Joana R. C. Voigt

CONTACT INFORMATION

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RESEARCH SUMMARY

I am an Earth and Planetary Scientist studying volcanic terrains on Earth, Mars, and the Moon. My research aims to gain a comprehensive understanding of the relationships between volcanic surfaces/subsurface and eruption dynamics by using a combination of remote sensing techniques and instruments, unoccupied aircraft systems (UAS), as well as field observations. I integrate remote sensing images and radar sounding data to understand the evolution of planetary surfaces, as well as near-IR spectra to investigate water-rock interactions in volcanic terrains. As part of the Mars 2020 science team, I am interested in the volcanic history in and around Jezero Crater. I am closely involved in NASA's funded PSTAR projects RAVEN (Rover–Aerial Vehicle Exploration Network) and PANTHER (Passive Autonomy, Navigation, Topography, and Habitability Exploration Radar). RAVEN uses a powerful combination of a rover and drone operating in a Martian analog site to demonstrate and improve the technology and science operations to inform next-generation planetary science missions. PANTHER aims at leveraging passive radar sounders mounted on a UAS to search for water and ice in the shallow subsurface of volcanic terrains.

EDUCATION

Doctor of Philosophy in Planetary Science — December 2022
University of Arizona, Lunar and Planetary Laboratory, United States
Effusive Volcanism on Earth and Mars—Advisor: Christopher W. Hamilton

Master of Science in Planetary Science — May 2020
University of Arizona, Lunar and Planetary Laboratory, United States

Master of Science in Geological Science — December 2017
Freie Universität Berlin, Germany
Investigating the Volcanic versus Aqueous Origin of the Surficial Deposits in Eastern Elysium Planitia, Mars—Advisors: Ralf Jaumann and Anne Bernhardt

Bachelor of Science in Geological Science — December 2014
Freie Universität Berlin, Germany
Geomorphological and Topographical Investigations of Patterned Ground on Svalbard
—Advisors: Ralf Jaumann and Stephan van Gasselt

RESEARCH POSITIONS

Assistant Professor of Planetary Sciences — January 2026–Present
Department of Earth and Planetary Sciences
University of California, Riverside

Postdoctoral Research Associate — December 2022–December 2025
NASA Jet Propulsion Laboratory (JPL), Pasadena, CA
—Supervisors: Vivian Z. Sun and Kathryn M. Stack Morgan

Visiting Student Researcher — January 2022–December 2022
California Institute of Technology, Pasadena, CA
—Host: Bethany L. Ehlmann

Graduate Research Assistant January 2018–December 2022
The University of Arizona, Lunar and Planetary Laboratory, Tucson, AZ

Student Research Assistant 2011–2017
German Aerospace Center (DLR), Institute of Planetary Research
Department of Planetary Geology, Berlin Adlershof, Germany

Exchange Graduate Program in Planetary Science 2015–2016
The University of Arizona, Lunar and Planetary Laboratory, Tucson, AZ

GRANTS AWARDED

The Magmatic Evolution of Elysium Planitia, NASA Mars Data Analysis Program (MDAP), 2025
Role: PI

Constraints on Lava Flow Emplacement History of the Tharsis Volcanic Province using SHARAD Super Resolution and Flow Unit Mapping, NASA Mars Data Analysis Program (MDAP), 2025
Role: Co-I

Passive Autonomy, Navigation, Topography, and Habitability Exploration Radar (PANTHER), 2024
NASA Planetary Science and Technology Through Analog Research (PSTAR),
Role: Co-I

Revealing the Geologic History of Amazonis Planitia, NASA Mars Data Analysis Program (MDAP), 2024
Role: Science PI

Magmatic and Tectonic Processes in Amazonis Planitia: Implications for Late Amazonian Volcanism and Lithospheric Structure, NASA Mars Data Analysis Program (MDAP), 2024
Role: Co-I

Deciphering Effusive Eruption Styles throughout Elysium Planitia, Mars: Linking Lava Emplacement Dynamics with Magmatic Storage Conditions, Future Investigators in NASA Earth and Space Science and Technology (FINESST), 2020
Role: Science PI

MISSION AND MISSION SIMULATION EXPERIENCE

Field-lead and Science Operations lead for PANTHER	2024–Present
Mars 2020 science team member	2023–2025
Science operations for Mars 2020	2023–2025
Deputy PI for Rover–Aerial Vehicle Exploration Network (RAVEN)	2021–2024

