CURRICULUM VITAE

ALEXANDER M. RUZICKA
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Education

Ph.D.	1996	Planetary Sciences, University of Arizona. Tucson, AZ
M.S.	1988	Earth and Space Sciences, SUNY Stony Brook, NY
B.S.	1982	Geology, University of Minnesota, Minneapolis, MN
B.S.	1982	Geophysics, University of Minnesota, Minneapolis, MN

Employment

- Professor, Portland State University, Department of Geology, 2016-current
- Associate Professor, Portland State University, Department of Geology, 2012-2016
- Assistant Professor, Portland State University, Department of Geology, 2006-2012
- Research Assistant Professor, Portland State University, Department of Geology, 2001-2006
- Assistant Professor, Portland State University, Department of Geology, 2000
- Instructor, Portland Community College, Portland, 1999-2002
- Postdoctoral Research Fellow, University of Tennessee, Knoxville, 1996-1999
- Graduate Research Associate, University of Arizona, Tucson, 1991-1996
- Graduate Research Assistant, University of Arizona, Tucson, 1986-1991
- Graduate Teaching Assistant, University of Arizona, Tucson, 1987
- Graduate Research Assistant, SUNY Stony Brook, 1982-1985

Dissertation

Petrologic-kinetic studies of meteorites, 1996, Advisor William V. Boynton.

Refereed Publications

* indicates graduate student mentored by Dr. Ruzicka
** indicates undergraduate student mentored by Dr. Ruzicka

Macente A., L. Daly, S. Griffin, M. Gritsevich, J. Moilanen, J.F. Einsle, P. Trimby, C. Mucahy, J. Moffat, **A.M. Ruzicka** (2025) The petrology of the Ozerki meteorite constrained by electron backscatter diffraction and X-ray computed tomography. Meteorit. Planet. Sci. 60, 1095,1118. https://doi.org/10.1111/maps.14344

Sheikh D.* and **A.M. Ruzicka** (2024) 'Ground truth' occurrence of Pink Spinel Anorthosite (PSA) as clasts in lunar meteorite Northwest Africa (NWA) 15500. Meteorit. Planet Sci. https://doi.org/10.1111/maps.14298

Ruzicka A.M., R.C. Hugo, J.M. Friedrich and M.T. Ream* (2024) Accretion of warm chondrules in weakly metamorphosed ordinary chondrites and their subsequent reprocessing. *Geochim. Cosmochim. Acta 378, 1-35*. https://doi.org/10.1016/j.gca.2024.05.031

Ruzicka A.M., J.M. Friedrich, M.L. Hutson, J.W. Strasser, R.J. Macke, M.L. Rivers, R.C. Greenwood, K. Ziegler and R.N. Pugh (2020) Shock compaction heating and collisional processes in the production of type 3 ordinary chondrites: Lessons from the (nearly) unique L3 chondrite melt breccia Northwest Africa 8709. *Meteorit. Planet. Sci.* 55, 1418-1438. https://doi.org/10.1111/maps.13567

Hugo R.C., **A.M. Ruzicka** and A.E. Rubin (2020) Mesoscale and microscale shock effects in the LL6 (S4) chondrites Saint-Severin and Elbert: A tale of two breccias. *Meteorit. Planet. Sci. 55* (6)**,** 1418-1438. https://doi.org/10.1111/maps.13304

Ruzicka A.M., R.C. Greenwood, K. Armstrong*, K.L. Schepker* and I.A. Franchi (2019) Petrology and oxygen isotope composition of large igneous inclusions in ordinary chondrites: Early solar system igneous processes and oxygen reservoirs. *Geochim. Cosmochim. Acta*, 266, 497-528. https://doi.org/10.1016/j.gca.2019.01.017

Ruzicka A.M. and R.C. Hugo (2018) Electron Backscatter Diffraction (EBSD) study of seven heavily metamorphosed chondrites: Deformation systematics and variations in pre-shock temperature and post-shock annealing. *Geochim. Cosmochim. Acta*, 234, 115-147. https://doi.org/10.1016/j.gca.2018.05.014

Ruzicka A.M., M. Hutson, J.M. Friedrich, M.L. Rivers, M.K. Weisberg, D.S. Ebel, K. Ziegler, D. Rumble III and A.A. Dolan (2017) Petrogenesis of Miller Range 07273, a new type of anomalous melt breccia: Implications for impact effects on the H chondrite asteroid. *Meteorit. Planet. Sci.* ***52***, 1063-1990.

Ruzicka A., H. Haack, E. Scott, and N. Chabot (2017) Iron and stony-iron meteorites: evidence for the formation, crystallization and early impact histories of differentiated planetesimals. In *Planetesimals: Early Differentiation and Consequences for Planets*, Chapter 7 (Cambridge University Press).

Friedrich J.M., **A. Ruzicka**, R.J. Macke, J.O. Thostenson, R.A. Rudolph, M.L. Rivers and D.S. Ebel (2017) Relationships among physical properties as indicators of high temperature deformation or post-shock thermal annealing in ordinary chondrites. *Geochim. Cosmochim. Acta* **203**, 157-174.

Ruzicka A., R. Brown**, J. Friedrich, M. Hutson, R. Hugo and M. Rivers (2015) Shock-induced mobilization of metal and sulfide in planetesimals: Evidence from the Buck Mountains 005 (L6 S4) dike-bearing chondrite. *Am. Mineralogist* **100**, Special Collection: Building Planets: The Dynamics and Geochemistry of Core Formation, 2725-2738.

Ruzicka A., R. Hugo and M. Hutson (2015) Deformation and thermal histories of ordinary chondrites: Evidence for post-deformation annealing and syn-metamorphic shock. *Geochim. Cosmochim. Acta* **163**, 219-233.

Ruzicka A. (2014) Silicate-bearing iron meteorites and their implications for the origin of asteroidal parent bodies. *Chemie der Erde* 74, 3-48 (Invited Review).

Friedrich J.M., **A. Ruzicka**, M.L. Rivers, D.S. Ebel, J.O. Thostenson and R.A. Rudolph (2013) Metal veins in the Kernouve (H6 S1) chondrite: Evidence for pre- or syn-metamorphic shear deformation. *Geochim. Cosmochim. Acta* **116**, 71-83.

Hutson M., **A. Ruzicka**, T. Jull, J. Smaller and R. Brown** (2013) Stones from Mohave County, Arizona: Multiple falls in the “Franconia strewn field”. *Meteorit. Planet. Sci.* **48**, 365-389.

Ruzicka A. (2012) Chondrule formation by repeated evaporative melting and condensation in collisional debris clouds around planetesimals. *Meteorit. Planet. Sci.* **47**, 2218-2236.

Ruzicka A., M. Hutson, C. Floss and A. Hildebrand (2012) Large silica-rich igneous-textured inclusions in the Buzzard Coulee chondrite: Condensates, differentiates, or impact melts? *Meteorit. Planet. Sci*. **47**, 1809-1829.

Ruzicka A., C. Floss and M. Hutson (2012) Amoeboid olivine aggregates (AOAs) in the Efremovka, Leoville and Vigarano (CV3) chondrites: A record of condensate evolution in the solar nebula. *Geochim. Cosmochim. Acta* **79**, 79-105.

Ruzicka A., C. Floss and M. Hutson (2012) Agglomeratic olivine (AO) objects in ordinary chondrites: Accretion and melting of dust to form ferroan chondrules. *Geochim. Cosmochim. Acta* **76**, 103-124.

Jamsja N.** and **A. Ruzicka** (2010) Shock and thermal history of NWA 4859, an annealed impact-melt breccia of LL-chondrite parentage containing unusual igneous features and pentlandite. *Meteorit. Planet. Sci.* **45**, 828-849.

Ruzicka A. and M. Hutson (2010) Comparative petrology of silicates in the Udei Station (IAB) and Miles (IIE) iron meteorites: Implications for the origin of silicate-bearing irons. *Geochim. Cosmochim. Acta* **74**, 394-433.

Ruzicka A., C. Floss and M. Hutson (2008) Relict olivine grains, chondrule recycling, and implications for the chemical, thermal, and mechanical processing of nebular materials. *Geochim. Cosmochim. Acta* **72**, 5530-5557.

Hutson M., **A. Ruzicka**, R. Pugh, L. Sloan and E. Thompson (2007) Complex brecciation and shock effects in the Buck Mountain Wash (H3-5) chondrite. *Meteorit. Planet. Sci.* **42**, 963-978.

Ruzicka A., H. Hiyagon, M. Hutson and C. Floss (2007) Relict olivine, chondrule recycling, and the evolution of nebular oxygen reservoirs. *Earth Planet. Sci. Lett.* **257**, 274-289.

Ruzicka A. and M. Hutson (2006) Differentiation and evolution of the IVA meteorite parent body: Clues from pyroxene geochemistry in the Steinbach stony-iron. *Meteorit. Planet. Sci.* **41**, 1959-1987.

Ruzicka A., M. Hutson and C. Floss (2006) Petrology of silicate inclusions in the Sombrerete ungrouped iron meteorite: Implications for the origins of IIE-type silicate-bearing irons. *Meteorit. Planet. Sci.* **41**, 1797-1831.

Ruzicka A., M. Killgore, D.W. Mittlefehldt and M.D. Fries (2005) Portales Valley: Petrology of a metallic-melt meteorite breccia. *Meteorit. Planet. Sci.* **40**, 261-296.

Ruzicka A., G.A. Snyder and L.A. Taylor (2002) Response to the comment by G. Dreibus and H. Wänke on "Comparative geochemistry of basalts from the Moon, Earth, HED asteroid, and Mars: Implications for the origin of the Moon" (2001). *Geochim. Cosmochim. Acta* **66**, 2633-2635

Ruzicka A., G.A. Snyder and L.A. Taylor (2001) Comparative geochemistry of basalts from the Moon, Earth, HED asteroid, and Mars: Implications for the origin of the Moon. *Geochim. Cosmochim. Acta* **65**, 979-997.

Snyder G.A., D.-C. Lee, **A. Ruzicka**, M. Prinz, L.A. Taylor and A.N. Halliday (2001) Hf-W, Sm-Nd, and Rb-Sr isotopic evidence of late impact fractionation and mixing of silicates on iron meteorite parent bodies. *Earth Planet. Sci. Lett.* **186**, 311-324.

Hutson M. and **A. Ruzicka** (2000) A multi-step model for the origin of E3 (enstatite) chondrites. *Meteorit. Planet. Sci.* **35**, 601-608.

