

# Carmen A. Nezat

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## EDUCATION

2006      **Ph.D., Geological Sciences**, University of Michigan, Ann Arbor  
1998      **M.S., Geology**, University of Alabama, Tuscaloosa  
1994      **B.S., Geology**, University of Southwestern Louisiana, Lafayette

## PROFESSIONAL LICENSURE

Since 2008 Licensed Geologist in the State of Washington

## RELEVANT EXPERIENCE

2017–      **Professor**, Department of Geology, Eastern Washington University  
Present      *Courses taught:* Discovering Geology (GEOL 100), Introduction to Environmental Science (ENVS 100), Principles of Geochemistry (GEOL 462), Environmental Geochemistry (GEOL 463), Isotopic Tracers in the Environment (GEOL 466), Field Camp (GEOL 490), GEOL 496 (Elemental Analysis of Environmental Samples), GEOL 496 (Analytical Methods for non-Geology students), GEOL 491 (Undergraduate Thesis), GEOL 499 (Directed Study)

2017–      **Director**, Environmental Science Program, Eastern Washington University  
Present

2013–17      **Associate Professor**, Department of Geology, Eastern Washington University

2007–13      **Assistant Professor**, Department of Geology, Eastern Washington University

2009, 10      **Acting Director**, EWU's Environmental Science Program (summers)

2006– 07      **Postdoctoral Research Fellow**, Department of Geological Sciences, University of Michigan, Ann Arbor

2001–06      **Graduate Research Assistant and Graduate Student Instructor**, Department of Geological Sciences, University of Michigan, Ann Arbor

1998–2001      **Research Associate**  
Byrd Polar Research Center, Ohio State University, Columbus (2000–2001) &  
Department of Geology, University of Alabama, Tuscaloosa (1998–1999)

1995–98      **Graduate Research Assistant and Graduate Teaching Assistant**  
Department of Geology, University of Alabama, Tuscaloosa