SCHOLARSHIPS AND AWARDS

Gerard P. Kuiper Memorial Award: Department of Planetary Science, University of Arizona	March 2022
Galileo Circle Scholarship, UA College of Science Galileo Circle Scholarships	March 2022
Zonta International Amelia Earhart Fellowship for the 2020–2021 academic year	April 2020
Galileo Circle Scholarship, UA College of Science Galileo Circle Scholarships	April 2020
Galileo Circle Scholarship, UA College of Science Galileo Circle Scholarships	April 2018
Lipman Research Award GSA (Geological Society of America) Research Grant	2016
German Academic Exchange Service (DAAD) Scholorship for Graduate -and PhD students	2015–2016
Deutsche Physikalische Gesellschaft e.V. DPG (German Society of Physics) Abitur Award	2010

FIELD EXPERIENCE

Field lead for Death Valley and Dumont Dunes field testing for PANTHER, U.S.A.	2025
Field lead for the Rover–Aerial Vehicle Exploration Network (RAVEN) ground truthing campaign, Iceland	2023
Data collection and monitoring of the 2022 Fagradalsfjall eruption on the Reykjanes peninsula, Iceland	2022
UAS Field Implementation lead for the Rover–Aerial Vehicle Exploration Network (RAVEN), Iceland	2022

Data collection and monitoring of the 2021 Fagradalsfjall eruption on the Reykjanes peninsula, Iceland	2021
Planetary analogs field trip to Chiricahua mountains and the San Bernardino volcanic field, U.S.A.	
NASA Goddard Space Flight Center (GSFC)-led field campaign to the Holuhraun 2014–2015 eruption site and Askja volcano, Iceland	2019
Planetary analogs field trip to Zuni–Bandera Volcanic Field, U.S.A.	
NASA GSFC-led field campaign to 2014–2015 Holuhraun eruption site and Kverkfjoll volcano, Iceland	2018
Planetary analogs field trip to Death Valley, U.S.A.	
Geomorphology and sedimentology field trip: From source to sink, Pyrenees, Spain	2017
Volcanology field campaign to 2014–2015 Holuhraun eruption site, Iceland	2016
Planetary analogs field trip to Chiricahuas and San Bernardino Valley, U.S.A.	
Field trip to evolution of planetary surfaces in the Flagstaff area, U.S.A.	2015
Planetary analogs field trip practicums to Salton Sea region, U.S.A.	
Field trip to Barberton Belt, Greenstone Belt and the Vredefort Impact Structure, South Africa	2014
Sedimentology and Stratigraphy flied trip to Harz, Germany	2013
Tectonic field trip to Erz Mountains, Germany	
Mapping field trip in the Rheinisches Schiefergebirge, Germany	
Impact geology field trip to Ries Crater, Germany	2011
System of the Earth fielt trip to Harz, Germany	

TEACHING EXPERIENCE

Guest Lecturer for GEOS470R/570R - Volcanology: Physical Processes and Petrologic Applications	Spring 2022
Guest Lecturer for PTYS/GEOS/HWRS411 - Geology and Geophysics of the Solar System	Spring 2022
Graduate Teaching Assistant for PTYS170A1 - Planet Earth: Evolution of the Habitable World	Spring 2019
—Lecturer: Dr. Steve Kortenkamp	
Graduate Teaching Assistant for PTYS170B - The Universe and Humanity: Origin and Destiny	Fall 2018
—Lecturer: Dr. Tommy Koskinen	
Guest Lecturer for PTYS170B - The Universe and Humanity: Origin and Destiny	Fall 2018
Graduate Teaching Assistant for PTYS206 - Our Golden Age of Planetary Exploration	Spring 2018
—Lecturer: Dr. Jeffrey Andrews-Hanna	
Teaching Assistant for Planetary Sciences III	Fall 2017
—Lecturer: Dr. Ralf Jaumann	

