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Professional Preparation

United States Marine Corps - Active Duty 1987 - 1991
Kent State University - Geology - Bachelor of Science December 1995
University of New Mexico - Geology - Master of Science December 1998
University of New Mexico - Geology - Doctor of Philosophy December 2005

Appointments

2011-present:

Associate Professor of Geology, New Mexico Highlands University
Consulting Geologist, Monte Vista Petroleum Exploration Company (2004 - present)

2006-2011:

Assistant Professor of Geology, New Mexico Highlands University

2005 - 2006:

Visiting Assistant Professor, The Colorado College, Department of Geology

2001- 2005:

Ph.D. candidate, research assistant, assistant Paleomagnetism lab manager E&PS
President E&PS Graduate Student Association 2001-2003

1998-2001:

Exploration/Production Geoscientist ExxonMobil Corporation, Houston, TX

1996-1998:

Research and Teaching Assistant E&PS; Contract Geologist, NM Bureau of Geology

Grants, Honors and Awards

Pending

- Czech Science Foundation - **Pending 75,345 €**
- Natural Environment Research Council (NERC) - **Pending 976,345 £**
- NSF 12-551 - International Research Experiences for Students (IRES) - **Pending \$249,122**
- NSF 15-516 - EAR - Instrumentation & Facilities - **Pending \$43,642**

Awarded

- NSF 14-606 - DMR - PREM - **\$3,388,925 Awarded**
- National Geographic Society Grants-in-aid-of Research - **Awarded \$19,750**
- NSF Catalyzing New International Collaborations, **Awarded \$27,106**
- NSF EAR Tectonics: **Awarded \$171,836**
- NSF Major Research Instrumentation Program: **Awarded \$50,156**
- United States Department of Agriculture (USDA): **Awarded \$299,789**
- NERC: The Svalbard Exemplar for Neoproterozoic Glaciations: **Awarded \$1,247,735**
- NERC: Nanoparticle Movement in Groundwaters?: **Awarded \$457,987**
- NSF Epscore Seed Grant: **Awarded \$49,997**
- NSF Sedimentary Geology and Paleobiology: **Awarded: \$333,461**
- NSF Major Research Instrumentation Program: **Awarded \$199,000**
- NSF Major Research Instrumentation Program: **Awarded \$42,489**
- National Geographic Society Grants-in-aid-of Research: **Awarded \$19,890**
- National Geographic Society Grants-in-aid-of Research: **Awarded \$20,500**
- NMHU Pino Endowment: **Awarded \$1500**
- NMHU Office of Research and Sponsored Projects: **Awarded \$31,000**

- NMHU Faculty Research Committee grants in Aid of Research: **Awarded \$16,600**
- University College Dublin International Collaborative Research Project: **Awarded \$21,200**
- NSF Fellowship Institute of Rock Magnetism Visiting Researcher Program: **Awarded \$750**
- NSF Western Alliance to Expand Student Opportunities: **Awarded \$25, 666**
- NSF International Research & Education: Planning Visit: **Awarded \$20,000**