Ruzicka A., G.A. Snyder and L.A. Taylor (2000) Crystal-bearing lunar spherules: Impact melting of the Moon's crust and implications for the origin of meteoritic chondrules. *Meteorit. Planet. Sci.* **35**, 173-192.

Ruzicka A., G.A. Snyder and L.A. Taylor (2000) Geochemical and isotopic evidence bearing on the origin of large, igneous-textured inclusions in ordinary chondrites. *Antarct. Meteorite Res.* **13**, 19-38.

Ruzicka A., G.W. Fowler, G.A. Snyder, M. Prinz, J.J. Papike and L.A. Taylor (1999) Petrogenesis of silicate inclusions in the Weekeroo Station IIE iron meteorite: Differentiation, remelting, and dynamic mixing. *Geochim. Cosmochim. Acta* **63**, 2123-2143.

Ruzicka A., L.R. Riciputi, L.A. Taylor, G.A. Snyder, J. Greenwood, R.A. Keller, G.P. Bulanova, and H.J. Millidge (1999) Petrogenesis of mantle-derived sulfide inclusions in Yakutian diamonds: Chemical and isotopic disequilibrium during quenching from high temperatures, In *7th International Kimberlite Conference*, Cape Town, South Africa, 741-749.

Ruzicka A. (1998) Growth of mineral zones by diffusion-controlled reactions: Theory and application to mesosiderites. *Am. J. Sci.* **298**, 1-35.

Ruzicka A., G.A. Snyder and L.A. Taylor (1998) Mega-chondrules and large, igneous-textured clasts in Julesberg (L3) and other ordinary chondrites: Vapor-fractionation, shock-melting, and chondrule formation. *Geochim. Cosmochim. Acta* **62**, 1419-1442.

Ruzicka A., G.A. Snyder and L.A. Taylor (1998) Giant Impact and Fission Hypotheses for the Origin of the Moon: A Critical Review of Some Geochemical Evidence. *Intl. Geol. Rev.* **40**, 851-864.

Ruzicka A. (1997) Mineral layers around coarse-grained, Ca-Al-rich inclusions in CV3 carbonaceous chondrites: Formation by high-temperature metasomatism. *J. Geophys. Res. Planets* **102**, 13387-13402.

Ruzicka A., G.A. Snyder and L.A. Taylor (1997) Vesta as the howardite, eucrite, and diogenite parent body: Implications for the size of a core and for large-scale differentiation. *Meteorit. Planet. Sci.* **32**, 825-840.

Ruzicka A., D.A. Kring, D.H. Hill, W.V. Boynton, R.N. Clayton and T.K. Mayeda (1995) Silica-rich orthopyroxenite in the Bovedy chondrite. *Meteoritics* **30**, 57-70.

Ruzicka A. (1995) Nullarbor 018: A new L6 chondrite from Australia. *Meteoritics* **30**, 102-105.

Ruzicka A., W.V. Boynton and J. Ganguly (1994) Olivine coronas, metamorphism and the thermal history of the Morristown and Emery mesosiderites. *Geochim. Cosmochim. Acta* **58**, 2725-2741.

Ruzicka A. (1990) Deformation and thermal histories of chondrules in the Chainpur (LL3.4) chondrite. *Meteoritics* **25**, 101-113.

Non-refereed Publications

* indicates graduate student mentored by Dr. Ruzicka

** indicates undergraduate student mentored by Dr. Ruzicka

Sheikh D.*, **A.M. Ruzicka**, T.C. Prissel (2025) Chemical-crystallographic investigation into the petrogenesis and shock deformation history of an olivine-rich clast in lunar meteorite Dayet El Aam 003: A dunite fragment from an Mg-suite pluton that assimilated lunar crust. 88th Annual Meeting of the Meteoritical Society, 2025, Abstract #5259.

Sheikh, D.* and **A.M. Ruzicka** (2025) Characterizing secondary shock effects in olivine from a potential mantle-derived dunite clast within lunar meteorite Northwest Africa (NWA) 14900 using Electron Backscatter Diffraction (EBSD). 56th Lunar Planet. Sci., 2025, Abstract #1833.

Sheikh, D.* and **A.M. Ruzicka** (2024) Application of Electron Backscatter Diffraction (EBSD) to investigate the petrogenesis and shock deformation history of a Pink Spinel Anorthosite (PSA) clast in lunar meteorite Northwest Africa (NWA) 15500, 87th Annual Meeting of the Meteoritical Society, 2024, Abstract #6468.

Sheikh D.*, **A.M. Ruzicka** and M.L. Hutson (2024) The most spinel-rich sample from the Moon: A first look at pink spinel anorthosite (PSA), pink spinel pyroxenite (PSP), and spinel-cordierite assemblages (SCA) in Northwest Africa (NWA) 16400. 55th Lunar Planet. Sci. Conf., 2024, Abstract #2023.

Anim G.A.* and A.M. Ruzicka (2024) Electron Backscatter Diffraction (EBSD) of shergottites Northwest Africa (NWA) 15628, NWA 12241, and Dhofar (Dho) 019. 55th Lunar Planet. Sci. Conf., 2024, Abstract #1810.

Ruzicka A.M., J.M. Friedrich, and R.C. Hugo (2023) Northwest Africa 11351 (LL3-6): A case study for a shock-induced petrofabric. *86th Annual Meeting of the Meteoritical Society, 2023*, Abstract #6284

Karner J.M, M.D. Fries, M.L. Hutson, **A. M. Ruzicka**, D. Sheikh*, and M. Terlaga (2023) The fall and recovery of the Great Salt Lake meteorite (2023). *86th Annual Meeting of the Meteoritical Society, 2023*, Abstract #6307.

Sheikh D.* and **A.M. Ruzicka** (2023) Felsite "frenzy" in lunar meteorite Bechar 009: Constraining the role of silicate liquid immiscibility (SLI) on lunar felsite petrogenesis. *86th Annual Meeting of the Meteoritical Society, 2023*, Abstract #6219.

Sheikh D.*, **A. Ruzicka**, M. Hutson and C. Zlimen (2023) Pink Spinel Anorthosite (PSA) clasts

in lunar dimict breccia Northwest Africa 15500: Evidence for a petrogenetic link between PSA and Mg-suite. *54th Lunar Planet. Sci. Conf., 2023*, Abstract #2066.

Welzenbach L.C., M.D. Fries, G. Costin, R.C. Greenwood, W.J. Cooke, D. Moser, S. Hicks, E. Rasmussen, E.E. Satterwhite, K. Righter, D. Sheikh*, **A.M. Ruzicka**, M.L. Hutson, R. Vargas, M. Stream, S.A. Eckley, R.A. Ziegler, and F.M. McCubbin (2023). The Cranfield meteorite: An H3-5 (regolith?) breccia. *54th Lunar Planet. Sci. Conf., 2023*, Abstract #2860.

Ruzicka A.M. and R.C. Hugo (2022b) A robust Electron Backscatter Diffraction annealing metric for olivine. *85th Annual Meeting of the Meteoritical Society, 2022,* Abstract #6179. LPI Contribution No. 2695.

Sheikh D.*, **A.M. Ruzicka**, M.L. Hutson and M. Stream (2022) Dunite clast in lunar meteorite Northwest Africa (NWA) 14900: Mantle derived? *85th Annual Meeting of the Meteoritical Society, 2022*, Abstract #6077. LPI Contribution No. 2695*. [Winner of Wiley Award for best student oral presentation.]*

Hutson M.L., **A.M. Ruzicka**, M.D. Fries, J.M. Friedrich and K. Ziegler (2022) More evidence for unique aqueous alteration on the L-chondrite parent body. *85th Annual Meeting of the Meteoritical Society, 2022*, Abstract #6065. LPI Contribution No. 2695.

Welzenbach L.C., M.D. Fries, W.J. Cooke, D. Moser, S. Hicks, E. Rasmussen, C.E. Satterwhite, K. Righter, D. Sheikh*, **A.M. Ruzicka**, M.L. Hutson, R. Vargas, M. Stream, S.A. Eckley, R.A. Zeigler, and F.M. McCubbin (2022) Rapid recovery of a new chondrite meteorite near Natchez, Mississippi. *85th Annual Meeting of the Meteoritical Society, 2022,* Abstract #6361. LPI Contribution No. 2695.

Sheikh D.*, **A. Ruzicka**, M. Hutson, A. Greshake, E. Thompson and P. Thompson (2022) Northwest Africa 14446: A unique lunar dimict breccia composed of distinct feldspathic crystalline melt breccia lithologies. *53rd Lunar Planet. Sci. Conf. 2022,* Abstract #1085.

Frye J.K.* and **A.M. Ruzicka** (2022) Electron Backscatter Diffraction (EBSD) analysis of ureilites Northwest Africa 11993, 12433, 7630 and 7304: Clues to petrogenesis from deformation-thermal parameters and rock fabrics. *53rd Lunar Planet. Sci. Conf.*, Abstract #1760.

Ruzicka A.M. and R.C. Hugo (2022) Model deformation temperatures derived from EBSD data for olivine in type 6 ordinary chondrites and ureilites. *53rd Lunar Planet. Sci. Conf.*, Abstract #1757.

Ruzicka A.M. and R.C. Hugo (2021) Probing the thermal and deformation histories of chondrules in a cluster chondrite lithology of Northwest Africa 5205 with Electron Backscatter Diffraction (EBSD) techniques. *84th Annual Meeting of the Meteoritical Society, 2021*, Abstract #6109. LPI Contribution No. 2609

Hugo R.C. and **A.M. Ruzicka** (2021) Untangling the history of a chondrule in Northwest Africa 5205 (LL3.2) with Electron Backscatter Diffraction and Transmission Electron Microscopy. *84th Annual Meeting of the Meteoritical Society, 2021*, Abstract #6258. LPI Contribution No. 2609.

Hutson M.H., **A.M. Ruzicka** and R.N. Pugh (2021) Harold (a) and Harold (b): Two new meteorites from Ness County, Kansas. *84th Annual Meeting of the Meteoritical Society, 2021*, Abstract #6064. LPI Contribution No. 2609.