INVITED TALKS, PANELS, AND PUBLIC OUTREACH

Invited talk at the University of Pittsburgh, Pittsburgh	January 2026
Invited Conference presentation, AGU Fall Meeting	December 2025
Invited talk at the California Institute of Technology, Pasadena	March 2025
Invited talk at the University of California, Riverside	February 2025
Invited talk at the University of Texas at Austin	December 2024
Invited panelist for Rise of the Drones workshop	July 2024
Invited Conference presentation, AGU Fall Meeting	December 2023
Invited talk at German Aerospace Center's Planetary Science Seminar	June 2023
Invited expert to help create planetarium show about Lava Planets, Hamburg Germany	2023
Invited talk at Caltech's Planetary Science Seminar	January 2022
Invited talk at Tucson Amateur Astronomy Association	January 2021
Volcanism and Cryovolcanism in the Solar System: Examples from Earth, Mars, and Europa	
The Art of Planetary Science, University of Arizona	2018–2019
Public outreach at Night of Science, Berlin	2011–2017
Public outreach at ILA Berlin Air Show	2014

SELECTED PRESS

Popular Science: Lava may have flowed over parts of Mars.	2023
University of Arizona News: Recent Volcanism on Mars Reveals a Planet More Active than Previously Thought.	
CBS News 60 Minutes Overtime: Iceland's newest volcano provides insight into Mars.	2021
Arizona Illustrated: Flight of the RAVEN: Drone testing in Iceland may lead to exploring	

inaccessible places on Mars.
University of Arizona News: Plumes on Icy Worlds Hold Clues About What Lies Beneath. 2020
NASA JPL News: Potential Plumes on Europa Could Come From Water in the Crust.
Stanford News: Stanford researchers model source of eruption on Jupiter's moon Europa.

PROFESSIONAL TRAINING

NOLS Wilderness First Aid Certificate 2025
Small Science and Technology Research Proposal Writing, JPL 2023
USGS Bystander Intervention Workshop, JPL 2023
ArcGIS Workshop for Planetary Science, LPSC 2018

SERVICE

Served as reviewer for research proposals and executive secretary on several NASA review panels: SSW, PSTAR, LDAP, and FINESST.
Co-convener for the session *Terrestrial Analogues for Planetary Volcanism* at the IAVCEI 2023 scientific assembly.
Session chair for the session *Volcanic Processes and Environments* at the Second Workshop on Terrestrial Analogs for Planetary Exploration 2024.
Reviewer for Science Communications, Icarus, and Journal of Geophysical Research: Planets.

PEER-REVIEWED PUBLICATIONS

24 peer-reviewed scientific publications: 8 first-author publications, 16 co-author publications

in prep. **J. R. C. Voigt**, V. Z. Sun, C. E. Viviano, A. Emran, J. Schroeder, and K. M. Stack (in prep.): A Global Investigation of Hydrated Silica, Mars. Journal of Geophysical Research: Planets.

in revision S. Gwizd, K. M. Stack, L. Ives, S. Gupta, M. Lamb, A. Vaughan, S. Sholes, R. Kronyak, N. Randazzo, L. Crumpler, J. Rice, B. Horgan, L. Kah, N. Cavallo, N. Williams, O. Ciancolo, C. Quantin-Nataf, O. Beyssac, V. Sun, D. Shuster, **J. R. C. Voigt**, K. Siebach, M. Nachon (in review): Depositional history of the Otis Peak formation, Western fan, Jezero crater, Mars. Journal of Geophysical Research - Planets.

T. H. Kristinsson, S. T. Peters, **J. R. C. Voigt**, G. Steinbrügge, C. W. Hamilton, S. Diniega, J. Williams, G. Alfonso, and A. Romero- Wolf (in revision): In Situ Demonstration of Passive Radar Using HF Jovian Bursts as a Source for Echo Detection. IEEE Geoscience and Remote Sensing Letters.

M. D. Lane, J. L. Bishop, C. E. Viviano, D. Tirsch, L. L. Tornabene, L. E. Sacks, and **J. R. C. Voigt** (in revision): Identifying Two Distinct Olivine Compositions in the Circum-Isidis Basin and Tyrrhena Terra Regions of Mars. Journal of Geophysical Research: Planets.

J. L. Bishop, D. Tirsch, C. E. Viviano, M. D. Lane, L. L. Tornabene, **J. R. C. Voigt**, L. E. Sacks, L. Ojha, D. Loizeau, F. H. Grant, K. D. Seelos, and F. P. Seelos (in revision): Unraveling Geologic Processes and Aqueous Alteration at Tyrrhena Terra, Mars. Journal of Geophysical Research: Planets.