Submitted - Declined

- EAR - 1528524 - MRI: Acquisition of a 755 Superconducting Rock Magnetometer System to Enhance the Paleomagnetic and Rock Magnetic Laboratory at New Mexico Highlands University, submitted 01/15/2015, *Declined \$506,710*
- OISE 1459971 - IRES - From the Roots to the Roof - the Anatomy of the Volcanic-Magmatic-Plutonic System, Submitted 08/18/2014, *Declined \$294,995*
- DRL 1441018 - New Mexico Math Education Partnership, submitted 03/18/2014, *Declined \$1,499,554*
- EAR 1423479 – MRI - Acquisition of a 755 Superconducting Rock Magnetometer System to Enhance the Paleomagnetic and Rock Magnetic Laboratory at New Mexico Highlands University, submitted 01/14/2014, *Declined \$493,816*
- OISE 1339094 - Catalyzing New International Collaborations: The Anatomy of Volcanic-Magmatic Systems, submitted 03/11/2013, *Declined \$45,210*
- EAR 1252541 - Acquisition of an Automatic Sediment Core Analysis System and other Minor Equipment to Enhance the Paleomagnetic and Rock Magnetic Laboratory at New Mexico Highlands University, submitted 07/18/2012, *Declined \$95,430*
- OISE -1156434 - CNIC/US-UK-France: From the Roots to the Roof: The Anatomy of Volcanic-Magmatic Systems, submitted 08/22/2011, *Declined \$99,849*
- EAR- 1119149 - Fingerprinting Ocean Floor Magnetite Production and Rare Metal Concentration in Variably Serpentinized Rocks, submitted 01/06/2011, *Declined \$350,943*
- GEO -1107616 - Collaborative Proposal: Track 2-Using Critical Transitions and Context to Enhance Diversity in Geosciences in Northern New Mexico, submitted 11/10/2010, *Declined \$339,796*
- EAR - 1054069 - Acquisition of Geochemistry Analytical Instrumentation and Sample Processing Equipment for Geologic Research at New Mexico Highlands University, submitted 07/19/2010, *Declined \$313,644*
- EAR - 0960105 - MRI-R2: Acquisition of Geochemistry Analytical Instrumentation and Rock and Mineral Processing Equipment for Investigating Ancient and Active Geologic Systems at New Mexico Highlands University, submitted 08/10/2009, *Declined \$275,891*
- EAR- 0911755 - Structural, Petrologic, and Experimental Approaches to Understanding Controls on Shallow Level Magma Emplacement and Volcanic Eruptions, submitted 12/01/2008, *Declined \$245,478*
- EAR- 838366 - Collaborative Research: Assessing Magnitude of Heterogeneous Extensional Strain in the Southern Great Basin- Constraints from AMS Fabrics in Ash-Flow Tuffs of the Caliente Caldera, submitted 06/02/2008, *Declined \$123,097*
- EAR - 0809907 - Collaborative Research: Controls on Shallow Level Magma Emplacement Mechanism, submitted 11/30/2007, *Declined \$276,132*
- EAR - 0651115 - Acquisition of Rock Magnetic - Anisotropy Equipment for Establishment of a New Environmental Rock Magnetism Laboratory for Geologic Instruction and Research, submitted 09/13/2006, *Declined \$92,576*

Software Grant

- Seismic Micro-Technology Software Grant: **Awarded \$477,158 x 2**

Awards

- Recognized as an outstanding reviewer by the Journal of Geophysical Research 2014
- NMHU 2010 **Professor of the Year**
- UNM Graduate School Research and Travel Grant, 1997, 2002, 2003, 2004, 2005
- Sigma Xi Research Grant, 1996, 2001, 2003
- Geological Society of America Student Research Grant, 1998, 2002, 2003, 2004

- Society of Independent Professional Earth Sciences (SIPES) Scholarship, 2002
- SW New Mexico section of Society for Mining & Exploration Scholarship, 2002
- GSA (Geophysics Division) Allen Cox Student Research Award 1998

Teaching Experience (Nine years at the graduate and undergraduate level)

- NMHU: Environmental Geophysics, Geographic Information System and Surveying, Depositional Environments, Hydrogeology, Ore Deposits, Structural Geology, Volcanology, Field Mapping
- Colorado College, Tectonics, Intro Geology, Geophysics, Field Methods/Instrumentation
- UNM EPS319L Geology Field Camp (1997, 1998, 2000, 2001, 2002, 2003, 2004, 2005)
- UNM EPS551L Volcanology Summer Field Camp 2004
- LSU (6 week) Geology Field Camp 2002
- UNM EPS307L Structural Geology 1998
- UNM EPS255/310 New Mexico Field Geology 1996, 1997, 2001, 2002
- UNM EPS105L Introductory Geology Lab 1996, 2005
- UNM Athletic Department Geology Tutor 2001 - 2005