## PEER-REVIEWED PUBLICATIONS (IN REVERSE CHRONOLOGICAL ORDER)

- Nezat, C.A.**, S. Hatch\*, and T. Uecker\* (2017) Heavy metal content in urban residential and park soils: A case study in Spokane, Washington, USA. *Applied Geochemistry* **78**, 186-193.
- Chambers, L.G.; Y.-P. Chin; G.M. Filippelli; E.M. Herndon; D.T. Long; W.B. Lyons; G.L. Macpherson; S.P. McElmurry; C.E. McLean; J. Moore; R.P. Moyer; K. Neumann; **C.A. Nezat**; K. Soderberg; N. Teutsch; E. Widom (2016) Developing the scientific framework for urban geochemistry. *Applied Geochemistry* **67**, 1-20.
- Schoonover, C.M., J. Wieker, R. Pope, C. Brown, E. Cooper, J. DeWitt, S. Gunselman, C. Jensen, W. Stevens, J. Yri, **C.A. Nezat**, and J. Joyner-Matos (2016) Development of functional trait biomarkers for trace metal exposure in freshwater clams (*Musculium* spp.), *Comp. Biochem. Physiol., A* (2016), <http://dx.doi.org/10.1016/j.cbpa.2016.04.012>
- Gebauer, A.D., R. Brown, S. Schwab, **C.A. Nezat**, and C. McNeely (2015) Effects of an Invasive Grass (*Phalaris arundinacea*) on Water Use in Semi-Arid Riparian Zones. *Wetlands*, 36(1), 59-72.
- Nezat, C.A.**, J.D. Blum and C. T. Driscoll (2010) Patterns of Ca/Sr and <sup>87</sup>Sr/<sup>86</sup>Sr variation before and after a whole watershed CaSiO<sub>3</sub> addition at the Hubbard Brook Experimental Forest, USA. *Geochimica et Cosmochimica Acta* **74**, 3129-3142.
- Nezat, C.A.**, J.D. Blum, R.D. Yanai, and B.B. Park (2008) Mineral sources of calcium and phosphorus in soils of the northeastern USA. *Soil Science Society of America Journal* **72**, 1-9.
- Nezat, C.A.**, J.D. Blum, R. Yanai, and S.P. Hamburg (2007) A sequential extraction to selectively dissolve apatite for determination of soil nutrient pools with an application to Hubbard Brook Experimental Forest, New Hampshire, USA. *Applied Geochemistry* **22**, 2406-2421.
- Lyons, W.B., Carey, A.E., and **C.A. Nezat** (2005) Chemical weathering in high-sediment-yielding watersheds, New Zealand. *Journal of Geophysical Research* **110**, F01008.
- Yanai, R.D., J.D. Blum, S.P. Hamburg, M.A. Arthur, **C.A. Nezat** and T.G. Siccama (2005) New insights into calcium depletion in northeastern forests. *Journal of Forestry* **103**, 14-20.
- Nezat, C.A.**, J.D. Blum, A. Klaue, C.E. Johnson, and T.G. Siccama (2004) Influence of landscape position and vegetation on long-term weathering rates at Hubbard Brook Experimental Forest, New Hampshire, USA. *Geochimica et Cosmochimica Acta* **68**, 3065-3078.
- Carey, A.E., **C.A. Nezat**, J.R. Pennock, T. Jones, and W.B. Lyons (2003) Nitrogen budget of the Mobile-Alabama River System watershed. *Geochemistry: Exploration, Environment, Analysis* **3**, 239-244.
- Blum, J.D., A. Klaue, **C.A. Nezat**, C.T. Driscoll, C.E. Johnson, T.G. Siccama, C. Eagar, T.J. Fahey, and G.E. Likens (2002) Mycorrhizal weathering of apatite as an important calcium source in base-poor forest ecosystems. *Nature* **417**(6890), 729-731.
- Carey, A.E., Lyons, W.B., **C.A. Nezat**, Shuh-Ji Kao, D.M. Hicks, and J.S. Owen (2002) Trace metal fluxes to the ocean: The importance of high-standing oceanic islands. *Geophysical Research Letters* **29** (23) 2099.
- Lyons, W.B., **C.A. Nezat**, A.E. Carey, and D.M. Hicks (2002) Organic carbon fluxes to the ocean from high-standing islands. *Geology* **30**(5), 443-446.
- Lyons, W.B., **C.A. Nezat**, L.V. Benson, T.D. Bullen, E.Y. Graham, J. Kidd, K.A. Welch, J.M. Thomas (2002) Strontium isotopic signature of the streams and lakes of Taylor Valley, Southern Victoria Land, Antarctica: Chemical weathering in a polar climate. *Aquatic Geochemistry* **8**, 79-95.

- Nezat, C.A.**, W.B. Lyons, and K.A. Welch (2001) Chemical weathering in streams of a polar desert (Taylor Valley, Antarctica). *GSA Bulletin* 113(11), 1401-1408.
- Lyons, W.B., **C.A. Nezat**, K.A. Welch, S.T. Kottmeier, and P.T. Doran (2000) Fossil fuel burning in Taylor Valley, Antarctica: Estimating the role of scientific activities on carbon and nitrogen reservoirs and fluxes. *Environmental Science and Technology* **34**, 1659-1662.
- Lyons, W.B., K.A. Welch, **C.A. Nezat**, D.M. McKnight, K. Crick, J.K. Toxey and J.A. Mastrine (1997) Chemical weathering rates and reactions in the Lake Fryxell Basin, Taylor Valley, Antarctica: Comparison to temperate river basins, *Ecosystem Processes in Antarctic Ice-free Landscapes*, Balkema Press, Rotterdam.

### **BOOK CHAPTERS**

- Camille McNeely and **Nezat, Carmen A.** (2018) “Mining, Climate, and the Giant Salmonfly.” *The Spokane River*. Seattle: University of Washington Press.