2025 K. M. Stack, R. Francis, F. J. Calef, III, Sa. J. Gwizd, J. F. Schroeder, **J. R.C. Voigt**, T. Kristinsson, P. Schroedl, J. Shah, M Varnam, C. D. Neish, R. P. Perkins, S. Vanga, M. S. Bramble, A. Donnellan, J. T. Osterhout, M. Tuite, B. B. Carr, and C. W. Hamilton (2025): Simulating Science Operations for a Joint Rover-Helicopter Mission Architecture in a Mars Analog Setting. Planetary Science Journal 6 173. doi:10.3847/PSJ/ade786

J. R. C. Voigt, C. W. Hamilton, L. P. Keszthelyi, M. Varnam, S. M. Hibbard, and K.M. Stack (2025): The 2014–2015 Holuhraun Lava Flow-field in Iceland as a Planetary Analog for Young Volcanic Terrains in Elysium Planitia, Mars. American Astronomical Society Journals. Planet. Sci. J. 6 81. doi:10.3847/PSJ/adb5f1.

2024 **J. R. C. Voigt**, V. Z. Sun, C. E. Viviano, and K. M. Stack (2024): Investigating Hydrated Silica in Syrtis Major, Mars: Implications for the Longevity of Water–Rock Interaction. Geophysical Research Letters, 51, e2024GL108610. doi:10.1029/2024GL108610.

B. B. Carr, M. Varnam, N. Hadland, J. Shah, **J. R. C. Voigt**, S. Gwizd, K. M. Stack, F. Calef, R. Francis, U. Basu, B. Björnsson, C. Chen, E. Dong, J. Graff, J. E. Moersch, M. Phillips, J. Springer, C. D. Neish, and C. W. Hamilton (2024): Evaluating the use of Unoccupied Aircraft Systems (UAS) for planetary exploration in Mars-analog terrain. American Astronomical Society Journals, 5, 231. doi:10.3847/PSJ/ad781e.

S. Gwizd, K. M. Stack, R. Francis, F. Calef, B. B. Carr, C. Langley, J. Graff, T. H. Kristinsson, V. P. Thorarensen, E. Bernhardsson, M. Phillips, M. Varnam, N. Hadland, J. Shah, J. Moersch, U. Basu, **J. R. C. Voigt**, and C. W. Hamilton (2024): Comparing rover and helicopter planetary mission architectures in a Mars analog setting in Iceland. American Astronomical Society Journals, 5, 172. doi:10.3847/PSJ/ad55f4.

2023 **J. R. C. Voigt**, C. W. Hamilton, G. Steinbrügge, M. Christoffersen, S. Nerozzi, L. Kerber, J. Holt, and L. M. Carter (2023): Revealing Elysium Planitia's Young Geologic History: Constraints on Lava Emplacement Styles, Areas, and Volumes. Journal of Geophysical Research: Planets, 128, e2023JE007947. doi:10.1029/2023JE007947.

2022 G. D. Tolometti, C. D. Neish, C. W. Hamilton, G. R. Osinski, A. Kukko, and **J. R. C. Voigt** (2022): Differentiating Fissure-Fed Lava Flow Types and Facies Using RADAR and LiDAR: An Example From the 2014–2015 Holuhraun Lava Flow-Field. Journal of Geophysical Research: Solid Earth, 127, e2021JB023419. doi:10.1029/2021JB023419.

G. Steinbrügge, M. S. Haynes, D. M. Schroeder, K. M. Scanlan, A. Stark D. A. Young, C. Grima, S. Kempf, G. Ng, D. Buhl, **J. R. C. Voigt**, T. Roatsch, and D. D. Blankenship (2022): Altimetry Measurements from Planetary Radar Sounders and Application to SHARAD on Mars. IEEE Transactions on Geoscience and Remote Sensing, Vol. 60, pp. 1-14, 2022. doi:10.1109/TGRS.2021.3134638.

J. R. C. Voigt, C. W. Hamilton, G. Steinbrügge, Á. Höskuldsson, I. Jónsdottir, and T. Thordarson (2022): Linking Lava Morphologies to Effusion Rates for the 2014–2015 Holuhraun Lava Flow-Field, Iceland. Geology, 50 (1): 71–75. doi:10.1130/G49251.1.

2021 **J. R. C. Voigt**, C. W. Hamilton, G. Steinbrügge, and S. P. Scheidt, (2021): Roughness Characterization of the 2014–2015 Holuhraun Lava Flow-Field in Iceland: Implications for Facies Mapping and Remote Sensing. Bulletin of Volcanology 83, 82 (2021). doi:10.1007/s00445-021-01499-4.