Mapping Experience

15 years mapping experience, including

- Greenland: glacial deposits
- Poland: Diatremes, maar craters
- Czech Republic: Volcanic deposits
- Norway: Svalbard glacial deposits/ Leka ophiolite
- Chaîne des Puys, France
- Isle Rhum and Ross of Mull - Scotland UK
- West-central Nevada, regional ignimbrites and metamorphic rocks
- EDMAP 1:24000 South Garcia SE Quadrangle (in progress), central New Mexico
- Southern Colorado and northern New Mexico
- Southwest Utah, transition zone between BRP and Colorado Plateau
- Bohemian Massif (Poland and Czech Republic)
- Masters Thesis Research: 1:6000 scale mapping: Silver Peak Range, Nevada

Synergistic Activities

Service to the University

- Faculty Research Committee member (2015 - present)
- International Education Committee (2015 - present)
- Travel Policy Committee (2014 - present)
- Faculty Association Executive Committee, Secretary (2015 - present)
- Faculty Association Executive Committee, At-large, (2012 - 2015)
- Faculty Association Grievance Committee (2012 - present)
- HR committee (2013 - present)
- Dossier Review Committee (2012 - present)
- Indirect Cost Committee chair (2010 - present)
- Web Page Committee chair (2009 - present)
- Faculty Research Committee Chair (2006-2010).
- Organized 7th Annual New Mexico Highlands University Faculty and Student Research Day (2009).

Service to the Environmental Geology Program

- Coordinator Environmental Geology Program (2014-present)
- Facilitated and funded a website for the NMHU paleomagnetic-rock magnetic laboratory and Earth Materials laboratory (<http://www.nmhugeology.com/>)
- Environmental Geology Program Advisor (2006-present)
- Visiting Professor of Geology Search and Screen Committee Chair (2014)
- Visiting Professor of Geology Search and Screen Committee Chair (2013)
- Dean of Arts and Science Search and Screen Committee (2012)
- Forestry Assistant Professorship Search & Screen Committee Chair (2008/2011).
- Vice President Academic Affairs Search and Screen Committee

Service to the Student Body

- Hosted the 2015 Ballen Visiting Professor
- Faculty Representative Highlands University Geological Society (HUGS).
- Participate in NMHU Sigma Xi Chapter Activities.
- Participate in NMHU Society of American Foresters Student Chapter Activities.
- Provide graduate students with letters of recommendation for graduate school admission, scholarships, financial aid awards, internships, and employment opportunities.

Service to the Community

- Co-hosting New Mexico Geological Society 2015 fall field conference
- Science Fair Judge (2006 - present)
- Hosted the 2015 Ballen Visiting Professor
- Guest speaker at Santa Rosa Middle School, Geology of the Santa Rosa area and the origin of Blue Holes" (March 2008).
- Guest speaker at Juan Elliot Elementary School, "The Rock Cycle" (December 2008).
- Collaboration with Rio Rancho High School teachers and students: fundamental concepts of Earth System, Environmental Issues, Magnetism (field, lab, & classroom experiments)

Service to the Profession

- New Mexico Geological Society Member (1996 - current).
- American Geophysical Union (1996 – current)
- Geological Society of America (1994 – current)
- Society of Independent Professional Earth Sciences (SIPES) (2000 – current)
- American Association of Petroleum Geologists Associate Member (2006 – current)
- Sigma XI (2004 – current)
- Reviewer, National Science Foundation Grants (ongoing)
- Reviewer, numerous peer-reviewed journals (ongoing)
- Reviewed 50 + WAESO proposals and awarded more than \$500,000 in funds

Analytical Experience

- Paleomagnetism, rock magnetism, anisotropy magnetic susceptibility
- Exploration Geophysics – Gravity and Magnetics
- ArcGIS 10.xx; Remote Sensing (ERDAS)
- Laser probe and conventional high-precision, low blank $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology
- XRF whole-rock and trace element geochemistry
- High-precision, low blank U-Pb geochronology
- Petrographic and microstructural analysis
- Extensive field geology mapping and techniques

