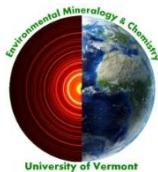


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CURRENT POSITION

Assistant Professor (Tenure Track), University of Vermont, Department of Geology, Burlington, VT (08/2019 - CURRENT)

EDUCATION

- **Ph.D.** (Physics, Chemistry & Biology of the Environment) Université Louis Pasteur, Strasbourg, France. 2007.
- **M.S.** (Sedimentology & Geochemistry) Université Paris XI - Ecole Normale Supérieure, Paris, France. 2003.
- **B.S.** (Biology & Geology) Université de Nantes, Fr - Laboratoire de Planétologie & Géodynamique. 2001.

PROFESSIONAL EXPERIENCE

Research Assistant Professor, University of Vermont, Burlington, USA, 2013-2019

Assistant Research Scientist, University of Arizona, Tucson, USA, 2012-2014

Research Associate, University of Arizona, Tucson, USA, 2008-2012

Lecturer (ATER), Université Louis Pasteur, Strasbourg, France, 2006-2007

Teaching Assistant, Université Louis Pasteur, Strasbourg, France, 2003-2006

Archaeogeologist, ARC'Antic Laboratory, Nantes, France, 2002

Lab assistant, Planetology & Geodynamic Laboratory, Nantes, France, 2001

ACTIVE & RECENT RESEARCH PROJECTS

University of Vermont.

- Collaborative Research: A fossil ecosystem under the ice: deciphering the glacial and vegetation history of northwest Greenland using long-lost Camp Century basal sediment (NSF Arctic) Co-PI \$365,859, 2021-2023
- Assessing nutrient sustainability in forest management: novel applications of microbial and isotopic signatures. (USDA AFRI) Co-PI \$470,835. 2020-2024.
- Development and Application of PXRF Protocols to Potentially Hazardous Metals in Soils of Urban Forests and Gardens. (USDA-NRCS, 2019-2021), Co-PI \$76,588. 2019-2021
- Lead water and Soil Education and Assessment by Vermont middle and high school students. (EPA Healthy Communities 2019-2021) PI \$27,963. 2019-2021
- Mineral weathering at the atomic scale. (VT NASA-EPSCoR GRFC) PI \$ 37,051 & (UVM, CAS, 2017-2019), PI. \$2,487.
- Weathering on Mars: Extending the concept of the critical zone to extraterrestrial bodies (VT NASA-EPSCoR FRC). Co-PI \$25,948. Collaboration with NASA-JSC.
- Multiscale impacts of soil microenvironments distribution and density on metal sorption as a tool for sustainable remediation. (UVM, CAS, 2014-2016), PI. \$2,750.

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Assistant Research Scientist / Research Associate – University of Arizona.

- Uranium and strontium fate in waste-weathered sediments: Scaling of molecular processes to predict reactive transport. Collaborative project (DOE, SBR funded, 2011-2014), PI: J. Chorover (UofA), co-PI: P. O'Day (UC Merced), K. Mueller, J. Zachara & W. Um (PNNL), Carl Steefel (LBNL) \$1.20 M. **Collaborator:** Postdocs not allowed as PIs at UofA
- Interaction of microbial and abiotic processes in soil leading to the (bio)conversion and ultimate attenuation of new insensitive munitions compounds. Collaborative project (SERDP funded, 2012-2015), PI: J. Field (UofA), Co-PI: J. Chorover, R. Sierra, L. Abrell (UofA) \$1.00 M. **Collaborator:** Postdocs not allowed as PIs at UofA
- Release of aged contaminants from weathered sediments: Effects of sorbate speciation of scaling of reactive transport. Collaborative project (DOE, SBR funded, 2008-2011), PI: J. Chorover (UofA), co-PI: P. O'Day (UC Merced), K. Mueller, J. Serne & W. Um (PNNL), Carl Steefel (LBNL) \$1.35 M.

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Ph.D. 3-years French Ministry of Research Fellowship – Université Louis Pasteur, Strasbourg

- Nature and role of the solid suspended matter in the dynamic of pollutant transfer. *Advisors: Françoise Elsass (INRA), Nicole Liewig (CNRS)*

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M.S. Ecole Normale Supérieure de Paris, France.