Ruzicka A.M., M.L. Hutson and K. Ziegler (2021) Lunar meteorite Northwest Africa 13531: Chip off a different kind of block. *52nd Lunar Planet. Sci. Conf. 2021*, Abstract #2234. LPI Contribution 2548. https://www.hou.usra.edu/meetings/lpsc2021/pdf/2234.pdf

Ruzicka A.M., S. Goudy* and R.C. Hugo (2020) Role of hot accretion and deformation in producing cluster and type 3 ordinary chondrites. *51st Lunar Planet. Sci. Conf.*, Abstract #1308.

Goudy S.P.* and **A. Ruzicka** (2019) Cluster chondrite accretion temperatures determined with electron backscatter diffraction. *Goldschmidt Abstracts*, 2019.

Goudy S.P.* and **A.M. Ruzicka** (2019) Relations between accretional deformation and temperature in cluster chondrite chondrules. *82nd Annual meeting of the Meteoritical Society, 2019*, Abstract #6105. LPI Contrib. No. 2157.

Hutson M.L., **A.M. Ruzicka** and S. Tutorow (2019) Abundant water in ordinary chondrites: Evidence from a clast with unique alteration assemblage in the Northwest Africa (NWA) 12380 (L3) chondrite. *50th Lunar Planet Sci. Conf.*, Abstract #1764.

Crowther S.A., J.D. Gilmour and **A.M. Ruzicka** (2019) Iodine-xenon systematics of large igneous inclusions in ordinary chondrite meteorites. *50th Lunar Planet. Sci. Conf.*, Abstract #2629.

Ruzicka A.M., Hellmann J.L. and T. Kleine (2018) Hf-W chronology of large igneous inclusions from ordinary chondrites. *49th Lunar Planet. Sci. Conf.*, Abstract #1714.

Ruzicka A.M., and R.C. Hugo (2017) EBSD Analyses of Seven Ordinary Chondrites: Deformation Metrics and Implications for Parent Body Thermal Histories. *Meteorit. Planet. Sci.*, Abstract #6368.

Hugo R.C., **A.M. Ruzicka** and A. Rubin (2017) Elbert and Saint-Severin: LL6(S4) Chondrites with Contrasting Shock Histories. *Meteorit. Planet. Sci.*, Abstract #6298.

Crowther S.A., J.D. Gilmour and **A.M. Ruzicka** (2017) First I-Xe age of a new suite of large igneous inclusions in ordinary chondrites. *Meteorit. Planet. Sci.*, Abstract #6284.

Ruzicka A., J. Grossman, A. Bouvier, and C.B. Agee (2017) The Meteoritical Bulletin, No. 103, *Meteorit. Planet. Sci.* **52**, 1014.

Ruzicka A., K. Schepker* and Y. Guan (2017) Trace element compositions bearing on the origins of large igneous inclusions in ordinary chondrites. *48th Lunar Planet. Sci. Conf.*, Abstract #2477.

Hutson M. and **A. Ruzicka** (2017) Miller Range 07273: An unusual chondritic melt breccia. *48th Lunar Planet. Sci. Conf.*, Abstract #2942.

Ruzicka A.M., K.L. Schepker*, R.C. Greenwood and I.A. Franchi (2016) Combined chemical-oxygen isotope study of large igneous inclusions in ordinary chondrites. *47th Lunar Planet. Sci. Conf.*, Abstract #2230.

Hutson M.L., **A.M. Ruzicka**, K.R. Farley*, K.L. Schepker*, R.C. Hugo and L.E. Likkel (2016) Carbides in ordinary chondrites revisited. *47th Lunar Planet. Sci. Conf.*, Abstract #1377.

Ruzicka A., J. Grossman, A. Bouvier, C. Herd, and C.B. Agee (2015) The Meteoritical Bulletin, No. 102. *Metorit. Planet. Sci.* **50***,* 1662. Full electronic article 248 pp.

Ruzicka A., J. Grossman, A. Bouvier, C. Herd, and C.B. Agee (2015) The Meteoritical Bulletin, No. 101. *Metorit. Planet. Sci.* **50**, 1661. Full electronic article 136 pp.

Strait M.M., A.N. Clayton, S.J. Jack, **A.M. Ruzicka**, G.J. Flynn and D.D. Durda (2015) Chemical composition of artificially hydrated ordinary chondrites. *Meteorit. Planet. Sci.*, Abstract #5324.

Ruzicka A.M., M. Hutson, J.M. Friedrich, P.A. Bland and R. Pugh (2015) Northwest Africa 8709: A rare but revealing type 3 ordinary chondrite melt breccia. *Meteorit. Planet. Sci.*, Abstract #5348.

Ruzicka A.M., P.M. Clay, R. Hugo, K.H. Joy and H. Busemann (2015) Contrasting early and late shock effects on the L chondrite parent body: Evidence from Ar ages and olivine microstructures for two meteorites. *Meteorit. Planet. Sci.*, Abstract #5177.

Farley K.R.** and **A.M. Ruzicka** (2015) NWA 8614: The least heated winonaite? *46th Lunar Planet. Sci. Conf.*, Abstract #1821.

Hutson M.L., R.N. Pugh and **A.M. Ruzicka** (2015) Lessons learned from meteorite public outreach and education in the Pacific Northwest. *46th Lunar Planet. Sci. Conf.*, Abstract #1690.

Armstrong K.* and **A.M. Ruzicka** (2015) Major-element geochemistry of large, igneous-textured inclusions in ordinary chondrites. *46th Lunar Planet. Sci. Conf.*, Abstract #1572.

Ruzicka, A., J.M. Friedrich, R. Hugo and M. Hutson (2015) Macro- and microstructures in

ordinary chondrites: Implications for impact deformation and annealing processes. *46th Lunar Planet. Sci. Conf.*, Abstract #1544.

Hutson M.L., **A.M. Ruzicka** and M. Nazari (2014) Diverse and unusual O-chondrites from the Lut desert, Iran. *Meteorit. Planet. Sci.*, Abstract #5180.

Ruzicka A. and R. Hugo (2014) Microstructures in olivine from ordinary chondrites: Evidence for post-shock thermal annealing and syn-metamorphic shock. *45th Lunar Planet. Sci. Conf.*, Abstract #1306.

Ruzicka A., J.N. Grossman and L. Garvie (2014) The Meteoritical Bulletin, No. 100, 2014 June. *Meteorit. Planet. Sci.* **49**, E1-E101.

Brown R.A.**, **A.M. Ruzicka**, M. Hutson, J.M. Friedrich and M.L. Rivers (2013) Micro-tomography and electron microscopy of a shock dike in the Buck Mountains 005 L6 chondrite. Abstract, American Geophysical Union.

Brown R.**, **A.M. Ruzicka**, M. Hutson, J.M. Friedrich and M.L. Rivers (2013), Micro-tomography and electron microscopy of a shock dike in the Buck Mountains 005 L6 chondrite, Abstract P31B-1808 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

Ruzicka A. and M. Hutson (2013) Evidence from silicate-bearing irons for the nature of asteroidal differentiation. *Workshop on Planetesimal Formation and Differentiation*, Carnegie Institution of Science, Washington D.C. October 27-29.

Armstrong K.* and **A. Ruzicka** (2013) Survey of large, igneous-textured inclusions in O-chondrites. *Meteorit. Planet. Sci.*, Abstract #5278.

Likkel L., **A.M. Ruzicka**, M. Hutson, K. Schepker*, and T.R. Yeager (2013) Cohenite in chondrites: Further support for a shock-heating origin. *Meteorit. Planet. Sci.*, Abstract #5145.

Brown R.**, **A. Ruzicka**, J. Friedrich, M. Hutson and M. Rivers (2013) A shock melt dike in 3D: Shear and melt migration in the Buck Mountains 005 L6 chondrite. *Meteorit. Planet. Sci.*, Abstract #5078.

Ruzicka A., M. Hutson, N. Jamsja** and T. Stout (2013) Anhydrous and hydrous R chondrites: Evidence from NWA 6491, 6492 and the newly discovered NWA 7514. *44th Lunar Planet. Sci. Conf.*, Abstract #1168.

Claydon J.L., **A. Ruzicka**, S. A. Crowther, M. Y. P. Lee, A. Bischoff, H. Busemann and J. D Gilmour (2013). First I-Xe ages of Rumuruti chondrites and the thermal history of their parent body. *44th Lunar Planet. Sci. Conf.*, Abstract #2211.

Hutson M., **A. Ruzicka**, and R. Brown** (2013) A pyroxene-enriched shock melt dike in the Buck Mountains 005 (L6) chondrite. *44th Lunar Planet. Sci. Conf.*, Abstract #1186.

Friedrich J.M., **A. Ruzicka**, D.S. Ebel., J.O. Thostenson, R.A. Rudolph and M.L. Rivers (2012) Early microstructures of asteroidal building blocks from 3D petrography: A compaction and porosity perspective. *Asteroids, Comets, Meteors (ACM) 2012*, Abstract #6205.

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Presentations at Professional Meetings (2000-current)

* indicates graduate student mentored by Dr. Ruzicka

** indicates undergraduate student mentored by Dr. Ruzicka

2025 Oral presentation at the 88th Annual Meeting of the Meteoritical Society, for "Chemical-crystallographic investigation into the petrogenesis and shock deformation history of an olivine-rich clast in lunar meteorite Dayet El Aam 003: A dunite fragment from an Mg-suite pluton that assimilated lunar crust" (lead speaker D. Sheikh*, with T.C. Prissel).

2025 Oral presentation at the 56th Lunar and Planetary Science Conference, for "Characterizing secondary shock effects in olivine from a potential mantle-derived dunite clast within lunar meteorite Northwest Africa (NWA) 14900 using Electron Backscatter Diffraction (EBSD)" (lead speaker D. Sheikh*).

2024 Oral presentation at the 87th Annual Meeting of the Meteoritical Society, for "Application of Electron Backscatter Diffraction (EBSD) to investigate the petrogenesis and shock deformation history of a Pink Spinel Anorthosite (PSA) clast in lunar meteorite Northwest Africa (NWA) 15500" (lead speaker D. Sheikh*). *Winner of Gordon McKay Award for best student oral presentation.*

2024 Oral presentation at the 55th Lunar and Planetary Science Conference, for "The most spinel-rich sample from the Moon: A first look at pink spinel anorthosite (PSA), pink spinel pyroxenite (PSP), and spinel-cordierite assemblages (SCA) in Northwest Africa (NWA) 16400" (lead speaker D. Sheikh*, with M.L. Hutson).

2024 Poster presentation at the 55th Lunar and Planetary Science Conference, for "Electron Backscatter Diffraction (EBSD) of shergottites Northwest Africa (NWA) 15628, NWA 12241, and Dhofar (Dho) 019" (lead presenter: G. Anim*).