Peer-Reviewed Publications (* student authors)

In Review

- Magee, C., B. O'Driscoll, **M.S. Petronis**, C.T.E. Stevenson, 2015, Three-dimensional magma flow patterns in sub-volcanic sheet intrusions on Ardnamurchan, NW Scotland, *in review Geosphere*
- O'Driscoll, B., **M.S. Petronis**, A.W. Marks, C.T.E. Stevenson, P.L. Clay, W.S. McCarthy and J.W. Geissman, 2015, Magnetic fabric in laminated cumulates of the Kakortokite Layered Series of the Ilímaussaq igneous complex, southern Greenland, *in review Geochemistry, Geophysics, Geosystems*

Papers in press

- Fleming, E.J.*, D.I. Benn, C.T.E. Stevenson, **M.S. Petronis**, M.J. Hambrey, I.J. Fairchild, 2015, Glacitectonism, subglacial and glacialacustrine processes during a Neoproterozoic panglaciation, northeast Svalbard, *Sedimentology, in press*
- McCarthy W., Reavy, R.J., Stevenson, C.T., and Petronis, M.S., 2015, Late Caledonian transpression and the structural controls on pluton construction: new insights from the Omev Pluton, western Ireland, *Earth and Environmental Science Transactions of the Royal Society of Edinburgh, in press*

Peer Reviewed

1. Lindline, J., **Petronis, M.S.**, and Zebrowski, P.J., 2015, Geology of the Las Vegas Region, New Mexico Geological Society Fall Field Conference Guidebook #66, (editors) Lindline, J., Petronis, M.S., and Zebrowski, P.J., 312 pages, ISBN: 9781585461028