E. Lev, C. W. Hamilton, **J. R. C. Voigt**, A. C. Stadermann, Y. Zhan, and C. D. Neish (2021): Emplacement conditions of lunar impact melt flows. Icarus. Vol. 369, 114578, doi:10.1016/j.icarus.2021.114578.

J. R. C. Voigt, C. W. Hamilton, S. P. Scheidt, U. Münzer, Á. Höskuldsson, I. Jónsdottir, and T. Thordarson (2021): Geomorphological Characterization of the 2014–2015 Holuhraun Lava Flow-Field in Iceland. Journal of Volcanology and Geothermal Research. Vol. 419, 107278. doi:10.1016/j.jvolgeores.2021.107278.

2020 G. Steinbrügge*, **J.R.C. Voigt***, N. S. Wolfenbarger, C. W. Hamilton, K. M. Soderlund, D. A. Young, D. D. Blankenship, S. D. Vance, D. M. Schroeder, (2020): Brine Migration and Impact-Induced Cryovolcanism on Europa. Geophysical Research Letters, 47, e2020GL090797. doi:10.1029/2020GL090797. *Co-first author/corresponding authors.

G. Steinbrügge, **J. R. C. Voigt** , D.M. Schroeder, A. Stark, M.S. Haynes, K. Scanlan, D.A. Young, C. Grima, H. Hussmann, D.D. Blankenship (2020): The Surface Roughness of Europa from Galileo Stereo Images. Icarus. Vol. 343, 113669. doi:10.1016/j.icarus.2020.113669.

2018 **J. R. C. Voigt**, and C. W. Hamilton (2018): Investigating the Volcanic versus Aqueous Origin of the Surficial Deposits in Eastern Elysium Planitia, Mars. Icarus. Vol. 309, 389–410, doi:10.1016/j.icarus.2018.03.009.

D. Tirsch, G. Erkeling, J. Bishop, **J. R. C. Voigt**, L. Tornabene, and R. Jaumann (2018): Geology of central Libya Montes, Mars: Aqueous alteration history from mineralogical and morphological mapping. Icarus. Vol. 314, 12–34, doi:10.1016/j.icarus.2018.05.006.

M. Golombek, M. Grott, G. Kargl, J. Andrade, J. Marshall, N. Warner, N. A. Teanby, H. E. Abarca, R. G. Deen, V. Ansan, E. Hauber, **J. Voigt**, R. Lichtenheldt, B. Knapmeyer-Endrun, A. Trebi-Ollennu, J. Singer, J. Maki, C. Schmelzbach, S. Kedar, D. Banfield, I. J. Daubar, D. Kipp, N. Muller, P. Lognonné, W. Folkner, S. Le Maistre, D. Mimoun, N. Murdoch, S. Piqueux, P. Delage, W. T. Pike, C. Charalambous, R. Lorenz, L. Fayon, S. Smrekar, A. Lucas, S. Rodriguez, P. Morgan, A. Spiga, T. Gudkova, Ö. Karatekin, M. Panning, R. Garcia, D. Giardini, U. Christensen, T. Nicollier, D. Sollberger, J. Robertsson, K. Ali, W. Kim, O. Khan, C. Sorice, P. Bailey, B. Kenda, M. Siegler, C. Vrettos, and W. B. Banerdt (2018): Geology and Physical Properties Investigations by the InSight Lander. Space Science Reviews. Vol. 214: 84, doi:10.1007/s11214-018-0512-7.

2015 R. Jaumann, D. Tirsch, E. Hauber, V. Ansan, G. Di Achille, G. Erkeling, F. Fueten, J. Head, M. G. Kleinhans, N. Mangold, G. G. Michael, G. Neukum, A. Pacificii, T. Platz, M. Pondrelli, J. Raack, D. Reiss, D. A. Williams, S. Adeli, D. Baratouxl, G. de Villiers, B. Foing, S. Gupta, K. Gwinner, H. Hiesinger, H. Hoffmann, L. Le Deit,L. Marinangeli, K.-D. Matz, V. Mertens, J. P. Muller, J. H. Pasckert, T. Roatsch, A. P. Rossi, F. Scholten, M. Sowe, **J. Voigt**, N. Warner (2015): Quantifying Geological Processes on Mars - Results of the High Resolution Stereo Camera (HRSC) on Mars Express. Planetary and Space Science. Vol. 112, 53–97, doi:10.1016/ j.pss.2014.11.029.