- Behavior of chemical elements during weathering: mobility and concentrations factors, application to archaeological ceramics. *Advisor: Bruce Velde (CNRS)*

RESEARCH TOOLS

Quantitative XRD, SEM, HRTEM, EXAFS, XRF, EMPA, FT-IR, ICP-MS/OES, IC, TOC, (LA)ICP-MS, GIS

AWARDS

Outstanding Faculty Adviser Award 2016 - UVM Graduate Student Senate

STUDENT RESEARCH ADVISING

Undergraduate Student Research

Rebecca Holt (BS) – (2020-2021)
Eva Pepe (BS) – (2020-2021)
Ruth Oppenheimer (2020-2021)
Lily Zanta (BS) – (2018-2019)
Izzy Ellenthal (BS) – (2018-2019)
Alex Gagnon (BS) – (2017-2018)
Christian Wurzburger (BS) – (2017-2018)
Leah Williamson (BS) – (2017-2018)
Amanda Rossi (BS) – (2016-2018)
Katelyn Czyzyk (BS) – (2016-2017)
Amy Lewis (BS) – (2015-2016)
Garrett Hazebrouck (BS) – (2015)
Sidney Lister (BS) – (2014-2015)
Ifan Hywel (BS) – (2014-2015)
Chandler Noyes (BS) – (2014-2015)
Kris A. Ford (BS) – (2012- 2013)
Peirong Cao (BS) – (2012)
Theresa Lau (BS) - (2011-2013)
Kelsie M. LaSharr (BS) – (2010-2013)
Tyler J. Anderson (BS) – (2011)
Sarah Verghese (BS) – Biosphere 2 (AZ), (2011)
Makhlouf Nait-Chabanne (BS) – (2007)

Graduate Student Research

Victoria Treto (MS) – Nutrient Sustainability (2021-Current)
Trevor Mackoviak (MS) – Min. of Caribbean Streams (2020-Current)
Sandra Walser (MS) – Metals in soils (2019-2021)
Adele Conde (MS) - Weathering of Apatite (2017-2019)
Grant Reeder (MS) – Effect of competitive sorption on Pb Speciation in urban Soils (2016-2018)
Sophie Greene (MS) – Comparing Beryllium isotopes across watersheds (2014-2016)
Jennifer Bower (MS) – Mobility and Speciation of Legacy Lead in Soils (2014-2017)
Billy Linker (MS) – Sorption of insensitive munition compounds to soil constituents (2011-2013)
Adrien Bouzouville (MS) –State of soils in the Strasbourg urban area (2007)

Committee member

Jeffrey Ulbrandt (PhD) – Committee Chair
Maziar Foroutan(PhD) – Committee Chair
Arash Kamali-Asl (PhD) – Committee Chair
Malayika Cincotta (MS)
Jesse Armfield (MS)
Jenny Bower (PhD)
Katy Czar (Hon. Col.)

TEACHING EXPERIENCE

UNIVERSITY OF VERMONT

Extraterrestrial Life (Spring ~250 students)
Earth System Sciences, (Fall ~160 students)
Environmental Geology, (Spring ~160 students)
Geocomputing, (Spring/Fall ~25 students)
Planetology, (Fall/Spring ~20 students)
Intro. to Environmental Sci. (2014-2016, 80 students)

UNIVERSITY OF ARIZONA (2012-2014)

Environmental Soil and Water Chemistry (35 students)

Quantitative X-ray diffraction (10 students)

UNIVERSITY OF STRASBOURG (FRANCE)

External Geodynamic (60 students)
Mineralogy & Petrography (80 students)
Crystal-chemistry and reactivity of fine particles
Soil science (10 students)
Orogen of the Alps (20 students)
Fundamentals of Geochemistry (20 students)
Introduction to Geosciences (15 students)
Mapping Camp (35 students)

CONTRIBUTIONS TO EQUITY AND DIVERSITY:

Organizer of the UVM Geology Seminar series on Equity and Diversity in the Geoscience.
Teaching of environmental racism and racial justice to local high school students.
Pledge to the building of an Anti-Racist lab.
Pledge to equity and diversity in student selection and hiring.
Member of the White Fragility UVM Geology book club.