2. Benn, D.I., Dumas, I., Fairchild, I.J., Fleming, E.J.*, Hambrey, J.M., Le Hir, G., McMillan, E.A., **Petronis, M.S.**, Ramstein, G. and Stevenson, C.T.E., 2015, Orbitally forced climatic fluctuations in snowball earth: geological evidence and model results. *Nature Geoscience*, doi:10.1038/ngeo2502
3. Rapprich, V. and **Petronis, M.S.**, 2015, 14 million years of the volcanic history of the Doupovské hory Volcanic Complex, 13th Meeting of the Central European Tectonic Group, Field Guide Book, (editors) Ondrej Lexa , Vít Peřestý, Petr Jeřábek, Pavlína Hasalová, Martin Racek, Vladislav Rapprich & Michael Petronis, Czech Geological Survey Publications, 42 pages, ISBN: 978-80-7075-881-6
4. McCarthy, D.J.*, Meere, P.A., **Petronis, M.S.**, 2015, A comparison of the effectiveness of clast based finite strain analysis techniques to AMS in sandstones from the Sevier Thrust Belt, Wyoming, *Tectonophysics*, Volume 639, Pages 68-81
5. McCarthy, W., **Petronis, M.S.**, Reavy, R.J., and Steveson, C.T., 2015, Distinguishing diapirs from inflated plutons; an integrated rock magnetic, magnetic fabric and structural study on the Roundstone Pluton, western Ireland, *Journal of the Geological Society*, v. 172:550-565, first published on June 26, 2015, doi:10.1144/jgs2014-067
6. **Petronis, M.S.**, Castillo, G.*, Lindline, J., Zebrowski, J., McCarthy, W., and Lemen, D.*, McIntosh, W.C., 2015, Paleomagnetic, Anisotropy of Magnetic Susceptibility, and Geochronologic Data from the Buena Vista Intrusion, North-Central New Mexico, in *New Mexico Geological Society Fall Field Conference Guidebook #66 - Geology of the Las Vegas Region*, (editors) Lindline, J., Petronis, M.S., and Zebrowski, P.J., 312 pages, ISBN: 9781585461028
7. **Petronis, M.S.**, Brister, A.R.*, Rapprich, V., van Wyk de Vries, B., Lindline, J., and Mišurec, J., 2015, Emplacement history of the Trosky basanitic volcano (Czech Republic): paleomagnetic, rock magnetic, petrologic, and anisotropy of magnetic susceptibility evidence for lingering growth of a monogenetic volcano, Accepted for publication in the *Journal of Geosciences*, October 2015.
8. Delcamp, A*., **M.S Petronis**, V.R. Troll, 2014, Discerning magmatic flow patterns in shallow-level basaltic dykes from the North-East Rift Zone of Tenerife, Spain using the Anisotropy of Magnetic Susceptibility (AMS) technique, *Geological Society of London Special Volume on Volcanoes and Magnetism*, doi 10.1144/SP396.2
9. **Petronis, M.S.**, D. K. Holm, J.W. Geissman, B.J. Arnold*, D.B. Hacker, 2014, Paleomagnetic Results from the Eastern Caliente - Enterprise Zone, SW Utah: Implications for Initiation of a Major Miocene Transfer Zone, *Geosphere*, doi 10.1130/GES00834.
10. Fleming, E.J.*, H Lovell, CTE Stevenson, **M.S. Petronis**, DI Benn, MJ Hambrey, Fairchild, I.J., 2013, Magnetic fabrics in the basal ice of a surge-type glacier, *Journal of Geophysical Research: Earth Surface* 118 (4), 2263-2278
11. **Petronis, M.S.** and O'Driscoll, B., 2013, Emplacement of the early Miocene Pinto Peak intrusion, southwest Utah, USA, *Geochemistry, Geophysics, Geosystems*, DOI: 10.1002/2013GC004930
12. **Petronis, M.S.**, A. Delcamp*, B. van Wyk de Vries, 2013, Structures, Anisotropy of Magnetic Susceptibility and Paleomagnetic Data bearing on Magma Emplacement at Lemptegy Volcano, Chaîne Des Puys, France, *Bulletin of Volcanology*, 75:753, DOI 10.1007/s00445-013-0753-y
13. Fleming, E.J.*, C. T. Stevenson and **M. S. Petronis**, 2013, New insights into the deformation of a Middle Pleistocene glaciotectionised sequence in Norfolk, England through magnetic and structural analysis, *Proceedings of the Geologists' Association* 124 (2013), pp. 834-854, DOI information: 10.1016/j.pgeola.2012.11.004
14. Magee, C*., B. O'Driscoll, **M.S. Petronis**, C.T.E. Stevenson, P.L. Clay & R. Gertisser, 2013, Magma Rheology Variations in Sheet Intrusions of the Ardnamurchan Central Complex (Scotland) Inferred from Gabbro Inclusion Characteristics, *Journal of Petrology*, 54(1): 75-102, DOI: 10.1093/petrology/egs064
15. **Petronis, M.S.**, B. O'Driscoll, C.T.E. Stevenson, R.J. Reavy, 2012, Regional structural controls on the emplacement of the Ross of Mull Granite, NW Scotland, *Geological Society of American Bulletin*, DOI: 10.1130/B30362.1, v. 124 no. 5-6 p. 906-927.
16. Magee, C*., Stevenson, C.T.E., O'Driscoll, B., and **Petronis, M.S.**, 2012, Local and regional controls on the lateral emplacement of the Ben Hiant dolerite intrusion, Ardnamurchan (NW Scotland). *Journal of Structural Geology*, 39, 66-82, DOI:10.1016/j.jsg.2012.03.005.
17. Delcamp A*., Troll V.R., van Wyk de Vries B., Carracedo J.C., **Petronis M.S.**, Pérez-Torrado F. and Deegan F.M, 2012, Dykes and structures of the NE rift of Tenerife, Canary Islands: a record of stabilisation and destabilisation of ocean island rift zones. *Bulletin of Volcanology* 74: 963-980, DOI: 10.1007/s00445-012-0577-1