2023 Oral presentation at the 86th Annual Meeting of the Meteoritical Society, for "Northwest Africa 11351 (LL3-6): A case study for a shock-induced petrofabric" (lead speaker, with J.M. Friedrich and R.C. Hugo).

2023 Oral presentation at the 86th Annual Meeting of the Meteoritical Society, for "Felsite "frenzy" in lunar meteorite Bechar 009: Constraining the role of silicate liquid immiscibility (SLI) on lunar felsite petrogenesis" (lead speaker D. Sheikh*).

2023 Oral presentation at the 86th Annual Meeting of the Meteoritical Society, for "The fall and recovery of the Great Salt Lake meteorite" (lead speaker J.M. Karner, with M.D. Fries, M.L. Hutson, D. Sheikh*, and M. Terlaga).

2023 Oral presentation at the 85th Annual Meeting of the Meteoritical Society, for "The Cranfield meteorite: An H3-5 (regolith?) breccia" (lead speaker L.C. Welzenbach, with M.D. Fries, G. Costin, R.C. Greenwood, W.J. Cooke, D. Moser, S. Hicks, E. Rasmussen, E.E. Satterwhite, K. Righter, D. Sheikh*, M.L. Hutson, R. Vargas, M. Stream, S.A. Eckley, R.A. Ziegler, and F.M. McCubbin).

2023 Oral presentation at the 54th Lunar and Planetary Science Conference, for "Pink Spinel Anorthosite (PSA) clasts in lunar dimict breccia Northwest Africa 15500: Evidence for a petrogenetic link between PSA and Mg-suite" (lead speaker D. Sheikh*, with M. Hutson and C. Zlimen).

2022 Oral presentation at the 85th Annual Meeting of the Meteoritical Society, for "A robust Electron Backscatter Diffraction annealing metric for olivine" (lead speaker, with R.C. Hugo).

2022 Poster presentation at the 85th Annual Meeting of the Meteoritical Society, for "More evidence for unique aqueous alteration on the L-chondrite parent body" (lead presenter, with M.L. Hutson, M.D. Fries, J.M. Friedrich and K. Ziegler).

2022 Oral presentation at the 85th Annual Meeting of the Meteoritical Society, for "Dunite clast in lunar meteorite Northwest Africa (NWA) 14900: Mantle derived?" (lead speaker D. Sheikh*, with M.L. Hutson, M. Stream). *Winner of Wiley Award for best student oral presentation.*

2022 Oral presentation at the 85th Annual Meeting of the Meteoritical Society, for "Rapid recovery of a new chondrite meteorite near Natchez, Mississippi" (lead speaker L.C. Welzenbach, with M.D. Fries, W.J. Cooke, D. Moser, S. Hicks, E. Rasmussen, C.E. Satterwhite, K. Righter, D. Sheikh*, M.L. Hutson, R. Vargas, M. Stream, S.A. Eckley, R.A. Zeigler, and F.M. McCubbin).

2022 Oral presentation at the 53rd Lunar and Planetary Science Conference, for "Model deformation temperatures derived from EBSD data for olivine in type 6 ordinary chondrites and ureilites" (lead speaker, with R.C. Hugo).

2022 Poster presentation at the 53rd Lunar and Planetary Science Conference, for "Electron Backscatter Diffraction (EBSD) analysis of ureilites Northwest Africa 11993, 12433, 7630 and 7304: Clues to petrogenesis from deformation-thermal parameters and rock fabrics" (lead presenter J.K. Frye*).

2022 Poster presentation at the 53rd Lunar and Planetary Science Conference, for "Northwest Africa 14446: A unique lunar dimict breccia composed of distinct feldspathic crystalline melt breccia lithologies" (lead presenter D. Sheikh*, M. Hutson, A. Greshake, E. Thompson and P. Thompson).

2022 Poster presentation at the Spring Student Symposium, Oregon Space Grant Consortium, Corvallis, Oregon (lead presenter M. Hutson, with H. Babst**, N. Bintliff**, L. McHenry**, A. Ruzicka and D. Sheikh*).

2021 Oral presentation at the 84th Annual Meeting of the Meteoritical Society, for "Probing the thermal and deformation histories of chondrules in a cluster chondrite lithology of Northwest Africa 5205 with Electron Backscatter Diffraction (EBSD) techniques" (lead speaker, with R.C. Hugo).

2021 Oral presentation at the 84th Annual Meeting of the Meteoritical Society, for "Untangling the history of a chondrule in Northwest Africa 5205 (LL3.2) with Electron Backscatter Diffraction and Transmission Electron Microscopy" (lead speaker R.C. Hugo).

2021 Poster presentation at the 52nd Lunar and Planetary Science Conference, for "Lunar meteorite Northwest Africa 13531: Chip off of a different kind of block"

(lead presenter, with M.L. Hutson, K. Ziegler).

2020 Scheduled oral presentation at the 51st Lunar and Planetary Science Conference, for "Role of hot accretion and deformation in producing cluster and type 3 ordinary chondrites" (with S. Goudy* and Richard Hugo). *This conference was cancelled owing to the Covid pandemic.*

2019 Poster presentation at the 50th Lunar and Planetary Science Conference, for "Abundant water in ordinary chondrites: Evidence from a clast with unique alteration assemblage in the Northwest Africa (NWA) 12380 (L3) chondrite" (lead presenter, with M. Hutson and S. Tutorow).

2019 Poster presentation at the 50th Lunar and Planetary Science Conference, for "Iodine-xenon systematics of large igneous inclusions in ordinary chondrites" (lead presenter, with S.A. Crowther and J.D. Gilmour).

2018 Poster presentation at the 49th Lunar and Planetary Science Conference, for "Hf-W chronology of large igneous inclusions from ordinary chondrites" (lead presenter, with J. Hellman and T. Kleine).

2017 Oral presentation at the Annual Meeting of the Meteoritical Society, for "EBSD Analyses of Seven Ordinary Chondrites: Deformation Metrics and Implications for Parent Body Thermal Histories" (lead speaker, with R. Hugo).

2017 Poster presentation at the 80th Annual Meeting of the Meteoritical Society, for "Elbert and Saint-Severin: LL6(S4) Chondrites with Contrasting Shock Histories" (lead presenter, with R. Hugo, A. Rubin).

2017 Oral presentation at the Meeting of the Meteoritical Society, for "First I-Xe age of a new suite of large igneous inclusions in ordinary chondrites" (lead speaker S.A. Crowther, with J.D. Gilmour).

2017 Poster presentation at the 48th Lunar and Planetary Science Conference, for "Trace element compositions bearing on the origins of large igneous inclusions in ordinary chondrites" (lead presenter, with K. Schepker and Y. Guan).

2017 Poster presentation at the 48th Lunar and Planetary Science Conference, for "Miller Range 07273: An unusual chondritic melt breccia" (lead presenter, with M. Hutson).

2016 Poster presentation at the 47th Lunar and Planetary Science Conference, for "Combined chemical-oxygen isotope study of large igneous inclusions in ordinary chondrites" (lead presenter, with K.L. Schepker, R.C. Greenwood, I.A. Franchi).

2016 Poster presentation at the 47th Lunar and Planetary Science Conference, for "Carbides in ordinary chondrites revisited" (lead presenter, with M.L. Hutson, K.R. Farley, R.C. Hugo, L.E. Likkel).

2015 Oral presentation at the *76th Annual Meeting of the Meteoritical Society*, for "Contrasting early and late shock effects on the L chondrite parent body: Evidence from Ar ages and olivine microstructures for two meteorites" (lead speaker, with P.M. Clay, R. Hugo, K.H. Joy, H. Busemann).

2015 Poster presentation at the *76th Annual Meeting of the Meteoritical Society*, for "Northwest Africa 8709: A rare but revealing type 3 ordinary chondrite melt breccia" (lead presenter, with M. Hutson, J.M. Friedrich, P.A. Bland, R. Pugh).

2015 Poster presentation at the *76th Annual Meeting of the Meteoritical Society*, for "Chemical composition of artificially hydrated ordinary chondrites" (lead presenter M.M. Strait, with A.N. Clayton, S.J. Jack, G.J. Flynn, D.D. Durda).

2015 Poster presentation at the *46th Lunar and Planetary Science Conference*, for "Macro- and microstructures in ordinary chondrites: Implications for impact deformation and annealing processes" (lead presenter, with J. Friedrich, R. Hugo, M. Hutson).

2015 Poster presentation at the *46th Lunar and Planetary Science Conference*, for

"Major-element geochemistry of large, igneous-textured inclusions in ordinary chondrites" (lead presenter K. Armstrong*).

2015 Poster presentation at the *46th Lunar and Planetary Science Conference*, for "Lessons learned from meteorite public outreach and education in the Pacific Northwest" (lead presenter, with M. Hutson, R. Pugh).

2015 Poster presentation at the *46th Lunar and Planetary Science Conference*, for "NWA 8614: The least heated winonaite?" (lead presenter K. Farley*)

2014 Oral presentation at the *45th Lunar and Planetary Science Conference*, The Woodlands, for "Microstructures in olivine from ordinary chondrites: Evidence for post-shock thermal annealing and syn-metamorphic shock" (lead speaker, with R. Hugo).

2013 Oral presentation at the *Workshop on Planetesimal Formation and Differentiation*, Carnegie Institution of Science, Washington D.C. October 27-29, for "Evidence from silicate-bearing irons for the nature of asteroidal differentiation" (lead speaker, with M. Hutson).

2013 Oral presentation at the *75th Annual Meeting of the Meteoritical Society*, for "A shock melt dike in 3D: Shear and melt migration in the Buck Mountains 005 L6 chondrite" (lead speaker, with R. Brown**, J. Friedrich, M. Hutson and M. Rivers).

2013 Oral presentation at the *44th Lunar and Planetary Science Conference*, the Woodlands, TX, for "Anhydrous and hydrous R chondrites: Evidence from NWA 6491, 6492 and the newly discovered NWA 7514" (lead speaker, with M. Hutson, N. Jamsja**, and T. Stout).

2012 Poster presentation at *Asteroids, Comets, Meteors (ACM) 2012 conference*, Nigata, Japan, for "Early microstructures of asteroidal building blocks from 3D petrography: A compaction and porosity perspective" (lead presenter J. Friedrich, with D.S. Ebel, J.O. Thostenson, R.A. Rudolph and M.L. Rivers).

