of Engineering and Technology, UK, 2006
"Starry Night" Astronomy software, 2003
JPL/NASA's film "40 Years of Space Exploration", 2002
KCET Television in *Hispanic Heritage Month*, 1990-1992

Profiled in the following books:

"Dr E's Super Stellar Solar System" by B. Ehlmann with Jennifer Swanson, *National Geographic*, 2018
"A World of Her Own: 24 Amazing Women Explorers and Adventurers" by Michael Ehsohn Ross, Chicago Review Press, 2014.
"Women of Space" by Laura S. Woodmansee (Apogee Books, 2003)
"Spotlight on Scientists", Curriculum Guide for Science Enrichment (grades 5-6) by J. Sinsal (Carson-Dellosa, 2006)

“Extreme Science Jobs” (Scholastic Books, 2004)
“What do you Want to be?” (The Sally Ride Science Club, 2004)
“What do you Want to be? Explore Space Sciences”, NASA/Sally Ride Science poster (2005), winner of the 2006 Distinguished Achievement Award from the Association of Educational Publishers (AEP).
“The Inside Story of Jupiter”, by B. Geiger, Sally Ride Science, 2006.
“Focus on Earth Science”, Cambridge Physics Outlet, middle school science book, 2006
“Adventurous Dreams, Adventurous Lives: Today’s Explorers Recall the Youthful Dream Launching their Remarkable Lives” (Rocky Mountain Books, September 2007)
“Lava Scientist: Careers on the edge of volcanoes” (*Extreme Scientists series*), by Sara Latta (Enslow Publishing, 2009, new edition 2015)

Press conferences:

American Geophysical Union, December 2008
European Geosciences Union meeting, April 2008
Division for Planetary Sciences meeting, October 2007
American Geophysical Union Fall Meeting, December 2006
Division for Planetary Sciences meeting, October 2006
Division for Planetary Sciences meeting, September 2005
European Geosciences Union Meeting, May 2005
Division for Planetary Sciences meeting, November 2001
American Geophysical Union, December 2001
NASA Space Science Update (press conference), November 1999
American Geophysical Union, December 1999
American Geophysical Union, December 1996
American Geophysical Union, May 2000
Division for Planetary Sciences meeting, October 2000

Selected Websites:

“Women at JPL” website <http://www.jpl.nasa.gov/women/>
NASA Solar System Exploration: <http://solarsystem.nasa.gov/people/index.cfm>
A Conversation with Rosaly Lopes: http://www.jpl.nasa.gov/news/profiles/lopes/lopes_index.html
Planetary Society, Mars volcanoes: <http://www.youtube.com/watch?v=nAtsRehiE7E>
Planetary Society profile: <http://www.planetary.org/connect/our-experts/profiles/rosaly-lopes.html>
International Innovation: <http://www.research-europe.com/index.php/2013/10/dr-rosaly-lopes-senior-research-scientist-nasa-jet-propulsion-laboratory/>
Wired Science interview: <http://www.tv.com/web/wired-science/watch/chat-rosaly-lopes-1863045/>
Volcano World: <http://volcanoworld.wordpress.com/2011/12/19/rosaly-lopes/>

Other:

Planetary Geomorphology Image of the Month, June 2013, based on paper by Lopes et al. (2013)
Keynote speaker, 23rd LA’s BEST Science Fair, California State University, Los Angeles, 2014
Science media advisor, post-production, “Pompeii” movie, 2014

MAIN PUBLICATIONS:

Researcher ID : D-1608-2016

Profile URL (for h-index in Web of Science, does not include all publications):

<http://www.researcherid.com/rid/D-1608-2016>

<http://www.orcid.org/0000-0002-7928-3167>

h-index: 42

1. Books:

Lopes, R. and T.K. Gregg (Eds): *Volcanic Worlds: Exploring the Solar System Volcanoes*. Foreword by Sally Ride. Praxis Publishing Company (Springer-Verlag, 2004). Undergraduate-level book reviewing volcanism in the Solar System in terms of bodies (e.g. Moon, Venus, Io) and processes (e.g. cryovolcanism, volcano/ice interactions). Authors of individual chapters are Rosaly Lopes, Tracy Gregg, Ellen Stofan, Joy Crisp, Susan Sakimoto, Mary Chapman, Gudrun Larsen, Kathy Cashman, Susan Kieffer, Lisa Gaddis, and Louise Prockter.

Lopes, R.: *The Volcano Adventure Guide*. Cambridge University Press (2005). A popular-level book about volcanoes on Earth and how best to visit and learn about them. The book includes an introduction to volcanology. (Portuguese translation by Oficina do Texto, 2008).

Lopes, R. and J.R. Spencer (Eds): *Io After Galileo*. Praxis Publishing Company (Springer-Verlag, 2007). Research-level book on Io focusing on results from the Galileo mission. Chapters range from formation of Io to surface, atmosphere, and torus. Authors of individual chapters include Bill McKinnon, Bill Moore, Gerry Schubert, Fran Bagenal, Robert Carlson, Nick Schneider, and Emmanuel Lellouch.

Lopes, R. and M. Carroll: *Alien Volcanoes*. Foreword by Arthur C. Clarke. John Hopkins University Press, 2008. Popular-level book about volcanoes on Earth and in the Solar System.