18. Martinez, E., J. Lindline, **M.S. Petronis**, M. Pilotti, 2011, Effectiveness of a Science Agricultural Summer Experience (SASE) in Recruiting Students to Natural Resources Management, *Journal of Science Education and Technology* (25 December 2011), pp. 1-9. doi:10.1007/s10956-011-9359-3
19. Lindline, J., **M.S. Petronis**, R. Pitrucha*, and S. Sena*, 2011, La Cieneguilla Basanites, Santa Fe County: Monitors Of Early Rio Grande Rift Magmatism, *in* D.J. Koning, K.E. Karlstrom, S.A. Kelley, V.W. Lueth, S.B. Aby, [editors], *Geology of the Tusas Mountains and Ojo Caliente*, 418 pages.
20. Garcia*, L., **M.S. Petronis**, D. Koning, M. Zimmerer*, and N. Dunbar, 2011, Structural, anisotropy of magnetic susceptibility, Geochemistry, and paleomagnetic investigations of a steeply Dipping, welded tuff (amalia tuff) south of Petaca, New Mexico, *in* D.J. Koning, K.E. Karlstrom, S.A. Kelley, V.W. Lueth, S.B. Aby, [editors], *Geology of the Tusas Mountains and Ojo Caliente*, 418 pages.
21. **Petronis, M.S.** and Lindline, J., 2011, Paleomagnetic and geochemical data from the late Miocene Lobato Formation adjacent to the Santa Clara fault system, Chili quadrangle, Rio Arriba County, New Mexico, *New Mexico Geology*, v. 33, no. 2, pp. 27-39.
22. **Petronis, M.S.**, O'Driscoll, B., and Lindline, J., 2010, Rock Magnetic and Petrologic Data from the Western Granite, Isle of Rum NW Scotland: Implications for Post-Emplacement Alteration of a Shallow Igneous Intrusion, *Geochem. Geophys. Geosyst.*, 12(1), doi: 10.1029/2010GC003246.
23. Delcamp, A*. , **M.S. Petronis**, J.C. Carracedo, V.R. Troll, B. van Wyk de Vries, 2010, Vertical axis rotation of the upper portions of the north-east rift of Tenerife Island inferred from paleomagnetic data, *Tectonophysics*, ISSN 0040-1951, DOI: 10.1016/j.tecto.2010.04.020
24. O'Driscoll, B. and **Petronis, M.S.**, 2009, Oxide mineral formation during the serpentinization of a Cr spinel seam: Insights from rock magnetic experiments, *Geochemistry, Geophysics, Geosystems*, 30 January 2009, v.10, n.1 doi:10.1029/2008GC002274.
25. **Petronis, M.S.**, Geissman, J.W., Oldow, J.S., and McIntosh, W.C., 2009, Late Miocene to Pliocene vertical-axis rotation attending development of the Silver Peak–Lone Mountain displacement transfer zone, west-central Nevada, *in* Oldow, J.S., and Cashman, P.H., eds., *Late Cenozoic Structure and Evolution of the Great Basin–Sierra Nevada Transition: Geological Society of America Special Paper 447*, p. 215–253, doi: 10.1130/2009.2447(12)..