2014 K. Krohn, R. Jaumann, D. Elbeshausen, T. Kneissl, N. Schmedemann, R. Wagner, **J. Voigt**, K. Otto, K. D. Matz, F. Preusker, T. Roatsch, K. Stephan, C. A. Raymond, C. T. Russell (2014): Asymmetric craters on Vesta: Impact on sloping surfaces. Planetary and Space Science. Vol. 103, 36–56, doi:10.1016/j.pss.2014.04.011.

2013 J. L. Bishop, D. Tirsch, L. L. Tornabene, R. Jaumann, A. S. McEwen, P. C. McGuire, A. Ody, F. Poulet, R. N. Clark, M. Parente, N. K. McKeown, J. F. Mustard, S. L. Murchie, **J. Voigt**, Z. Aydin, M. Bamberg, A. Petau, G. Michael, F. P. Seelos, C. D. Hash, G. A. Swayze, and G. Neukum (2013): Mineralogy and morphology of geologic units at Libya Montes, Mars: Ancient aqueously derived outcrops, mafic flows, fluvial features, and impacts. Journal of Geophysical Research: Planets. Vol. 118, 487–513, doi:10.1029/2012JE004151.

CONFERENCE PRESENTATIONS

58 conference proceedings: 21 first-author and 37 co-author conference proceedings

2025 **J. R. C. Voigt**, et al. (2025). Aerial Exploration of Young Volcanic Terrains and Subsurface Volatiles on Mars. AGU Fall Meeting 2025. AGU2025 P21C-2646.*invited

C. W. Hamilton, et al. (2025). Mars Analog Field Testing Reveals Key Operational Strategies for Planetary Exploration Using Unoccupied Aircraft Systems (UAS). AGU2025 P21C-2650.

T.H. Kristinsson, et al. (2025). PANTHER – Preliminary field demonstration of passive radar using HF Jovian radio bursts. AGU2025 P11G-2224.

M.C. Deahn. et al. (2025). Compositional Diversity of the Jezero Crater Rim and Links to Regional Units. 56th Lunar and Planetary Science Conference.

T.H. Kristinsson, et al. (2025). Design and Projected Performance of the Passive Autonomy, Navigation, Topography, and Habitability Exploration Radar (PANTHER): Using Radio-Astronomical Sources for Altimetry and Sounding. 56th Lunar and Planetary Science Conference.

2024 **J. R. C. Voigt**, et al. (2024). Science Overview of the Passive Autonomy, Navigation, Topography, and Habitability Exploration Radar (PANTHER): An Instrument Package for an Unoccupied Aircraft System. AGU2024 P13E-3106.

T.H. Kristinsson, et al. (2024). Technology Overview of the Passive Autonomy, Navigation, Topography, and Habitability Exploration Radar (PANTHER): An Unoccupied Aircraft System (UAS) Instrument Package. AGU2024 P43F-06.

J. R. C. Voigt, et al. (2024). Geologic Maps and Crater Size Frequency Distributions of Sites with Hydrated Silica in Syrtis Major, Mars. Annual Meeting of the Planetary Geologic Mappers. Abstract number 8020.

J. R. C. Voigt, et al. (2024). The Holuhraun Eruption Site in Iceland as an Analog for Elysium Planitia on Mars. Second Workshop on Terrestrial Analogs for Planetary Exploration. Abstract number 8020.

J. R. C. Voigt, et al. (2024). Global Distribution of Hydrated Silica on Mars. Tenth International Conference on Mars. Abstract number 3181.

M. C. Deahn, et al. (2024). Jezero Crater Rim from Orbit: Mapping Diverse Targets for the Mars 2020 Rover. Tenth International Conference on Mars. Abstract number 3151

J. R. C. Voigt, et al. (2024). The Formation Environments of Hydrated Silica in Sytris Major, Mars. Lunar and Planetary Science Conference LV-1558.

M. C. Deahn, et al. (2024). An Orbital Photogeological Map of the Jezero Carter Rim: Diverse Targets for Mars 2020 Future Exploration. Lunar and Planetary Science Conference LV-2302.

A.-C. Plesa, et al. (2024). Thermal state if the Martian interior at present day as constrained by elastic lithosphere thickness estimates and recent volcanic activity. EGU2024-12473.

2023 **J. R. C. Voigt**, et al. (2023). Elysium Planitia's—the Youngest Volcanic Terrain on Mars: New Insights into the Volcanic and Aqueous History. AGU2023-P52C-08.