MEMBERSHIPS:

University of Vermont, Sustainability Fellow (2014-2015)
Member, American Chemical Society (2021-present)
Member, Geological Society of America (2018-present)
Member, Clay Mineral Society of America (2007-present)
Member, Critical Zone Exploration Network (2009-present)
Member, European Geochemical Association (2010-present)
Member, American Geophysical Union (2011-present)

PUBLICATIONS

Journal Articles (*denotes advised student), H-index: 18, Nb. of citations: 1083.

1. **Perdrial N.**, Vázquez-Ortega A., E. Reinoso-Maset, P. A. O'Day, and J. Chorover (2022). Effects of flow on uranium speciation in soils impacted by acidic waste fluids. *Journal of Environmental Radioactivity*, 251-252, 106955.
2. McStay A., Walser S*, **Perdrial N.**, Sirkovich E., Richardson J. (2022). Nutrient and toxic elements in soils and plants across 10 urban community gardens: Comparing pXRF and ICP-based soil measurements, *Journal of Environmental Quality*, 51, 439-450.
3. Bourgault R. R., Ross D. S., Bailey S., **Perdrial N.**, Bower J. (2022). Groundwater input drives large variance in soil manganese concentration and reactivity in a forested headwater catchment. *Soil Science Society of America Journal*. DOI: 10.1002/saj2.20439.
4. Richardson J., Mischenko I.C., Mackowiak* T.J. and **Perdrial N.** (2022). Trace metals and metalloids and Ga/Al ratios in gray shale weathering profiles along a climate gradient and in batch reactors. *Geoderma*, 405, 115431.
5. Adler T., Underwood K., Rizzo D., Harpold A., Sterle G., Li L., Wen H., Stinson L., Bristol C., Shanley J.B., Lini A., **Perdrial N.**, Perdrial J. (2021) - Drivers of Dissolved Organic Carbon Mobilization From Forested Headwater Catchments: A Multi Scaled Approach. Submitted to *Frontiers in Water*, 3, 578608.
6. Vázquez-Ortega A., **N. Perdrial**, E. Reinoso-Maset, P. A. O'Day, and J. Chorover. (2021). Phosphate Controls Uranium Release from Acidic Waste-Weathered Hanford Sediments. *Journal of Hazardous Materials*. 416, 126240.
7. Christ, A.J., P. R. Bierman, J.M. Schaefer, D. Dahl-Jensen, J.P. Steffensen, L.B. Corbett, D.M. Peteet, E.K. Thomas, E.J. Steig, T.M. Rittenour, J.-L. Tison, P.-H. Blard, **N. Perdrial** et al. (2021). A Multimillion-Year-Old Record of Greenland Vegetation and Glacial History Preserved in Sediment beneath 1.4 Km of Ice at Camp Century. *Proceedings of the National Academy of Sciences* 118 (13): e2021442118.
8. Singer D., Herndon E., Zemanek L., Cole K., Sanda T., Senko J., **Perdrial N.** (2021) - Biogeochemical controls on the potential for long-term contaminant leaching from soils developing on historic coal mine spoil. *Soil Systems*. 5 (1): 3
9. Foroutan M.*, Ghazanfari E., Amirlatif A., **Perdrial N.** – (2021) - Variation of Pore-Network, Mechanical and Hydrological Characteristics of Sandstone specimens through CO₂-Enriched Brine Injection. *Journal of Petroleum Science and Engineering*, 26, 100217.