2012 Oral presentation at the *43rd Lunar and Planetary Science Conference*, The Woodlands, TX, for "Large, silica-rich igneous-textured inclusions in the Buzzard Coulee (H4) chondrite" (lead speaker, with M. Hutson, C. Floss, A. Hildebrand).

2011 Poster presentation at the *Workshop on Formation of the First Solids of the Solar System*, Kauai, Hawaii, for "Agglomeratic olivine (AO) objects: Melting of dust to create Type II chondrules" (lead presenter, with M. Hutson).

2011 Oral presentation at the 74th Annual Meeting of the Meteoritical Society, Greenwich, England, for "2011 Service Award for Richard Norman Pugh" (award citation for Cascadia Meteorite Laboratory member).

2011 Oral presentation at the 74th Annual Meeting of the Meteoritical Society, Greenwich, England, for "A shocking tale: TEM observations of deformed olivine in ordinary chondrites" (lead speaker, with R. Hugo).

2011 Poster presentation at the 74th Annual Meeting of the Meteoritical Society, Greenwich, England, for "New insights on hydrous phases in R chondrites NWA 6491 and 6492" (lead presenter, with N. Jamsja**).

2011 Oral presentation at the 42nd Lunar and Planetary Science Conference, The Woodlands, TX, "Amoeboid Olivine Aggregate Condensates and the Origin of the Refractory Element Fractionation" (lead speaker, with M. Hutson and C. Floss).

2011 Poster presentation at the 42nd Lunar and Planetary Science Conference, The Woodlands, TX, "Cohenite in NWA 5964 (L3–6 Melt Breccia): A Possible Product of Shock-Induced Contact Metamorphism" (lead presenter K.L. Hauver*).

2011 Poster presentation at the 42nd Lunar and Planetary Science Conference, The Woodlands, TX, "Presence of Hydrous Phases in Two R Chondrites, Northwest Africa 6491 and 6492" (lead presenter N. Jamsja**).

2011 Poster presentation at the 42nd Lunar and Planetary Science Conference, The

Woodlands, TX, "Meteorites on the Road: Taking Meteorite Science to Rural Communities" (lead presenter, with M. L. Hutson and R. N. Pugh).

2010 Poster presentation at the 73rd Annual Meeting of The Meteoritical Society, New York City, NY, for “Classification of four new irons, including common (IIAB) and uncommon (IIIF, unusual IAB) types” (lead presenter, with M. Hutson and S.A. Kissin).

2010 Oral presentation at Lunar and Planetary Science Conference, The Woodlands, TX, for “Accretion and melting of dust to form ferroan chondrules in ordinary chondrites” (lead speaker, with C. Floss, M. Hutson).

2010 Poster presentation at Lunar and Planetary Science Conference, The Woodlands, TX, for “Jungo 001, Jungo 002, Jungo 003, and Big Horn Mountains: Four new chondrites from Nevada and Arizona which contain a variety of unusual petrographic features” (lead presenter, with M. Hutson).

2010 Poster presentation at Lunar and Planetary Science Conference, The Woodlands, TX, for “X-ray diffraction as a tool for the classification of equilibrated ordinary chondrites” (lead presenter T.J. Schepker*).

2009 Poster presentation at Lunar and Planetary Science Conference, The Woodlands, TX, for “Olivine microstructures in the Miller Range 99301 (LL6) ordinary chondrite” (lead presenter, with M. Hutson, R. Hugo, A.E. Rubin).

2009 Poster presentation at Lunar and Planetary Science Conference, The Woodlands, TX, for “A first look at the Buzzard Coulee (H4) chondrite, a recently observed fall from Saskatchewan” (lead presenter, with M. Hutson, E.P. Milley, A.R. Hildebrand).

2008 Poster presentation at the Annual Meeting of the Meteoritical Society, Matsue, Japan, for “Trace-element analyses of pyroxene and plagioclase in three HED meteorites” (lead presenter, with T.J. Schepker*).

2008 Oral presentation at Lunar and Planetary Conference, Houston, TX, for “Amoeboid olivine aggregates (AOAs) in the Efremovka (CV_R) chondrite: First SIMS trace-element results” (lead speaker, with C. Floss, M. Hutson).

2007 Poster presentation at the Annual Meeting of the Meteoritical Society, Tucson, AZ, for “XRD as a tool to constrain olivine composition: Applications to H- and L-chondrites” (lead presenter, with T.J. Schepker*).

2007 Poster presentation at the Annual Meeting of the Meteoritical Society, Tucson, AZ, for “The case against Mercury as the angrite parent body” (lead presenter, with M. Hutson).

2007 Poster presentation at the Annual Meeting of the Meteoritical Society, Tucson, AZ, for “Annealing after shock: Evidence from olivine microstructures in Portales Valley” (lead presenter, with M. Hutson, R. Hugo).

2006 Oral presentation at the Annual Meeting of the Meteoritical Society, Zürich, Switzerland, for “Trace-element compositions of normal, dusty, and clear olivine in Chainpur chondrules” (lead speaker, with C. Floss, M. Hutson).

2006 Poster presentation at the Annual Meeting of the Meteoritical Society, Zürich, Switzerland, for “NWA 2999 and other angrites: No compelling evidence for a Mercurian origin” (lead presenter, with M. Hutson).

2006 Poster presentation at the Lunar and Planetary Science Conference, Houston, TX, for “Public outreach and education with meteorites involving a museum exhibit, website, and teacher workshops” (lead presenter, with M. Hutson, R.N. Pugh).

2005 Oral presentation at the Annual Meeting of the Meteoritical Society, Gatlinburg, TN, for “Geochemical constraints for the origin of the Steinbach (IVA) stony-iron meteorite” (lead speaker, with M. Hutson).

2005 Poster presentation at the Annual Meeting of the Meteoritical Society, Gatlinburg, TN, for “Carbon and mineral phase distribution on a CV3 dark inclusion boundary – A confocal raman imaging study” (lead presenter, with M. Fries, A. Steele).

2005 Oral presentation at the Workshop on Oxygen in Asteroids and Meteorites, Flagstaff, AZ, for “Relict olivine, chondrule recycling, and evolution of oxygen reservoirs” (lead speaker, with H. Hiyagon, C. Floss).

2005 Poster presentation at the Lunar and Planetary Science Conference, Houston, TX, for “Filter-press differentiation: A newly-recognized fractionation mechanism for silicate inclusions in Sombrerete and possibly in other iron meteorites” (lead presenter, with C. Floss, M. Hutson).

2004 Oral presentation at the Lunar and Planetary Science Conference, Houston, TX, for “Forsterite and olivine in Sahara-97210 (LL3.2) and Chainpur (LL3.4) chondrules: Compositional evolution and the influence of melting” (lead speaker, with C. Floss).

2004 Poster presentation at the Lunar and Planetary Science Conference, Houston, TX, for “Relict forsterite in chondrules: Implications for cooling rates” (lead presenter, with S. Greeney*).

2003 Oral presentation at the Annual Meeting of the Meteoritical Society, Münster, Germany, for “Origin of silicate inclusions in the Miles (IIE) iron: Minimal partial melting, maximal fractional crystallization” (lead speaker, with T. Lindsay*, M. Killgore).

2003 Oral presentation at the Annual Meeting of the Meteoritical Society, Münster, Germany, for “Evidence for silicate liquid immiscibility within silicate inclusions during rapid cooling of the Sombrerete (Ungrouped) iron meteorite” (lead speaker, with M. Hutson).

2003 Oral presentation at the Lunar and Planetary Science Conference, Houston, TX, for “Relict forsterite and igneous olivine grains in Chainpur (LL3.5) chondrules: Major- and trace-element evidence for vapor-fractionation and igneous partitioning” (lead speaker, with C. Floss).

2002 Oral presentation at the Lunar and Planetary Science Conference, Houston, TX, for “Trace-element abundances in the Portales Valley meteorite: Evidence for geochemical fractionations” (lead speaker, with M. Killgore).

2000 Oral presentation at the Annual Meeting of the Meteoritical Society, Chicago, IL, for “Portales Valley: Not just another ‘ordinary’ chondrite” (lead speaker, with M. Killgore, J. Boesenberg, M. Prinz).

2000 Poster presentation at the Annual Meeting of the Meteoritical Society, Chicago, IL, for Portales Valley: Discovery of a large graphite nodule” (lead presenter, with J. McHone, M. Killgore).

Honors, Grants, and Fellowships

(Dollar amounts have been rounded to the nearest thousand, totals reflect funds going to PSU.)

2025-current **PI of awarded grant** from NASA for “A petrologic-crystallographic investigation of spinel-rich samples from the Moon: Constraints on the origin of lunar pink spinel and the evolution of the lunar interior”, **$150K** (3 years, awarded August 2025). This proposal to the FINESST program funds Future Investigator and Ph.D. student Daniel Sheikh, who Dr. Ruzicka is advising.

2025-current **PI of awarded PSU Faculty Development Grant**, for “A journey to the beginning: New discoveries on the most primitive rocks from space”, **$15K** (2 years, awarded June 2025).