26. **Petronis, M.S.**, B. O'Driscoll, V.R. Troll, C.H., Emeleus, and J.W. Geissman, 2008, Palaeomagnetic and Anisotropy of Magnetic Susceptibility data bearing on the emplacement of the Western Granite, Isle of Rum, NW Scotland, *Geological Magazine*, p.1-18, doi:10.1017/S0016756808005827.
27. Looock S.* S., Diotb, H., Van Wyk de Vriesa, B., Launeauc, P., Merlea, O., Vadeboind, F. and **Petronis, M.S.**, 2008, Lava flow internal structure found from AMS and textural data: An example in methodology from the Chaîne des Puys, France, *Journal of Volcanology and Geothermal Research*, V. 177, issue 1, p.445-472.
28. **Petronis, M.S.**, and Geissman, J.W., 2008, Anisotropy of Magnetic Susceptibility Data Bearing on the Transport Direction of the Candelaria Hills Regional Tuffs, central Walker Lane, Nevada, *Bulletin of Volcanology*, v. 69, n. 8. p. 930-951. DOI: 10.1007/s00445-008-0212-3.
29. **Petronis, M.S.**, Geissman, J.W., Oldow, J.S., and McIntosh, W.C., 2007, Tectonism of the southern Silver Peak Range: Paleomagnetic and geochronologic data bearing on the Neogene development of a regional extensional complex, Central Walker Lane, Nevada, *in* Till, A.B., Roeske, S.M., Sample, J.C., and Foster, D.A., eds., *Exhumation Associated with Continental Strike-Slip Systems: Geological Society of America Special Paper 434*, p. 81–106, DOI: 10.1130/2007.2343(05).
30. Hacker, D.B., **Petronis, M.S.**, Holm, D.K., and Geissman, J.W., 2007, Shallow level emplacement mechanisms of the Miocene Iron Axis Laccolith Group, Southwest Utah, *Geological Society of America Rocky Mountain Section Annual Meeting*, Utah Geological Association Publication 35, 49 pp.
31. Pressler, R.E.*, D.A. Schneider, **M.S. Petronis**, D.K. Holm, J.W. Geissman, 2007, Pervasive horizontal fabric and rapid vertical extrusion: lateral overturning and margin subparallel flow of deep crustal migmatites, northeastern Bohemian Massif, *Tectonophysics*, v. 443, p. 19–36
32. **Petronis, M.S.***, Hacker, D.B., Holm, D.K., Geissman, J.W., Harlen, S.S., 2004, Magnetic Flow Paths and Paleomagnetism of the Miocene Stoddard Mountain Laccolith, Iron Axis region, southwest Utah, USA, *Magnetic Fabric: Methods and Applications*, *GSL Special Publications* 238, p. 251-283
33. **Petronis, M.S.***, Geissman, J.W., and McIntosh, W.C., 2003, Transitional Field Clusters from Uppermost Oligocene Volcanic Rocks in the Central Walker Lane, Western Nevada, *Physics of the Earth and Planetary Interior*, v. 141, n.3,p. 207 - 238.
34. **Petronis, M.S.***, Geissman, J.W., Holm, D.K., Wernicke, B. and Schauble, E., 2002, Assessing vertical-axis rotation in large-magnitude extensional regimes: A transect across the Death Valley extended terrane, California, *Journal of Geophysical Research*, v. 107, B1, no. 1, 21 pp.