10. Kamali-Asl A.*, Ghazanfari E., **Perdrial N.**, and Cladouhos T. (2020) - Effects of circulating fluid type on response of fractured rock in geothermal reservoir: An experimental study. *Geothermics*, 87: 101832
11. Reinoso-Maset E., **Perdrial N.**, Steefel C.I., Um W., Chorover J., and O'Day P.A. (2020) - Dissolved carbonate and pH control the dissolution of uranyl phosphate minerals under flow conditions. *Environmental Science & Technology*, 54, 6031-6042.
12. Singer D., Herndon E., Cole K., Koval J., **Perdrial N.** (2020) - Formation of secondary mineral coatings results in the persistence of reduced metal-bearing phases in soils developing on historic coal mine spoil. *Applied Geochemistry*, 121, 104711.
13. Bailey S., Ross D.S., **Perdrial N.**, Jercinovic M., Webber J., and Bourgault R. (2019) - Determination of primary mineral content and calcium sources in forest soils using electron probe microanalysis mapping and cluster analysis. *Soil Science Society of America J.*, 83, 1830-1841.
14. Cincotta M, Perdrial J.N., Shavitz A., Libenson A., Landsman-Gerjoi M., **Perdrial N.**, Armfield J.*, Adler T., Shanley J. (2019) - Soil aggregates as a source of dissolved organic carbon to streams: an experimental study on the effect of solution chemistry on water extractable carbon. *Frontiers Earth Science*, 7:172
15. Armfield J.*, Perdrial J., Gagnon A.*, Ehrenkranz J, **Perdrial N.**, Cincotta M*, Ross D.S., Shanley J., Underwood K.L., and Ryan P. (2019) - Does stream water composition at Sleepers River in Vermont reflect dynamic changes in soils during recovery from acidification? *Frontiers Earth Science*, 6:246.
16. Kamali-Asl A.*, Ghazanfari E., **Perdrial N.**, and Bredice N. (2018) - Experimental study of fracture response in granite specimens subjected to hydrothermal conditions relevant for enhanced geothermal systems. *Geothermics*, 72, 205-224.
17. **Perdrial N.**, Vazquez-Ortega A., Wang G., Kanematsu M., Mueller K.T., Steefel C.I., O'Day P., and Chorover J. (2018) - Uranium speciation in acid waste-weathered sediments: The role of aging and phosphate amendments. *Applied Geochemistry*, 89, 109-120.
18. Singer D.M., Jefferson A.J., Traub E.L. and **Perdrial N.** (2018) - Mineralogical and geochemical variation in stream sediments impacted by acid mine drainage is related to hydro-geomorphic setting. *Elementa*, 6, 31.
19. Wang G., Um W., Wang Z.M., Reinoso-Maset E., Washton N.M., Mueller K.T., **Perdrial N.**, O'Day P.A. and Chorover J. (2017) - Uranium Release from Acidic Weathered Hanford Sediments: Single-Pass Flow-Through and Column Experiments. *Environmental Science & Technology*, 51, 11011-11019.
20. Bower J.A.*, Lister S.*, Hazebrouck G*. and **Perdrial N.** (2017) - Geospatial evaluation of lead bioaccessibility and distribution for site-specific prediction of threshold limit. *Environmental Pollution*, 229, 290-299
21. Clark K.E., Shanley J.B., Scholl M.A., **Perdrial N.**, Perdrial J.N., Plante A.F., McDowell W.H. (2017) - Tropical river suspended sediment and solute dynamics in storms during an extreme drought. *Water Resource Research*, 53.
22. Singleton A., Schmidt A., Bierman P., Rood D., Neilson T., Greene S*, Bower J*. and **Perdrial N.** (2016) - Effects of Grain Size and Mineralogy on the Distribution of the Fallout Radionuclides ⁷Be, ¹⁰Be, ¹³⁷Cs, and ²¹⁰Pb in River Sediment. *Geochimica et Cosmochimica Acta*, 197, 71-86.
23. Caulk R., Ghazanfari E., Perdrial J. and **Perdrial N.** (2016) - Experimental investigation of fracture aperture and permeability change within Enhanced Geothermal Systems. *Geothermics*, 62, 12-21
24. **Perdrial N.**, Thompson A. LaSharr K., Amistadi M.K. and Chorover J. (2015) - Quantifying particulate and colloidal release of radionuclides from saturated analog Hanford sediments. *Journal of Environmental Quality*, 44, 945-952.
25. Zaunbrecher L.K., Elliott W.C., Wampler J.M, **Perdrial N.** and Kaplan D.I. (2015) - Enrichment of Cesium and Rubidium in Weathered Micaceous Materials at the Savannah River Site, South Carolina. *Environmental Science and Technology*. 49, 4226-4234.
26. Linker B.*, Khatiwada R., **Perdrial N.**, Abrell L., Sierra-Alvarez R., Field J.A. and Chorover J. (2015) - Adsorption of novel insensitive munitions compounds at clay mineral and metal oxide surfaces. *Environmental Chemistry*, 12, 74-84.
27. **Perdrial N.**, Thompson A., O'Day P., Steefel C.I. and Chorover J. (2014) - Mineral transformation controls speciation and pore-fluid transmission of contaminants in waste-weathered Hanford sediments. *Geochimica et Cosmochimica Acta*, 141, 487-507.
28. Hayes S., Root R., **Perdrial N.**, Maier R. and Chorover J. (2014) - Surficial weathering of iron sulfide mine tailings under semi-arid climate. *Geochimica et Cosmochimica Acta*, 141, 240-257.
29. Dontsova K., Zaharescu D., Henderson W., Verghese S.*, **Perdrial N.**, Hunt E. and Chorover J. (2014) - Impact of organic carbon on weathering and chemical denudation of granular basalt. *Geochimica et Cosmochimica Acta*, 139, 508-526.
30. Kanematsu M., **Perdrial N.**, Um W., Chorover J. and O'Day P. (2014) - Influence of phosphate and silica on U(VI) precipitation from acidic and neutralized wastewaters. *Environmental Science and Technology*, 48, 6097-6106.
31. Perdrial J.N., **Perdrial N.**, Porter C., Vazquez-Ortega A.; Leedy J. and Chorover J, (2014) - Experimental assessment of passive capillary wick sampler suitability for inorganic soil solution constituents, *Soil Science Society of America Journal*, 78, 486-495.