2024 **PI of submitted NASA Grant** (declined) for “A petrologic-crystallographic

	investigation of spinel-rich samples from the Moon: Constraints on the origin of lunar pink spinel and the evolution of the lunar interior", **$149K** (3 years, FI Daniel Sheikh).
2023-current	**PI of awarded grant** from the Barringer Crater Family Fund for "Investigating the micro-deformation and high-pressure phases of chondritic shock melts", to help support M.S. thesis research by Vincent Mugica, who is being advised by Dr. Ruzicka, **$5K** (2 years).
2023-2024	**PI of awarded grant** from Oregon Space Grant (NASA), for "Unlocking research opportunities for students and the Cascadia Meteorite Laboratory". Oct. 1, 2023 – Sept. 30, 2024. Subaward **$9K** for PSU.
2022-2023	**PI of awarded grant** from Oregon Space Grant (NASA), for "Taking students to the Moon, Mars, and beyond through meteorite classification and research". July 1, 2022 – June 30, 2023. Subaward **$15K** for PSU.
2021-2022	**PI of awarded PSU Faculty Development Grant**, for "A new direction in meteorite research at PSU". **$14K**.
2021-2022	**PI of awarded grant** from Oregon Space Grant (NASA), for "Not just a pile of rocks: Unleashing the potential of the Cascadia Meteorite Laboratory collection". June 1, 2021 - May 31, 2022. Subaward **$15K** for PSU.
2019-2020	**PI of awarded grant** from Oregon Space Grant (NASA), for "Administration of the Oregon Space Grant Consortium Faculty Research Awards Program". May 15, 2019 - February 22, 2020. Subaward **$20K** for PSU.
2019-2024	**PI of awarded NASA grant** for "The deformation-heat connection: Evaluating hot accretion, lithification mechanisms, and heat sources in ordinary chondrites". February 1, 2019- December 31, 2024, Emerging Worlds program. **$357K**.
2016	Named **Fellow of the Meteoritical Society**.
2014-2017	**Collaborator of awarded NASA grant** for "Chondritic materials as products of asteroidal processing" (PI Alan Rubin, Subaward PI Alex Ruzicka, NASA Cosmochemistry program). Subaward **$90K** for PSU.
2014	**PI (with R. Hugo) of awarded PSU ERPDF grant** for "Understanding the origin of iron carbides in meteorites". **$2K**.
2013-2017	**PI of awarded NASA grant** for "The origin of large, igneous-textured inclusions in ordinary chondrites", NASA Cosmochemistry program. **$322K** for PSU.
2012-2015	**PI of awarded NASA grant** for "Acquisition of an Electron Back Scatter Detector for the Zeiss Sigma SEM at Portland State University". NASA Planetary Major Equipment program. **$132K**.
2010-2015	**PI of awarded NASA grant** for "Shock histories of chondrites as revealed by combined microstructural (TEM), petrographic, and X-ray microtomography (μCT) analysis". NASA Origins of Solar Systems program. **$123K**.
2010-2014	**PI of awarded NASA grant** for "Meteorites on the Road, II: Expanding NASA Outreach in the Pacific Northwest". NASA Supplemental Outreach program. **$30K**.
2010	**Co-I of submitted NASA grant** (declined) for "Primary Amines and the Magnetite-associated Delta ^{17}O from Primitive Chondrites", P.I. Radu Popa, **$353K** for PSU (3 years, NASA Cosmochemistry program)
2009	**PI of awarded PSU Faculty Development Grant** for "Shock and Awe: Collisions and Heating in the Early Solar System". **$11K**.
2009-2011	**Collaborator of awarded NASA grant** for "Constraints on Solar-System Processes from Geochemical Studies of Asteroidal and Nebular Materials" (PI Alan Rubin, NASA Cosmochemistry program)
2009	**Outstanding Researcher Award** in Earth Sciences from the Columbia-Willamette Chapter of Sigma Xi.

2008 **Co-I of submitted NASA Astrobiology Institute (NAI) Grant** (declined) for "Astrogeochemistry at PEARL: From molecules to Microbes… and back", $7.7M total, **$4.7M** for PSU (5 years, PI Niles Lehman).

2006-2010 **PI of awarded NASA Grant** for "Meteorites on the road: Taking meteorite science to rural communities". NASA Supplemental Education/Public Outreach program. **$35K**.

2006-2010 **PI of awarded NASA Grant** for "Evolution of primordial matter: Aggregational olivine inclusions in carbonaceous and ordinary chondrites", NASA Origins of Solar Systems program. **$132K**.

2006 **Co-I of NASA Discovery Program Proposal Authorization** for "The Hera Mission: Near-Earth Asteroid Sample Return" (PI Derek Sears) (not selected for authorization).

2005 **PI of awarded PSU Faculty Development Grant** for "Laying the groundwork for a vibrant program in meteorite science at PSU". **$10K**.

2004-2007 **PI of awarded NASA Grant** for "Public outreach and education with meteorites involving a museum exhibit, website, and teacher workshops". NASA Supplemental Education/Public Outreach program. **$37K**.

2003-2007 **PI of awarded NASA Grant** for "From grains to chondrules and beyond: The origin of 'relict' olivine grains in ordinary chondrites". NASA Origins of Solar Systems program. **$99K**.

2003-2007 **PI of awarded NASA Grant** for "Asteroidal differentiation: Origin and petrogenesis of silicate inclusions in iron meteorites". NASA Cosmochemistry program. **$165K**.

2002 **PI of awarded PSU Faculty Development Grant** for "Trace-element study of silicates in an iron meteorite: Seed money for a research program". **$10K**.

2001 **PI of Oregon Space Grant** (NASA) for "Microbial colonization in meteorites: A proof-of-concept study". **$7K**.

1996-1999 **Co-I**, NASA research proposals, with P.I. Lawrence Taylor (1996, 1997, 1998, 1999).

1996 **Recipient of the Gerard P. Kuiper Memorial Award** from the Department of Planetary Sciences, University of Arizona, for exceptional achievement in graduate studies.

1986-1988 **Graduate Student Scholarship**, University of Arizona.

1982 **NASA Planetary Geology Undergraduate Research Fellow**.

Teaching, Mentoring and Curricular Achievements

2025 **Faculty Advisor** to PSU undergraduate student Dipper Pierce for Honors Thesis research (topic: first analysis of a sample that was identified as possibly being from a new chondrite group).

2025 **Assisted student** Nico Morelli in undergraduate research (B.S. Geology student and McNair Scholar, with advisor Melinda Hutson, project: meteorite classification).

2025 **Faculty Advisor** to St. Mary's Academy high school student Ashley Reed (project: meteorite classification).

2023-current **Faculty Thesis Advisor** to M.S. Geology student Vincent Mugica (thesis topic: shock melt veins in chondrites).

2023-2025 **Faculty Thesis Advisor** to MS. Geology student Benjamin Agyemang (thesis: "Ureilite meteorite petrofabrics: Evolution and formation deformational conditions", awarded August 2025).

2023-2024 **Faculty Advisor** to PSU undergraduate students (B.S. Geology) Nico

	Morelli, Dipper Pierce, Jennifer Laster, and St. Mary's Academy high school student Felix (Alice) Hollett-Brown (project: meteorite classification).
2022-2024	**Faculty Thesis Advisor** to M.S. Geology student George Anim (thesis: "Shock effects including maskelynite formation in three shergottite meteorites from Mars", awarded March 2025).
2022-2023	**Faculty Advisor** to PSU undergraduate students (B.S. Geology) Ashley Morelli, Kristin Malacara, Lea Young, and Portland Community College undergraduate student Gena Nelson (Associate degree) (project: meteorite classification).
2021-current	**Faculty Thesis Advisor** to Ph.D. Earth, Environment & Society student Daniel Sheikh (thesis topic: Petrology of lunar highland lithologies).
2021-2022	**Faculty Advisor** to PSU undergraduate students (B.S. Geology) Lichen McHenry and Hayden Babst and PSU post-baccalaureate (Geology) student Nicole Bintliff (project: meteorite classification).
2020-2021	**Faculty Thesis Advisor** to Ph.D. Earth, Environment & Society student Michael Ream (thesis topic: Evaluation of shock compaction heating as a heat source in weakly-metamorphosed ordinary chondrites).
2020-2022	**Faculty Thesis Advisor** to M.S. Geology student James Frye (thesis: "Electron backscatter diffraction analysis of olivine in ureilite meteorites: Evaluation of the partially magmatic catastrophic disruption model of the Ureilite Parent Body (UPB) high-temperature deformation of ureilite achondrites", awarded June 2022).
2019-2022	**Led development of the Professional Science Master's in Applied Geosciences**, a new degree at PSU (with Ashley Streig). The degree was formally approved in 2022.
2018-2021	**Faculty Thesis Advisor** to M.S. Geology student Kimberly Maccini (thesis: "Characterization and interpretation of feldspathic chromite assemblages (FCAs) in four ordinary chondrites: An Electron Backscatter Diffraction Study of chromite-plagioclase assemblages in ordinary chondrites", awarded December 2021).
2017-2019	**Faculty Thesis Advisor** to M.S. Geology student Secana Goudy (thesis: "Assessment of cluster chondrite accretion temperature using electron backscatter diffraction and implications for chondrule formation models", awarded July 2019).
2014-2019	**Faculty Thesis Advisor** to M.S. Geology student Karla Farley (thesis: "Distribution and origin of carbides in ordinary chondrites", awarded June 2019).
2018-2019	**Faculty Advisor** to B.S. Geology Honors student Robert Kostynick (thesis: "Bleached chondrules and the possible influence of aqueous alteration", awarded June 2019).
2015-2019	**Faculty Thesis Advisor** to M.S. Geology student Michael Ream (thesis: "Geothermometry of H6 and L6 chondrites and the relationship between impact processing and retrograde metamorphism", awarded June 2019).
2019	**New course developed**, "Frontiers of Planetary Science" (G410-510, now G457/557), and taught for first time at PSU.
2017-2018	**Member of Ph.D. Advisory Committee** for Emily Cahoon.
2017-2018	**Faculty Advisor** to B.S. Geology Student Kyle Bocian (research topic: classification of two eucrite meteorites).
2014-2017	**Faculty Thesis Advisor** to Ph.D. Earth, Environment & Society student Kristy Schepker (research topic: Origins of large Igneous inclusions in

ordinary chondrites based on trace element compositions).

2017 **Faculty Advisor** to B.S. Geology student Kirben Smoody (research topic: classification of three ordinary chondrites).

2017 **Faculty Advisor** to B.S. Geology student Mountain Barber (research topic: classification of a ureilite).

2016-2017 **Faculty Advisor** to B.S. Geology students Monique Soiseth and Amy Seufert (topic: classification of two veined and heavily shocked ordinary chondrites)

2016 **Member of M.S. Thesis Committee** for Eric Schaeffer.

2016 **Reading and Conference**, "Mars Surface Exploration", B.S. students Peter Buco, Alex Narath, Monique Soiseth, Amy Seufert, Travis Shiprack, Abram Morphew (Spring 2016).

2016 **Faculty Advisor** to Westview High School student Nishit Mishra (research topic: classification of two eucrite meteorites").

2010-2015 **Faculty Advisor** to B.S. Geology student and graduate Ryan Brown.

2012-2014 **Faculty Advisor** to University Honors student Karla Farley (thesis: "Classification of four meteorite samples", presented May 2014).

2009-2014 **Faculty Advisor** to M.S. Geology student Kristy Schepker (thesis: "Complex thermal histories of L melt breccias NWA 5964 and NWA 6580", awarded June 2014).

2011-2014 **Faculty Advisor** to M.S. Geology student Katherine Armstrong (thesis: "Chemical and petrographic survey of large, igneous-textured inclusions in ordinary chondrites", awarded December 2014).