### **ON-LINE TEACHING ACTIVITIES DEVELOPED FOR GEOSCIENCE FACULTY**

- Nezat, C.A.** (2013) On-line Geoscience Teaching Activity: “Capabilities and Limitations of Geochemical Instruments” on NAGT’s (National Association of Geoscience Teachers) On the Cutting Edge Collection.  
<http://serc.carleton.edu/NAGTWorkshops/hydrogeo/HSG2013/activities/71644.html>
- Nezat, C.A.** (2013) On-line Geoscience Teaching Activity: “Dilutions and Spectral Properties of Solutions” on NAGT’s (National Association of Geoscience Teachers) On the Cutting Edge Collection.  
<http://serc.carleton.edu/NAGTWorkshops/hydrogeo/HSG2013/activities/71640.html>

### **RESEARCH GRANTS**

- 2019 C.A. Nezat, L. MacKenzie, A. Allen, A. Hossain, and A. Masiello. MRI: Acquisition of a Scanning Electron Microscope to Enable Novel Scientific and Engineering Research at a Primarily Undergraduate Institution. NSF, \$933,090, pending.
- 2019 C.A. Nezat. Heavy Metal Analysis of Soils for Undergraduate Research and Community Engagement. EWU Foundation, \$44,883, pending.
- 2018 Contract extension with Washington State Fish and Wildlife: Calcium analysis ~\$5,000. Aug 1, 2017 – July 31, 2018.
- 2017 C.A. Nezat. Heavy metals in urban soils. 2017-18 EWU Faculty Grants for Research and Creative Works. Awarded \$10,000.
- 2016 C.A. Nezat. Dissolved calcium analysis as part of the early detection zebra/quagga mussel monitoring. Contract with Washington State Fish and Wildlife.
- 2016 C.A. Nezat. Chemical weathering of rocks and minerals in areas devastated by the 1980 Mount St. Helens eruption 2016-17 EWU Faculty Grants for Research and Creative Works. Awarded \$10,000.
- 2015 J. Joyner-Matos, K. Magori, C.A. Nezat. IOS Preliminary Preproposal, RUI: Energetic trade-offs between reproduction and stress-tolerance in freshwater clams. Submitted to NSF Division of Integrative Organismal Systems on January, 2015.

- 2014 C.A. Nezat and C. McNeely. Tracing sources and pathways of water in eastern Washington using stable isotopes. 2014-15 EWU Faculty Grants for Research and Creative Works. Awarded \$19,992.
- 2014 R. Black, A. Masiello, C. Nezat and C. McNeely. Equipment request for an injection flow analyzer and ultrapure water system. Awarded \$41,419 by EWU Equipment Fund.
- 2013 J. Joyner-Matos, R. Brown, N. Burgis, and C.A. Nezat. Increasing the Participation of First-generation and Underrepresented Students in the Sciences. Awarded \$592,894 by Division of NSF Undergraduate Education.
- 2011 *MRI: Acquisition of a Thermal Ionization Mass Spectrometer (TIMS) to strengthen collaborative inter-University programs in isotope geochemistry.* Collaborative grant proposal with University of Idaho (lead PI) and Washington State University. Awarded by NSF, \$785,861.
- 2011 *Ecohydrology of invasive reed canary grass.* Funding to C. McNeely, C. Nezat, R. Brown, and S. Schwab. 2011-12, Submitted to State of Washington Water Research Center, awarded \$30,000.
- 2009 *Mineral dissolution by fungi and bacteria in a forest soil.* Funding to C.A. Nezat. 2009-10 Eastern Washington University Faculty Grants for Research; awarded \$5,000.
- 2008 *Mineral dissolution and nutrient uptake by fungi in a forest soil.* Funding to C.A. Nezat 2008-09 Eastern Washington University Faculty Grants for Research; awarded \$10,000.

## SELECTED PUBLISHED PRESENTATION ABSTRACTS

Underline denotes the presenter; \*Indicates undergraduate advisee; †Indicates graduate student

### 2019

Hogue, Taylor\*, Jesse Schultz, Patrick R. Biondo, and **C.A. Nezat** (2019) Distribution of zinc toxicity levels in surface waters across Washington State. Annual Geological Society of America Meeting – Cordilleran Section, 15-17 May, 2019, Portland, OR.

### 2018

Houtz, Emily\* and **C.A. Nezat** (2018) Ammunition as a Source of Lead in the EWU Palouse Prairie Restoration Site. EWU Student Research and Creative Works Symposium, 15-16 May.