J. R. C. Voigt, et al. (2023). Investigating the Formation Environments of Hydrated Silica in Syrtis Major, Mars. AGU2023-P52B-01.*invited

J. R. C. Voigt, et al. (2023). Revealing Elysium Planitia's Young Geologic History: Constraining Lava Emplacement Styles, Areas, and Volumes. Lunar and Planetary Science Conference LIV-1638.

S. Gwizd, et al. (2023). Rover-Aerial Vehicle Exploration Network (RAVEN): Mission Planning, Implementation, and Results from the 2022 Rover-Only Field Campaign at Holuhraun, Iceland. Lunar and Planetary Science Conference LIV-1748.

J. R. C. Voigt, et al. (2023). The 2014–2015 Holuhraun Lava Flow-Field in Iceland as an Analog Site for Young Volcanic Terrains in Elysium Planitia, Mars. Lunar and Planetary Science Conference LIV-1646.

C. W. Hamilton, et al. (2023). The Holuhraun Region of Iceland as a High-Fidelity Planetary Analog Site for Science and Exploration. Lunar and Planetary Science Conference LIV-3010.

J. Shah, et al. (2023). Evaluating the Use of Unoccupied Aircraft Systems (UAS) for Planetary Surface Exploration in Analog Terrain. Lunar and Planetary Science Conference LIV-1732.

V. Z. Sun, et al. (2023). Investigating Hydrated Silica in the Nili Patera Region, Mars. Lunar and Planetary Science Conference LIV-1654.

J. R. C. Voigt, et al. (2023). Effusion Rates as a Control for Transitional Lava Morphologies: A Case Study from the 2014–2015 Holuhraun Lava Flow-Field, Iceland. IAVCEI Scientific Assembly 2023-1379.

B. Carr, et al. (2023). Vent construction and erosion observed by UASs during 2021-2022 at Fagradalsfjall, Iceland. IAVCEI Scientific Assembly 2023-1222.

C. W. Hamilton, et al. (2023): The Rover–Aerial Vehicle Exploration Network (RAVEN): Field-testing the next generation of Mars mission design in Iceland. IAVCEI Scientific Assembly 2023-1472.

2022 U. Basu, et al. (2022). Selecting Suitable Test Sites at Holuhraun, Iceland, for Mars Mission Simulations Using Rovers and Unmanned Aircraft Systems (UAS). Lunar and Planetary Science Conference LIII-2362.

J. L. Bishop, et al., (2022). Aqueous Alteration at Tyrrhena Terra, Mars, and Evidence of Geothermal Processing. Lunar and Planetary Science Conference LIII-1783.

A. R. Kubas, et al. (2022). Crater Size-Frequency Distributions of Interior and Exterior Units at Giordano Bruno. Lunar and Planetary Science Conference LIII-2910.

L. E. Sacks, et al. (2022). Evidence for Widespread Shallow Chlorite in Tyrrhena Terra, Mars Lunar and Planetary Science Conference LIII-2820.

2021 **J. R. C. Voigt** et al. (2021). Effusion Rates as a Control for Lava Morphologies: A Case Study from the 2014–2015 Holuhraun Eruption, Iceland. AGU2021-V15F-0134.

D. Tirsch, et al. (2021). Spatial Trends in Mineral Abundances Across Tyrrhena Terra on Mars. Lunar and Planetary Science Conference LII-1193.

M. D. Lane, et al. (2021). Identifying Two Distinct Olivine Compositions in Tyrrhena Terra and Libya Montes, Mars. Lunar and Planetary Science Conference LII-2550.

D. Tirsch, et al. (2021). Spatial Trends in Mineral Abundances across Tyrrhena Terra on Mars derived from Geomorphological and Mineralogical Mapping. EGU21-7440.

2020 J. Bishop, et al. (2020). Characterizing the Aqueous Geochemical History at Tyrrhena Terra, Mars. AGU2020-P079-0008.

G. D. Tolometti, et al. (2020). Roughness Analysis of the Holuhraun Lava Flow-Field for Lunar and Martian Volcanic Analogs. AGU2020-P063-14.

J.R.C. Voigt, et al. (2020). Platy Lavas at the Holuhraun 2014-2015 Lava Flow-Field as an Analog for Platy-Ridged Terrains on Mars. Lunar and Planetary Science Conference LI-2358.

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