2009-2014 **Faculty Advisor** to M.S. Geology student T.J. Schepker (research topic: Evaluating the relative importance of metamorphism in affecting mineral compositions in eucrite meteorites).

2014 **Faculty Advisor** to B.S. student John Dandridge (research topic: using scanning electron microscopy for meteorite classification).

2012 **Reading and Conference**, "Io", B.S. students Ashley Sladky and Lisa Jackson (Spring 2012).

2010-2011 **Faculty Advisor** to McNair Scholar & Oregon Space Grant Undergraduate Researcher Niina Jamsja (B.S. student). Topic: Petrographic and microchemical study of two R chondrites.

2009-2011 **Member of Ph.D. Advisory Committee** for Arron Steiner.

2011 **Member of Ph.D. Advisory Committee** for Susan Wacaster.

2010 **Reading and Conference**, "Exoplanets", M.S. students James Mueller, Kristy Hauver, T.J. Schepker (Fall 2010).

2008-2010 **Faculty Advisor** to B.S. student Kristy Hauver for PSU Scholarly and Creative Activity Grant.

2009 **M.S. Thesis Committee** for Hollie Oakes-Miller. Thesis: "Biosignature preservation in phototrophic streamer mats from a silica depositing hot spring, Queens laundry, Yellowstone National Park"

2009 **Reading and Conference**, "Titan", B.S. students Don Miller and Glen Foster (Spring 2009).

2009 **M.S. Thesis Defense Committee** for Aspen Gillam. Thesis: "Andesites/dacites of the oceanic Narcondam volcano, Andaman Sea: Modification of tholeiitic arc basalts by crustal contamination and amphibole-dominated fractionation (presented May 2009).

2008-2009 **Chair of Ph.D. Advisory Committee** for Tessa Harden.

2008-2009 **Thesis Faculty Advisor** to B.S. Geology student T.J. Schepker. (Geology Honors Thesis: "X-ray diffraction as a tool for chondrite

	classification", awarded June 2009).
2008	**Reading and Conference**, B.S. students Kristy Hauver and Niina Jamsja (Fall 2008).
2008	**Faculty Advisor** to McNair Scholar & B.S. student Kristy Hauver.
2006-2008	**Chair of Ph.D. Advisory Committee** for Hollie Oakes-Miller (Summer 2006-Winter 2008).
2006-2008	**Member of Ph.D. Advisory Committee** for Frank Granshaw (Fall 2006-Spring 2008).
2007	**Faculty Advisor** to B.S. student T.S. Schepker for Scholarly and Creative Activity Grant.
2006	**Reading and Conference**, B.S. students Julie Ryan and Robert McGown (Spring 2006).
2005	**Reading and Conference**, M.S. student Douglas McCarty (Winter 2005).
2005	**Faculty Advisor** to visiting Harvey Mudd B.S. student Randy Goosen. RUI Project: SEM studies of basaltic, possibly meteoritic, samples. (Summer 2005).
2005	**Thesis Faculty Advisor** to B.S. Honors Thesis student Karen Carroll. Thesis: "Initial petrologic study and classification of three northwest African meteorites" (presented June 2005).
2004	**New course developed**, "Meteorites" (G446-546), and taught for first time at PSU.
2004	**Member of M.S. Thesis Committee** for Melinda Woods. Thesis: "Compositional and mineralogical relationships between mafic inclusions and host lavas as key to andesite petrogenesis at Mount Hood volcano Oregon" (presented July 2004).
2004	**Reading and Conference**, Karen Carroll (Fall 2004).
2004	**Minor in Space and Planetary Sciences approved by university** (contributed to effort led by M. Cummings).
2003-2004	**Thesis Faculty Advisor** for M.S. Geology student Sean Greeney (thesis: "Compositional gradients in relict olivine grains: Implications for thermal histories of chondrules in Type 3 ordinary chondrites", awarded June 2004).
2002	**B.S. Honors Thesis Committee** for Sam Rigby. Thesis: "Origin of the Ce anomaly in a Green Ridge lava flow, Cascade Range, Oregon (presented June 2002).

Community Outreach Achievements

Ongoing	**Responded to public email inquiries** regarding possible meteorites, as well as fireballs and general information about meteorites.
Ongoing	**Grassroots fundraising for the Cascadia Meteorite Laboratory (CML).** Total raised for CML-related accounts between 2004-2025 approximately **$337K**, with funds earmarked for the E.F. Lange Endowment (meteorite curation), for a separate CML PSU Foundation account, and for a previous CML Geology Department account. Median individual contribution ~$150.
2025	**Guest radio appearance** on PDX-Earth Link show, covering the potentially Earth-colliding asteroid 2024YR4 and related topics. Interview appears between 35-53 minutes in the following 1-hour mp3 file: https://drive.google.com/file/d/1rYMGucTkTk_mKYdI0TDKSL5COGfSxGBa/view?usp=sharing
2024	**Public lecture** to Southwest Oregon Community College, Coos Bay, OR,

"Expecting the unexpected: Astro-serendipity at the Cascadia Meteorite Laboratory".

2024 **Interviewed for Universe Today article**, "'Meteorites: Why study them? What can they teach us about finding life on Earth" (April 2024).

2023 **Guest radio appearance** on 15-minute KPSU program PDX-Earth Link, covering the Geminid meteor shower.

2022 **Public lecture** to the Southern Washington Mineralogical Society, Kelso, WA, "Meteorite space invaders". Co-presentation made with Ph.D. student Daniel Sheikh.

2020 **Public lecture** to Coriba PSU Geology club, "Meteorites: Misconceptions, Reality, and Their Value".

2019 **Public lecture** to Evergreen Aviation and Space Museum, July 20, 2019, 50th Anniversary of the Apollo 11 landing, "The legacy of Apollo: What we've learned about the Moon and our place in the cosmos".

2017 **Public lecture** for OMSI Science Pub, "Meteorites: Misconceptions, Reality, and Their Value".

2016 **Cascadia Meteorite Lab personnel Alex Ruzicka and Melinda Hutson were featured** in a September 12 Channel 2 KATU newscast about the OSIRIS-REx launch, and mentioned in a September 16 Wall Street Journal article about public meteorite specimen identification

2015 **Public lecture** to the Geological Society of the Oregon Country, "Meteorite Discoveries: Greatest Hits".

2013 **Popular press article published** about Alex Ruzicka. Shepard, D. (2013) "Passionate professors pass on inspiration", *The Daily Vanguard* (PSU student newspaper), May 15, 2013.

2012 **Guest radio appearance** on the 1 hour KPSU program "Faculty Friday" (November 2012).

2012 **Popular press article published** about the Cascadia Meteorite Laboratory. G. Shaw (2012), "PSU's public meteorite lab", *The Daily Vanguard* (PSU student newspaper), July 17, 2012.

2010 **Contributed to formal press release**, "Oregon's sixth meteorite, named Fitzwater Pass, is discovered to be a rare type of iron", Portland State University (September 27, 2010).

2010 **Popular press articles published** about Cascadia Meteorite Laboratory and Fitzwater Pass meteorite, including front page *Oregonian* story by Richard Cockle (September 21, 2010).

2010 **Contributed to formal press release**, "Portland State University researchers report the discovery of Morrow County, Oregon's fifth official meteorite", Portland State University (May 29, 2010).

2009 **Appeared on TV** (local, regional, and national news feeds) in story about donation of new Texas meteorite (Ash Creek) to Cascadia Meteorite Laboratory (March 5, 2009)

2008 **Contributed to formal press release**, "Meteorite bounty on track for Canadian record—Thousands of space rocks to yield clues about asteroid from November 20 impact", University of Calgary (Dec. 22, 2008). This press-release included mention of work on a new meteorite by the Cascadia Meteorite Laboratory.

2008 **Two popular press articles published** about Cascadia Meteorite Laboratory, including [1] KGW Staff (2008) "PSU prof still hunting for NW meteorite site", March 10, 2008, http://www.kgw.com/lifestyle/stories/kgw_030708_news_meteor_hunt.30731785.html and [2] [2] Chown, K. (2008) "In Search of Meteorites", *The Daily Vanguard* (PSU student newspaper), March 7, 2008; updated on-line July 14, 2008.

2007 **Showed meteorite display** and information about the Cascadia Meteorite Laboratory at the NSF Grants Workshop hosted at PSU (November, 2007).

2007 **Contributed to a successful grant proposal** made by the Libraries of Eastern Oregon (LEO) entitled "A Sense of Place" (February, 2007), which helped fund meteorite outreach efforts for Cascadia Meteorite Laboratory member Dick Pugh.

2007 **Presentation** to teachers at Gregory Heights Middle School, Portland Public Schools, for participation in Education/Public Outreach activities (with D. Pugh, February, 2007).

2007 **Presentation** to 3rd-6th graders for the Talented-and-Gifted (TAG) program, Portland Public Schools (January, 2007).

2006 **Presentation** to 7th graders from Sellwood School, Portland Public Schools (with D. Pugh, December, 2006).

2006 **Participated in NASA Digital Learning Network Video Conference**, at Vernon Elementary School, Portland (December, 2006).

2005 **E.F. Lange Endowment established at PSU** (supported an effort led by CML member Dick Pugh). This PSU Foundation account supports meteorite curation at PSU (September, 2005).

2005 **Three popular press articles published** about the Cascadia Meteorite Laboratory, including [1] Chenoweth, A. (2005) A souvenir from space. *The DailyVanguard*, Portland State University, May 12, 2005, pp. 1-2. [2] Meteor now believed to be the demise of dinosaurs. *The Daily Vanguard*, Portland State University, May 12, 2005, p. 2. [3] Russel, L. (2005) Out of this world. *Lake Oswego/West Linn Neighbors*, Jan. 6, 2005, pp. B1-B2.

2004 **Appeared on TV** in news story about donation of the Salem meteorite to the Cascadia Meteorite Laboratory by James P. Price, the police officer who picked up the rock in 1981.

2004 **Three popular press articles published** about the Cascadia Meteorite Laboratory, including [1] Hill, R.L. (2004) "Mad about meteorites". *Oregonian*, Dec. 8, 2004, pp. E11-E12. [2] "A rock collection from out of this world". *PSU Magazine*, Fall 2004, p. 4. and [3] Jarreau-Danner, B. (2004) "Scientists hope to find first Eastern Oregon meteorite". *Destination Harney County 2004*, p. 77.

