

Kerri L. Donaldson Hanna

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EDUCATION

Brown University	Ph.D.	Geological Sciences	2013
Brown University	M.S.	Geological Sciences	2010
Florida Institute of Technology	B.S.	Space Sciences	1999

PROFESSIONAL AND ACADEMIC POSITIONS

University of Central Florida	Associate Professor	2023 – Present
The Hawking Center	Joint Appointment, Scientist	2022 – Present
Florida Space Institute	Joint Appointment, Scientist	2020 – Present
University of Central Florida	Assistant Professor	2019 – 2023
Christ Church College, Oxford	Junior Research Fellow	2017 – 2019
University of Oxford	UKSA Aurora Research Fellow	2015 – 2019
University of Oxford	Postdoctoral Research Associate	2013 – 2015
Brown University	Graduate Student	2008 – 2013
National Solar Observatory	Scientific Programmer	2001 – 2008
Areté Associates	Research Associate	1999 – 2001

PUBLICATIONS

5 most current publications followed by 5 other significant publications

* underline – student under the supervision of K. L. Donaldson Hanna*

- Martin, D., **K. Donaldson Hanna**, K. H. Joy, and J. J. Gillis-Davis (2022), A petrological and spectral characterisation of NU-LHT-2M lunar highlands regolith simulant in preparation for the PROSPECT test campaign, *Planetary and Space Science*, 221, doi:10.1016/j.pss.2022.105561 [**Times Cited 0**].
- Prem, P., B. T. Greenhagen, **K. L. Donaldson Hanna**, K. A. Shirley, and T. D. Glotch (2022), Modeling thermal emission under lunar surface environmental conditions, *Planetary Science Journal*, 3(180), doi:10.3847/PSJ/ac7ced [**Times Cited 0**].
- Lowry, V. C., **K. L. Donaldson Hanna**, G. Ito, M. S. P. Kelley, H. Campins, and S. Lindsay (2022), T-matrix and Hapke modeling of thermal infrared spectra of Trojan asteroids and (944) Hidalgo: Implications for their regolith particle size and porosity, *Planetary Science Journal*, 3(181), doi:10.3847/PSJ/ac7a30 [**Times Cited 0**].
- Lowry, V. L., **K. Donaldson Hanna**, H. Campins, N. Bowles, V. Hamilton, and E. Brown (2022), Linear modeling of fine particulate materials: Implications for compositional analyses of primitive asteroids, *Earth and Space Science*, 9(3), doi:10.1029/2021EA002146 [**Times Cited 1**].
- Bates, H., **K. Donaldson Hanna**, A. King, N. Bowles, and S. Russell (2021), A spectral investigation of aqueously and thermally altered CM, CM-an and CY chondrites under simulated asteroid conditions for comparison with OSIRIS-REx and Hayabusa2 observations, *Journal of Geophysical Research Planets*, 126, doi:10.1029/2021JE006827 [**Times Cited 8**].
- Hamilton, V. E., A. A. Simon, P. R. Christensen, D. C. Reuter, B. E. Clark, M. A. Barucci, N. E. Bowles, W. V. Boynton, J. R. Brucato, E. A. Cloutis, H. C. Connolly Jr, **K. L. Donaldson Hanna**, J. P. Emery, H. L. Enos, S. Fornasier, C. W. Haberle, R. D. Hanna, E. S. Howell, H. H. Kaplan, L. P. Keller, C. Lantz, J.-Y. Li, L. F. Lim, T. J. McCoy, F. Merlin, M. C. Nolan, A. Praet, B. Rozitis, S. A. Sandford, D. L. Schrader, C.

A. Thomas, X.-D. Zou, D. S. Lauretta, and **The OSIRIS-REx Team** (2019), Evidence for widespread hydrated minerals on asteroid (101955) Bennu, *Nature Astronomy*, 3, 332-340, doi:10.1038/s41550-019-0722-2 [**Times Cited 187**].

Donaldson Hanna, K. L., B. T. Greenhagen, W. R. Patterson III, C. M. Pieters, J. F. Mustard, N. E. Bowles, D. A. Paige, T. D. Glotch, and C. Thompson (2017), Effects of varying environmental conditions on emissivity spectra of bulk lunar soils: Application to Diviner thermal infrared observations of the Moon, *Icarus*, 283, 326-342, doi:10.1016/j.icarus.2016.05.034 [**Times Cited 37**].

Donaldson Hanna, K. L., L. C. Cheek, C. M. Pieters, J. F. Mustard, B. T. Greenhagen, I. R. Thomas, and N. E. Bowles (2014), Global assessment of pure crystalline plagioclase across the Moon and implications for the evolution of the primary crust, *Journal of Geophysical Research*, 119, doi:10.1002/2013JE004476 [**Times Cited 64**].

Donaldson Hanna, K. L., I. R. Thomas, N. E. Bowles, B. T. Greenhagen, C. M. Pieters, J. F. Mustard, C. R. M. Jackson, and M. B. Wyatt (2012), Laboratory emissivity measurements of the plagioclase solid solution series under varying environmental conditions, *Journal of Geophysical Research*, 117, E11004, doi:10.1029/2012JE004184 [**Times Cited 41**].

Sprague, A. L., **K. L. Donaldson Hanna**, R. W. H. Kozlowski, J. Helbert, A. Maturilli, J. B. Warell, and J. L. Hora (2009), Spectral emissivity measurements of Mercury's surface indicate Mg- and Ca-rich mineralogy, K-spar, Na-rich plagioclase, rutile, with possible perovskite, and garnet, *Planetary and Space Science*, 57, 364-383, doi:10.1016/j.pss.2009.01.006 [**Times Cited 62**].

TEACHING EXPERIENCE

Term	Course Number	Title
Spring 2021, Spring 2023	AST4152	Planetary Geophysics
Spring 2021, Spring 2023	AST5154	Adv Planetary Geophysics
Fall 2022	AST4142	Asteroids, Comets, Meteorites
Fall 2022	AST5145	Asteroids, Comets, Meteorites
Spring 2022	AST2002	Astronomy
Spring 2020, Fall 2021	AST5263	Adv Observational Astronomy
Fall 2019, Fall 2020	AST2002H	Honors Astronomy

STUDENT ADVISING/MENTORING

Undergraduate Supervised Research: John Carter (Fall 2022), Dagny Noce (2022-Present), Thomas Townley (2022-Present), Michael Lea (Spring 2022), Luis Santori (2021-Present), Adam Bedel (2020-Present), Cheyenne Harper (2019-2021), Imogen Thrussell (Summer 2018), Emily Bamber (Summer 2016), Rory Evans (Summer 2015), Jonny Grice (Summer 2015), Tiffany Brydges (Summer 2014)

Master's Thesis Advisor: Ryan Galinkin (2019-2022), Imogen Thrussell (2018-2019), Emily Bamber (2016-2017), Rory Evans (2015-2016)

Master's Thesis Committee Member: Karlis Slumba (2021-2023), Katie Slavicinksa (2019-2021), Andrew Malfavon (2019-2020)

PhD Thesis Advisor: Lorraine Rosello Del Valle (2022-Present), Nicholas Piskurich (2020-Present), Autumn Shackelford (2020-Present), Vanessa Lowry (2019-2022), Helena Bates (2016-2020)

PhD Thesis Advisor: Audrey Martin (2020-2022), Mélissa Martinot (2019)

Postdoctoral Research Supervision: Audrey Martin (2022-Present), Mélissa Martinot (2020-Present)