Perry, Eric\* and **C.A. Nezat** (2018) Geochemical Characterization of Cheney, WA Tap Water through Analysis of Major Ions and Trace Metals. EWU Student Research and Creative Works Symposium, 15-16 May.

### 2017

Huddleston, Keylin\*, Calen Busch\*, and **C.A. Nezat** (2017) Geochemical Analysis of Deadman Creek. 31<sup>st</sup> Annual National Conference on Undergraduate Research (NCUR), University of Memphis, April 6-8.

Lamm, Jared, **C.A. Nezat**, and Justin Bastow (2017) Biologically Available Elements of Soils Infested by *Venttenata dubia*. 31<sup>st</sup> Annual National Conference on Undergraduate Research (NCUR), University of Memphis, April 6-8.

Murphy, Christa\* and **C.A. Nezat** (2017) Heavy Metals in Bio-infiltration Swales in Spokane, WA. 31<sup>st</sup> Annual National Conference on Undergraduate Research (NCUR), University of Memphis, April 6-8.

Perry, Eric F.\* and **Carmen A. Nezat** (2017) Analyzing discolored tap water for elements leached from aging pipes. Annual Geological Society of America Meeting, 22-25 October, 2017, Seattle, WA. (<https://gsa.confex.com/gsa/2017AM/meetingapp.cgi/Paper/300956>)

## 2016

Duckett, Kyle A.\*, Donahue, Justin L.\*, and **Nezat, Carmen A.** (2016) Heavy metal contaminants in river water; Coeur d'Alene, Idaho. Rocky Mountain Section - 68th Annual Meeting, Moscow, Idaho. (Also presented at 19<sup>th</sup> Annual EWU Student Research and Creative Works Symposium)

Higbee, C.V.†, Albrecht, J. Clinkenbeard, G. Davies, C. Davies, L. Johnston, J. Kenney, A. Shultz, B. Wolkenhauer, C. McNeely, C. Nezat, J. Joyner-Matos (2016) Elevated Zn and Pb levels in the chain lakes of the Coeur d'Alene River, ID may contribute to the low abundance of an amphipod (*Hyalella azteca*). 7<sup>th</sup> SETAC (Society of Environmental Toxicology and Chemistry) World Congress/SETAC North America 37<sup>th</sup> Annual Meeting, November 6-10, 2016, Orlando, FL.

Kautzman, Brandon John\*, Barnett, Max Benjamin\* and **Nezat, Carmen A.** (2016) Water quality in an urban wetland (Spokane, Washington). Rocky Mountain Section - 68th Annual Meeting, Moscow, Idaho.

(<https://gsa.confex.com/gsa/2016RM/webprogram/Paper276217.html>)

Murphy, Christa\* and **Nezat, Carmen A.** (2016) Heavy metal contribution to a reservoir from stormwater previously treated with biofiltration. Rocky Mountain Section - 68th Annual Meeting, Moscow, Idaho.

(<https://gsa.confex.com/gsa/2016RM/webprogram/Paper275983.html>)

Wimmer, Matthew Aaron\*, Larson, Eric Ian\* and **Nezat, Carmen A.** (2016) A water quality analysis of an urban pond in the city of Spokane, Washington. Rocky Mountain Section - 68th Annual Meeting, Moscow, Idaho.

(<https://gsa.confex.com/gsa/2016RM/webprogram/Paper276116.html>)

## 2015

S.K. Fortner, C.B. Dowling, S.T. Goldsmith, K. Johannesson, D. Leslie, K. Neumann, **C.A. Nezat**, K.A. Welch, and S. Welch (2015) Key contributions of W. Berry Lyons to transdisciplinary geochemical exploration. GSA Annual Meeting, November 1-4, Baltimore, MD.

\*W. Jeffries and **C.A. Nezat** (2015) Environmental factors that affect the release of metals from mining-contaminated sediments. GSA Annual Meeting, November 1-4, Baltimore, MD.

\*I. Leavy and **C.A. Nezat** (2015) Arsenic content of the Latah Formation and its potential for groundwater contamination. 2015 Northwest Scientific Association Conference, April 1-4, Pasco, Washington.