32. Perdrial J.N., **Perdrial N.**, Harpold A., Gao X., Gabor R., LaSharr K. and Chorover J. (2012) – Impact of sampling dissolved organic matter with passive capillary wicks versus aqueous soil extraction. *Soil Science Society of America Journal*, 76, 2019-2030.
33. **Perdrial N.**, Rivera N., Thompson A., O'Day P.A. and Chorover J. (2011) – Trace contaminant concentration affects mineral transformation and pollutant fate in hydroxide-weathered Hanford sediments. *Journal of Hazardous Materials*, 197, 119-127.
34. Rivera N., Choi S., Strepka C., Mueller K., **Perdrial N.**, Chorover J. And O'Day P.A. (2011) – Cesium and strontium incorporation into zeolite-type phases during homogeneous nucleation from caustic solutions. *American Mineralogist*, 96, 1809-1820.
35. Chang H.-S., Um W., Rod K., Serne R.J., Thompson A., **Perdrial N.**, Steefel C.I. and Chorover J. (2011) – Strontium and caesium release mechanisms during unsaturated flow through waste-weathered Hanford sediments. *Environmental Science and Technology*, 45, 8313-8320.
36. **Perdrial N.**, Perdrial J.N., Delphin J.-E., Elsass F., Liewig N. (2010) – Temporal and spatial monitoring of mobile nanoparticles in a vineyard soil: evidence of nanoaggregate formation. *European Journal of Soil Science*, 61, 456-468.
37. Thompson A., Steefel C.I., **Perdrial N.** and Chorover J. (2010) – Contaminant desorption during long-term leaching of hydroxide-weathered sediments. *Environmental Science and Technology*, 44, 1992-1997.
38. Perdrial J.N., Warr L.N., **Perdrial N.**, Lett M.-C. and Elsass F. (2009) – Interaction between smectite and bacteria: Implications for bentonite as backfill material in the disposal of nuclear waste. *Chemical Geology*, 264, 281-294.
39. **Perdrial N.**, Liewig N., Delphin J.-E. and Elsass F. (2008) – TEM evidence for intracellular accumulation of lead by bacteria in subsurface environments. *Chemical Geology*, 253, 196-204 .
40. **Perdrial N.**, Elsass F. and Liewig N. (2008) – New technique for in-situ sampling of particulate matter and colloids in soil and atmospheric fallout. *Colloids Surf. A.*, 317, 742-746.
41. Muller D., Medigue C., Koechler S., Arsene-Ploetze F., Barakat M., Barbe V., Bonnefoy V., Carapito C., Chandler M., Cournoyer B., Cruveiller S., Heymann M., Krin E., Leize E., Lieutaud A., Lievreumont D., Makita Y., Nitschke W., Ortet P., **Perdrial N.**, Siguier N., Simeonova D.D., Rouy Z., Talla E., Turlin E., Vallenet D., Van Dorselaer A., Weiss S., Weissenbach J., Lett M.C., Danchin A., Bertin P.N. (2007) – A tale of two oxidation states: Bacterial colonization of arsenic-rich environments. *PLoS Genetics*, 3 (4), e53.