2004-2014 **Developed and presented public exhibit on meteorites and impact phenomena,** for the Rice Northwest Museum of Rocks and Minerals in Hillsboro, OR (with M. Hutson). In this exhibit, meteorite specimens loaned to the museum from the Cascadia Meteorite Laboratory collection were paired with information panels. The display was set up near the museum entrance and was a destination for school field trips. After the loaned samples were returned to the lab, the owners of the museum asked to keep the display panels so they could pair them with meteorite samples the Rice Museum purchased.

2004 **Public lecture** to Columbia-Willamette Chapter of Sigma-Xi, PSU (with M. Hutson and D. Pugh, November, 2004)

2004 **Conducted workshop for Portland Public Schools teachers**, Portland (June, 2004).

2004 **Public lecture** to the Rose City Astronomers at Oregon Museum of Science and Industry (OMSI), Portland, OR (May, 2004)

2004 **Appeared on TV** (local, regional, and national newsfeeds) to discuss President Bush's Moon Exploration Initiative (January, 2004).

Significant Professional Development Activities

2005-2007 **Science Team member for Hera**, a proposed NASA asteroid sample return mission.

2003-Current **Director & co-founder (with M. Hutson and D. Pugh) of the Cascadia Meteorite Laboratory (CML)** at PSU. As part of a grass roots effort, the lab built a meteorite collection from one individual at PSU in 2003 and grew it to around 1900 different meteorites and impactites as of September 2025, making it one of the largest collections in the U.S. and world. It is an important resource for researchers at all levels and for outreach activities.

Governance and Other Professional Related Governancy Activities for the University, College, Department

2024-current **Member, Promotion and Tenure Advisory Committee** for the College of Liberal Arts & Sciences. (On sabbatical leave until Spring, 2026.)

2024 **Chair, Promotion and Tenure Committee (J. Fink PTR)**, Department of Geology, PSU.

2024 **Member, Promotion and Tenure Committee** (R. Perkins PTR), Department of Geology, PSU.

2022-2024 **Member of the ad hoc Committee of Graduate Coordinators for the School of Earth, Environment, and Society (SEES)**. This committee deals with issues related to graduate students in the new School.

2021-2022 **Lead point-of-contact (together with Andrea Goforth) for the ad hoc CEMN Re-imagined Working Group**, consisting of 14 faculty (Biology, Chemistry, Geology, Physics) plus Lab Manager Greg Baty, who wrote 3 internal proposals to prevent the closing of the Center for Electron Microscopy and Nanofabrication at PSU. This effort was ultimately successful and resulted in the CEMN moving to Cramer Hall.

2020 **Chair, Promotion and Tenure Committee (K. Cruikshank Emeritus)**, Department of Geology, PSU.

2019-2025 **Graduate Student Coordinator** for the Geology Department. This job entailed: 1) handling applications to the graduate program and managing the review process for graduate applications, communicating decisions to applicants and the university, and processing application files in the Slate application system; 2) arranging orientation sessions for new students; 3) managing TA assignments, and making shared files available to TAs, 4) advising graduate students on degree issues and making DARS exceptions for them, and 5) managing graduate student records for the Geology department.

2019-2024 **Member, Curriculum Committee**, College of Liberal Arts & Sciences. In this position, I represented Geology in the Curriculum Committee and voted on curricular proposals from STEM departments.

2019 **Chair, Promotion and Tenure Committee (J. Fink PTR)**, Department of Geology, PSU.

2019 **Member, Promotion and Tenure Committee (J. Bershaw tenure)**, Department of Geology, PSU.

2019 **Member, Promotion and Tenure Committee (R. Perkins PTR),** Department of Geology, PSU.

2018 **Member, Promotion and Tenure Committee (A. Booth tenure)**, Department of Geology, PSU.

2018	**Chair, Promotion and Tenure Committee (A. Fountain Emeritus)**, Department of Geology, PSU.
2018	**Member, Promotion and Tenure Committee (A. Streig tenure)**, Department of Geology, PSU.
2017	**Chair, Promotion and Tenure Committee (J. Bershaw tenure and N. Price tenure)**, Department of Geology, PSU.
2016	Member, Ad Hoc Committee, for **Academic Program Review of the Department of Geology**, assisted in report writing (with Chair M. Streck, D. Percy), Department of Geology, PSU.
2016	Member, **Admissions Committee for the School of the Environment**, PSU.
2016	**Chair, Promotion and Tenure Committee (K. Cruikshank PTR)**, Department of Geology, PSU.
2016	**Member, Promotion and Tenure Committee (A. Fountain PTR)**, Department of Geology, PSU.
2015-2017	**Graduate Council**, PSU.
2014-2015	**Chair, Promotion and Tenure Committee (R. Perkins tenure)**, Department of Geology, PSU.
2010-2012	Member, **Curriculum Committee for the School of the Environment**, PSU.
2010-2012	Member, **UNST Council**, PSU.
2007-2011	**Chair, Ad Hoc Website Committee,** Department of Geology; led effort to create new website for the department, one of the first at PSU to use new Drupal management system.
2004-2010	**Faculty Development Committee**, PSU.
2007	**Core faculty at PSU** involved in internal proposal submitted to university entitled, "PSU Strategic Initiative—Astrobiology and Planetary Science Institute" for interdepartmental entity at PSU (February 2007).
2004-2005	**Faculty Grievance Committee**, PSU.

Professional Service

Ongoing	**Peer Reviewer** of journal articles submitted to *Meteoritics and Planetary Science*; *Geochimica et Cosmochimica*; *Earth and Planetary Science Letters; Icarus; Science; Astrobiology; Earth, Moon and Planets; Geoscience Frontiers*; *Journal of Geophysical Research—Planets, Planetary Science Journal*. The number of peer reviews averaged ~4-5 articles per year between 2001-2008, and dropped to ~3-4 articles per year in the 2008-2021 period while an Associate Editor for *Meteoritics & Planetary Science*. Currently I try to limit myself to ~3 articles per year.
2023-2024	**International Thesis Reviewer** for a Ph.D. student in Australia.
2021-2023	**Member (2021-2022)** and **Chair (2023) of the McKay Committee** of the Meteoritical Society. This committee makes recommendations for student presentation awards (McKay Award, and Wiley Award). The Chair's role is to set up the review process and make recommendations to the Council of the Meteoritical Society.
2019-2022	**Member (2019-2020)** and **Chair (2021-2022) of the Joint Publication Committee** (JPC) of the Geochemical Society and the Meteoritical Society. Among other tasks, this committee provides input on the naming of Associate Editors for the journal *Geochimica et Cosmochimica Acta.*
2015	**Program Committee**, Annual Meeting of the Meteoritical Society,

	Berkeley, CA (Spring-Summer, 2015). The main task of this committee was to set up the conference program.
2015	**Reviewer** for research achievements of a nominee for the Indian National Science Academy, Dehli, India (Spring 2015).
2015	**Reviewer** for NASA Postdoctoral Program (Spring 2015).
2015	**Chair, Ad Hoc Dense Collection Area (DCA) Subcommittee**, Nomenclature Committee, Meteoritical Society. This committee was tasked with setting up the rules for naming meteorites in dense collection areas.
2014	**Reviewer** for DFG (German) proposal (Spring, 2014).
2012-current	**Oregon Space Grant Consortium (OSGC) Affiliate Representative.** This role represents Portland State University to the Oregon Space Grant Consortium. It involves 1) participation in collective governance activities for the OSGC, 2) sending out OSGC news including award opportunities to interested faculty at PSU; and 3) signing proposals and student submissions to OSGC from PSU members.
2012-2019	**Panel Reviewer** for grant proposals, NASA Cosmochemistry program (once), NASA Origins of Solar Systems program (twice), NASA Laboratory Analysis of Returned Samples program (once), NASA Lunar Advanced Science Exploration Research program (once), NASA Emerging Worlds (once as **panel chair**).
2010-2017	**Nomenclature Committee**, Meteoritical Society (two consecutive 3-year terms starting Jan. 2010). This international committee is a workhorse of the Meteoritical Society, which formally approves the names of new meteorites, an important step in making meteorites available for research as no publications can use unapproved meteorite names.
2010-2011	**Ad Hoc Search Committee,** for Editor of the Meteoritical Bulletin, Nomenclature Committee, Meteoritical Society.
2009-2014	**Member (2009-2011)** and **Chair (2012-2014) of the Membership Committee**, Meteoritical Society. This committee deals with membership issues for the Society, with one of the larger tasks including sending personalized messages to members for membership renewals. As Chair I also led the effort to redesign the public web pages for the Meteoritical Society.
2009	**Bid for PSU to host the 2013 Annual Meeting of the Meteoritical Society** made to the Council of the Meteoritical Society. Portland lost out to Edmonton, Alberta.
2008-2021	**Associate Editor**, *Meteoritics and Planetary Science*. Handled on average ~8 papers per year (approximately 112 papers over more than a decade) as Associate Editor (AE), each of which I reviewed in addition to making recommendations to the Editor for acceptance, rejection, or revision. For this journal, AEs are the principal gatekeepers for papers submitted to the journal.
2006	**Reviewer** for two book chapters (Meteorites in the Early Solar System II).
2005-Current	**Reviewer** for NASA Lunar Advanced Science Exploration Research program, Cosmochemistry program, Origins of Solar Systems program, Planetary Geology & Geophysics program, NASA EPOESS (Education/Outreach) program, NASA Postdoctoral program, NASA Emerging Worlds program.
2002-2004	**Program Committee**, Lunar and Planetary Science Conference. The main task of this committee was to set up the program for this large

	international conference.
2001-2008	**Board Member**, Columbia-Willamette Chapter of Sigma Xi, the scientific research society.
2001-2002	**Board of Editors**, Astrobiology.
1997-Current	**Session Co-Chair** in science conferences (Lunar and Planetary Science Conference, Annual Meeting of the Meteoritical Society). Examples: (a) 49th Lunar and Planetary Science Conference, 2018, session: "Chondrites and their components II: metal and organics"; (b) 45th Lunar and Planetary Science Conference, 2014, session: "Chondrite parent body processes"; (c) 74th Annual Meeting of the Meteoritical Society, 2011, session: "Shock processes"; (d) 41st Lunar and Planetary Science Conference, 2010, session: "Formation of the building blocks of planetary bodies".

Membership in Professional Societies

Member of the Meteoritical Society, Sigma Xi.

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[Both websites designed and maintained by Alex Ruzicka]