**C.A. Nezat**, C. McNeely, and A. D. Gebauer (2015) Identifying plant water sources in an arid grassland with hydrogen and oxygen isotopes. GSA Annual Meeting, November 1-4, Baltimore, MD.

\*D. Nguyen, and **C.A. Nezat** (2015) Naturally-occurring arsenic contamination in rice products in northern Vietnam. 2015 Northwest Scientific Association Conference, April 1-4, Pasco, Washington.

†Schoonover, Cody M., J. Wieker, R. Pope, C. Brown, E. Cooper, J. DeWitt, S. Gunselman, C. Jensen, W. Stevens, **C. Nezat**, J. Joyner-Matos (2015) Development of functional trait biomarkers for trace metals in freshwater bivalves (*Musculium* spp.) The Second International Conference on Oxidative Stress in Aquatic Environments, November 11-14, Baja California Sur, Mexico.

## 2014

\*S.A. Hatch, \*T.M. Uecker, and **C.A. Nezat** (2014) Heavy metal contamination in urban soils. Geological Society of America Annual Meeting, October 19-22, Vancouver, Canada.

**C.A. Nezat** and \*M. Landkammer (2014) Seasonal and spatial changes in the dissolved load of the Spokane River (Washington State, USA). Geological Society of America Rocky Mountain (66<sup>th</sup> Annual) and Cordilleran (110<sup>th</sup> Annual) Joint Meeting, May 19-21, Bozeman, MT.

**C.A. Nezat** (2014) Addressing local environmental issues with undergraduate research. Geological Society of America Annual Meeting, October 19-22, Vancouver, Canada.

**C.A. Nezat**, A. Perham, S.A. Hatch, T.M. Uecker (2014) Anthropogenic contributions of toxic elements to soil and water in urban areas. Urban Geochemistry Working Group Meeting, August 5-7, Columbus, OH.

\*A. Perham, and **C.A. Nezat** (2014) Heavy metal uptake in stormwater gardens (Spokane, WA). Geological Society of America Rocky Mountain (66<sup>th</sup> Annual) and Cordilleran (110<sup>th</sup> Annual) Joint Meeting, May 19-21, Bozeman, MT.

\*T.M. Uecker, \*S.A. Hatch, and **C.A. Nezat** (2014) Heavy metal concentrations in urban soils. Geological Society of America Rocky Mountain (66<sup>th</sup> Annual) and Cordilleran (110<sup>th</sup> Annual) Joint Meeting, May 19-21, Bozeman, MT.

## 2013

**C.A. Nezat** and \*Michael Landkammer (2013) Temporal and spatial variability of the hydrochemistry of the Spokane River (Washington State, USA). October 27-31, Denver, CO.

\*M. Shafer and **C.A. Nezat** (2013) The effects of fertilizer and calcium carbonate on the mobilization of arsenic in groundwater. National Conference on Undergraduate Research (NCUR), April 11-13, La Crosse, WI.

**C.A. Nezat** (2013) Teaching the capabilities and limitations of geochemical instruments. On The Cutting Edge Professional Development Workshop: Teaching Hydrogeology, Soils, and Low-Temperature Geochemistry in the 21<sup>st</sup> Century. University of New Mexico, Albuquerque, June 5-9.

## 2012

\*D. Albrecht and **C.A. Nezat** (2012) Elemental analysis of EWU drinking water. *Poster presentation* at the EWU 15<sup>th</sup> Annual Student Research and Creative Works Symposium, May 15-16, Cheney, WA.

\*H. Campbell, \*J. Gardipe and **C.A. Nezat** (2012) Metal occurrence and basic nutrition in dog food. *Poster presentation* at the EWU 15<sup>th</sup> Annual Student Research and Creative Works Symposium, May 15-16, Cheney, WA.