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Book Section

Muller D., Carapito C., Koechler S., Weiss S., Salmeron A., **Perdrial N.**, Lièvreumont D., Arsène-Ploetze F., Bertin Ph. and Lett M.-C. (2007) – Arsenic stress in bacteria: involvement in the colonization of arsenic-contaminated environments? in: Zhu Y., Lepp N. & Naidu R. eds, Biochemistry of trace elements : environmental protection, remediation and human health. Tsinghua University Press. p 544-545. ISBN : 978-7-302-15627-7

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Reports

Chorover J., **Perdrial N.**, Mueller K., Strepka C., O'Day P., Rivera N., Um W., Chang H.S., Steefel C. and Thompson A. (2012) – Release of aged contaminants from weathered sediments: Effects of sorbate speciation on scaling of reactive transport. DOE/ER/64615, US DOE SC Office of Biological and Environmental Research, 16pp.

Elsass P., Bouzouville A*, Elsass F., Fourniquet G., Gorsy P., Liewig N., Morvan G. and **Perdrial N.** (2006) – Etude de synthèse des sols sur le territoire de la Communauté Urbaine de Strasbourg. Rapport final BRGM RP-54829-FR, 50 p.

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First and Senior Author Abstracts at Major Conferences only (*denotes advised student)

Perdrial N., Hellmann R, Conde A*, Rampe E, Christoffersen R, Murayama M., Chang J. (2021) - Apatite nanoresponse to acidic dissolution, Goldschmidt Conference, July 4-9, Online.

Walser S*, **Perdrial N.**, Massey C., McNally D., Bierman P. (2021) - Lead Education And Discovery: Engaging young student scientists in a community health project, Goldschmidt Conference, July 4-9, Online.

Perdrial N., Bierman P.R., Whittaker J.A., Vigoreaux J.O. (2020) - Soil and water Pb education in the time of COVID and Black Lives Matter. GSA Connects Online. Oct 26-30.

Perdrial N., Walser S*, Massey C & Bierman P Walser S., (2020) Lead in Water and Soil: Education and Assessment Involving Vermont Middle and High School Students Goldschmidt Virtual. June 21-26

Walser S.*, **Perdrial N.**, Bierman P.R., Massey C.A. (2020) - Citizen science as a tool for community outreach, data collection, and environmental justice in soil geochemistry. GSA Connects Online. Oct 26-30.

Walser S.*, **Perdrial N.**, Bierman P., Massey C. (2019) - Citizen science for a healthier community: Soil and water sampling in Burlington and Winooski. Vermont Citizen Science. peer-reviewed talk. 12-12-2019