35. **Petronis, M.S.**, 1998, A reconnaissance paleomagnetic investigation bearing on vertical-axis rotation associated with a simple-shear transfer system in the Silver Peak Range, west-central Nevada: University of New Mexico, [M.S. thesis], p. 273.

Mini papers published in NMGS 2015 Guidebook

- Late Pleistocene to Holocene paleoclimate of the Las Vegas National Wildlife Refuge and adjacent Great Plains — **M.S. Petronis**, J. Lindline, and E. Martinez, pp. 136-138
- The ancestral Gallinas River fluvial terrace east of Las Vegas, at the Melton Ranch gravel pit — **M.S. Petronis**, J. Lindline, and E. Martinez, pp. 138-139

Select Conference Proceedings

(*undergraduate student author; **graduate student author)

1. Rapprich, V., M.S. Petronis, J. Valenta, J. Lindline, A. Brister*, B. van Wyk de Vries, 2015, Complex and unexpected evolution of some Czech monogenetic volcanoes inferred from combination of geophysical tomography, rock magnetism, petrography, and volcanology, International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) annual meeting
2. Petronis, M.S., Rapprich, V., Valenta, J., Lindline, J., Brister, A.*, Foucher*, M., van Wyk de Vries, B., 2015, Complexity of feeding systems within monogenetic volcanoes: cases from New Mexico, Chaîne des Puys and Bohemian Paradise, 13th Meeting of the Central European Tectonic Studies Groups and 20th Meeting of the Czech Tectonic Studies Group (ČTS)
3. Garza D.A.*, M.S. Petronis, B. van Wyk de Vries, 2014, Emplacement of the Puy de Dôme Investigated Using Structural, Anisotropy of Magnetic Susceptibility, Paleomagnetic and Rock Magnetic Data, V51B-4758, annual American Geophysical Union Meeting in San Francisco, CA (December 14th – 19th December 2014).
4. Trevino, S.F.*, Petronis, M.S., Pluhar, C.J., Gorgon, L.*, 2014, Paleomagnetic and Anisotropy of Magnetic Susceptibility data from the Miocene Jack Springs Tuff measuring Vertical axis rotation and paleoflow patterns, GP21A-3645, annual American Geophysical Union Meeting in San Francisco, CA (December 14th – 19th December 2014).
5. Petronis, M.S., Rapprich, V., Valenta, J., Leman, J., Brister, A.R.*, van Wyk de Vries, B., 2014, Emplacement of Zebin Hill, Jičín Volcanic Field, Bohemian Paradise, Czech Republic: Anisotropy of Magnetic Susceptibility, Ground Magnetometry, and Paleomagnetic Data GP11A-3563, annual American Geophysical Union Meeting in San Francisco, CA (December 14th – 19th December 2014).
6. Benn, D., I. Fairchild, G. Le Hir, E. Fleming, G. Ramstein, C.T.E. Stevenson, Y. Donnadieu, H. Bao, M. Hambrey, M.S. Petronis, P. Wynn, 2014, Orbitally Forced Climatic Fluctuations in Snowball Earth: Compelling Evidence from a Data-Model Study, PP42B-04, annual American Geophysical Union Meeting in San Francisco, CA (December 14th – 19th December 2014).
7. Petronis, M.S. and McCarthy, 2014, Preliminary experimental anisotropy of magnetic susceptibility data on ice: A proxy for fabric development within glacial ice (POSTER), Abstract No. 462, Fredericton 2014 GAC-MAC annual meeting, 2014
8. **Aragon, A.D., Petronis, M.S., and Zebrowski, J.P., 2014, A Geographic Information Systems and Remote Sensing Geoheritage Investigation of the Upper Pecos River Valley, New Mexico Geological Society Annual Spring Meeting, Macey Center, New Mexico Tech campus, Socorro, NM, April 11, 2014, p. 11.
9. **Brister, A.R., Petronis, M.S., Lindline, J., Van Wyk der vries, B., and Rapprich, V., 2014, Paleomagnetic, Anisotropy of Magnetic Susceptibility, and Structural Data Bearing on Magma Emplacement and the Growth of a Miocene, Cinder Cone, New Mexico Geological Society Annual Spring Meeting, Macey Center, New Mexico Tech campus, Socorro, NM, April 11, 2014, p. 16.
10. **Castillo, G., Petronis, M.S., Lindline, L., and Lemen, D., 2014, Paleomagnetic and Anisotropy Of Magnetic Susceptibility, Study of the Buena Vista Dike, North-Central New Mexico, New Mexico Geological Society Annual Spring Meeting, Macey Center, New Mexico Tech campus, Socorro, NM, April 11, 2014, p. 18.
11. Petronis, M.S., Rapprich, V., Valenta, J., **Brister, A., Lindline, J., and van Wyk de Vries, B., 2014, Emplacement of Zebin Hill, Jičín Volcanic Field, Bohemian Paradise, Czech Republic, New Mexico Geological Society Annual Spring Meeting, Macey Center, New Mexico Tech campus, Socorro, NM, April 11, 2014, p. 50.
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