Lopes, R. *Volcanoes*. OneWorld Publications, Oxford, England, 2011. Undergraduate-level book about volcanism on Earth and the solar system.

Lopes, R. and J. Adams. *Volcanoes: Bolinda Beginner's Guides*. Abridged audio edition of *Volcanoes*. Bolinda Publishing Pty Ltd, 2012.

Fagents, S.A., T.K.P. Gregg, and R.M.C. Lopes (Editors). *Modeling Volcanic Processes: The Physics and Mathematics of Volcanism*. Cambridge University Press, 2013, 421pp. Graduate-level book on physical volcanology.

Carroll, M., and R. Lopes (Editors). *Alien Seas*. Foreword by James Cameron. Springer Publishing Co., 2013. Popular-level book about the many “seas” in the solar system, from seas of congealed lava on the Moon to sand seas and methane seas on Saturn’s moon Titan.

Carroll, M. and R. Lopes. *Ice worlds: Antarctica and Beyond*. Comparisons of Antarctica geology and geology of planetary worlds, with a focus on our trip to Mount Erebus. Springer Publishing Co., in press.

2. Refereed Publications

2018:

129. Lopes, R.M.C., S. Wall, C. Elachi, S. Birch, P. Corlies, A. Coustenis, A. Hayes, J. Hofgartner, M. Janssen, R. Kirk, A. LeGall, R. Lorenz, J. Lunine, M. Malaska, M. Mastroguiseppe, G. Mitri, K. Neish, C. Notarnicola, F. Paganelli, P. Paillou, V. Poggiali, J. Radebaugh, S. Rodriguez, A. Schoenfeld, J. Soderblom, A. Solomonidou, B. Stiles, F. Tosi, E. Turtle, R. West, C. Wood, H. Zebker, G. Alberti, J. Barnes, M. Callegari, D. Casarano, P. Encrenaz, T. Farr, C. Grima, D. Hemingway, O. Karatekin, A. Lucas, K. Mitchell, G. Ori, R. Orosei, P. Ries, D. Riccio, E. Schaller, L. Soderblom, E. Stofan, B. Ventura, L. Wye, Z. Zhang. Titan as Revealed by the Cassini RADAR. Submitted to *Planetary Science Reviews*.
128. Lopes, R.M.C., T.K.P. Gregg, A. Harris, J. Radebaugh, P. Byrne, L. Kerber, and P. Mougini-Mark. Extraterrestrial Lava Lakes. Invited review for J. Volcanol. Geotherm. Res., submitted.
127. Birch, S.P.D., A.G. Hayes, V. Poggiali, J.D. Hofgartner, C.D. Neish, J.L. Lunine, M.J. Malaska, S.D. Wall, R.M.C. Lopes, and O. White. Raised Rims around Titan's Sharp-Edged Depressions. *Geophys. Res. Letters.*, in press.
126. Rathbun, J.A., R.M.C. Lopes, and J.R. Spencer: The global distribution of active Ionian volcanoes and implications for tidal heating models. *Submitted to the Astrophysical Journal*.
125. Griffith, C., P. Penteado, J. Turner, C. Neish, N. Montiel, A. Schoenfeld, R. Lopes, G. Mitri. Ice-rich corridor exposed on Titan's surface of organic sediments. *Submitted to Nature Astronomy*.
124. Solomonidou, A.; A. Coustenis, R.M.C. Lopes, M. J. Malaska, S. Rodriguez, P. Drossart, C. Elachi, B. Schmitt, S. Philippe, M. Janssen, M. Hirtzig, S. Wall, C. Sotin, K. Lawrence, N. Altobelli, E. Bratsolis, J. Radebaugh, K. Stephan, R.H. Brown, S. Le Mouélic, A. Le Gall, E.V. Villanueva, J. F. Brossier, A.A. Bloom, O. Witasse, C. Matsoukas, A. Schoenfeld. The Spectral Nature of Titan's Major Geomorphological Units: Constraints on Surface Composition. *Journal of Geophysical Research: Planets*, 123. <https://doi.org/10.1002/2017JE005477>
123. Birch, S.P.D., A.G. Hayes, P. Corlies, E.R. Stofan, J.D. Hofgartner, R.M.C. Lopes, R.D. Lorenz, J.I. Lunine, S.M. MacKenzie, M.J. Malaska, C.A. Wood, and the Cassini RADAR Team. Morphological Evidence that Titan's Southern Hemisphere Basins are Paleoseas. *Icarus*, 310, 140-148. <https://doi.org/10.1016/j.icarus.2017.12.016>.
122. Nixon, C., R.D. Lorenz, R. Achterberg, A. Buch, P. Coll, R. N. Clark, R. Courtin, A. Hayes, L. Iess, R. Johnson, R. M.C. Lopes, M. Mastroguiseppe, K. Mandt, D. G. Mitchell, F. Raulin, A. Rymer, H. Todd Smith, A. Solomonidou, C. Sotin, D. Strobel, E. Turtle, V. Vuitton, R. West, R. Yelle (2018). Titan's Cold Case Files – Outstanding questions after Cassini-Huygens. *Planet. Space Sci.*, 155, 50-72.

2017:

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