- Perdrial N.**, (2019) - La minéralogie environnementale multi-échelle. Université du Québec à Montréal, 2/18/2019. **Invited Talk**.
- Perdrial N.**, Conde A*, Hellmann R, Rampe E, Christoffersen R & Murayama M. (2019) - Dissolution of Apatite: Micro and Nanoscale Insights, Goldschmidt Conference, August 18-23, Barcelona, Spain.
- Williamson L.*, **Perdrial N.**, Hughes J.M., (+13 authors), Bierman P. (2019) – Better understanding the geology of central Cuba through stream sediment composition analysis using X-Ray diffraction. Geological Society of America, September 22-25, Phoenix, AZ, USA.
- Conde A*, Hellmann R., Michel F.M. & **Perdrial N.** (2018) - Effects of crystal chemistry, habitus, and experiment apparatus on apatite dissolution across scales. Geological Society of America, November 4-7, Indianapolis, IN, USA.
- Perdrial N.**, Armfield J*, Reeder G*, Gagnon A*, Rampe E. & Perdrial J. (2018) - The Martian Critical Zone: Concept and Experimental Example. Goldschmidt Conference, August 12-17, Boston, MA, USA.
- Conde A*, Hellmann R., Wurzbürger C*. & **Perdrial N.** (2018) - Mechanism of Apatite Dissolution. Goldschmidt Conference, August 12-17, Boston, MA, USA.
- Reeder G*, Rossi A.*, Czyzyk K.*, Williamson L.* & **Perdrial N.** (2018) – Bioaccessible Pb in Burlington (VT) soils: Field and microscale controls. NE Geological Society of America, 18-20 March, Burlington, VT, USA.
- Rossi A.*, Reeder G.*, Czyzyk K.*, Williamson L.* & **Perdrial N.** (2018) Soil Pb bioavailability and distribution in Burlington, Vermont: Testing and assessment of a geospatial model. NE Geological Society of America, 18-20 March, Burlington, VT, USA.
- Perdrial N.**, Bower J* & Singer D (2017) - Speciation, Distribution, Mobility and Prediction of Pb in an Urban Soil. Goldschmidt Conference, August 13-18, Paris, France.
- Perdrial N.**, Clark K.E., Shanley J.B., Plante A.F., McDowell W.H. (2017) - Can the mineralogical signature of suspended sediments inform on the dynamics and resilience of river systems impacted by extreme climate events at Luquillo, Puerto Rico? AGU Chapman Conference, Jan 2017, San Juan, Puerto Rico.
- Perdrial N.** (2016) - Cold-war radionuclides legacy in the environment: Solving the problem one experiment at a time. **Invited Talk**, Department of Civil and Environmental Engineering, UVM.
- Bower J* and **Perdrial N.** (2015) - Impacts of competitive sorption processes on Pb bioavailability in urban soils. GSA annual Meeting, Baltimore, MA, USA.
- Perdrial N.**, Vasquez-Ortega A., Reinoso-Maset E., O'Day P.A. and Chorover J., (2014) – Acid-weathering and uranium speciation: Reaction kinetics and phosphate addition. Goldschmidt Conference, June 8-13, Sacramento, CA, USA.
- Perdrial N.**, Kanematsu M., Wang G., Um W., O'Day P. and Chorover J. (2013) - Process coupling between mineral transformation and U speciation in acid waste weathered sediments. American Geophysical Union's 46th Annual fall meeting.
- Perdrial N.**, O'Day P. and Chorover J. (2012) – Strontium fate in Hanford sediments – A multi-scale synchrotron X-Ray investigation. SSRL/LCLS Users' Conference, Oct 3-6, Menlo Park, CA, USA. *Invited speaker*
- Perdrial N.**, Thompson A. and Chorover J. (2011) – Quantifying particulate and colloidal release of radionuclides from analog Hanford sediments. Fall Meeting, AGU, Dec 5-9, San Francisco, CA, USA.
- Perdrial N.**, Thompson A., Rivera N., Deng Y.-T., O'Day P. and Chorover J. (2011) – Predicting the fate of radionuclides at the Hanford tank farm using analog sediments. Goldschmidt Conference, August 14-19, Prague, Czech Rep.
- Perdrial N.**, Thompson A. and Chorover J. (2010) – Mineral transformations and contaminant release dynamics under wetting-drying cycles in simulated Hanford sediments. Goldschmidt Conference, June 13-18, Knoxville, TN, USA.
- Perdrial N.**, Thompson A. and Chorover J. (2009) – Effects of mineral transformation, contaminant concentration and CO₂ pressure on contaminant speciation and mobility in simulated Hanford sediments. 46th Annual Meeting of the CMS, June 5-11, Billings, MT, USA.
- Perdrial N.**, Elsass F., Liewig N. (2007) – TEM evidence for lead transport by bacteria in atmospheric deposition. Goldschmidt Conference, August 19-24, Cologne, Germany.
- Perdrial N.**, Elsass F., Liewig N. (2007) – TEM investigation on the nature, distribution and factors affecting clays and nanoparticles in the soil system. 44th Annual Meeting of the CMS, June 2-7, Santa Fe, NM, USA.
- Perdrial N.**, Elsass F., Liewig N. and Gelhaye, D. (2006) – Aerosol particles over a french forest: size and composition of minerals and microbes. 43rd Annual Meeting of the CMS - 4ème colloque du GFA, 3-7 juin, Ile d'Oléron, France.
- Perdrial N.**, Elsass F., Lievreumont D., Berger J. and Liewig N. (2006) – Role of bacteria in controlling the toxicity and mobility of arsenic in soils. Proc. EGU General Assembly, April. 02-07 2006, Vienna, Austria.
- Perdrial N.**, Elsass F., Liewig N., Delphin J.-E. and Morvan G. (2005) – Typologie quantitative des particules environnementales. suivi spatio-temporel dans un sol sous vignoble. 3ème colloque du GFA, May 18-19 2005, Paris, France.

Perdril N., Elsass F., Liewig N., Delphin J.-E. and Morvan G. (2004) – Caractérisation physico-chimique des matières en suspension dans les eaux d'infiltration des sols. Proc. 20th RST, sept. 20-25 2004, Strasbourg, France.

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