- †A. Gebauer, S. Schwab, R. Brown, C. McNeely, and **C.A. Nezat** (2012) Ecohydrology of Invasive Reed Canary Grass (*Phalaris arundinacea*). 65th Annual Meeting of the Society for Range Management, January, 2012, Spokane, WA.
- \*M. Landkammer, \*Ian Leavy and **C.A. Nezat** (2012) Toxic elements in children's toys. *Poster presentation* at the EWU 15<sup>th</sup> Annual Student Research and Creative Works Symposium, May 15-16, Cheney, WA.
- \*I. Leavy and **C.A. Nezat** (2012) Arsenic content of the Latah Formation and its effect on local groundwater. *Poster presentation* at the EWU 15<sup>th</sup> Annual Student Research and Creative Works Symposium, May 15-16, Cheney, WA.
- Nezat, C.A.** (2012) From grant-proposal writing to research presentation: Providing course-based undergraduate research opportunities. *Poster presentation* at the Annual Meeting of the Geological Society of America, Charlotte, NC.

## 2011

- Case, Judd, D. Patrick, R. Stockton, **C.A. Nezat**, and Julia Clarke (2011) Rare earth element fingerprinting and <sup>87</sup>Sr/<sup>86</sup>Sr ratios support a Latest Maastrichtian Age for Antarctica's first discovered Cretaceous bird, *Polarornis Gregoryi*. 71st Society of Vertebrate Paleontology Meeting Annual Meeting, Las Vegas, NV.
- \*Lea, Alex and **Nezat, C.A.** (2011) Accuracy of whole rock digestion and analysis using Inductively Coupled Plasma Optical Emission Spectroscopy. *Poster presentation* at the EWU 14<sup>th</sup> Annual Student Research and Creative Works Symposium, May 17-18, Cheney, WA.
- \*Miller, Nicole and **Nezat, C.A.** (2011) Trace Metal Analysis of Sediments Proximal to the Bunker Hill Mine in Kellogg, ID. *Poster presentation* at the EWU 14<sup>th</sup> Annual Student Research and Creative Works Symposium, May 17-18, Cheney, WA.
- Nezat, C.A.** (2011) Microbial weathering of apatite and wollastonite in a forest soil: Evidence from minerals buried in a root-free zone. *Invited presentation* at the American Geophysical Union Fall Meeting, December 5-11, San Francisco, California.
- \*Segovia, Amy and **Nezat, C.A.** (2011) The Effect of Forest Fires on Soil Nutrient Availability in the Dishman Hills Natural Resources Conservation Area. *Poster presentation* at the EWU 14<sup>th</sup> Annual Student Research and Creative Works Symposium, May 17-18, Cheney, WA.

## 2010

- \*Davis, Klarissa and **Nezat, C.A.** (2010) Geochemistry of the Spokane River and interactions with the Spokane Valley-Rathdrum Prairie Aquifer. *Poster presentation* at the EWU 13<sup>th</sup> Annual Student Research and Creative Works Symposium, May 18-19, Cheney, WA.
- \*Jarvi, Justin and **Nezat, C.A.** (2010) Plant nutrients available through the weathering of basalt and granite. *Poster presentation* at the EWU 13<sup>th</sup> Annual Student Research and Creative Works Symposium, May 18-19, Cheney, WA.
- \*Pettett, Nerissa and **Nezat, C.A.** (2010) The spatial and temporal distribution of metals in the Spokane River. *Poster presentation* at the EWU 13<sup>th</sup> Annual Student Research and Creative Works Symposium, May 18-19, Cheney, WA.
- \*Bailey, Gabriel and **Nezat, C.A.** (2008) Paleoenvironmental study of the Etadunna Formation, South Australia. *Oral presentation* at the National Conference on Undergraduate Research (NCUR), April 10-12, Salisbury, MD.

## Prior to 2008

- Nezat, C.A.,** J.D. Blum and D.R. Zak (2007) Weathering of Ca- and P-bearing minerals by fungi in a northern hardwood forest. *Oral presentation* at Goldschmidt Conference, Cologne, Germany.
- Nezat, C.A.** and J.D. Blum (2005) A sequential leach method and Pb isotope approach to studying apatite weathering in granitoid soils at Hubbard Brook Experimental Forest, NH, USA. *Poster presentation* at American Geophysical Union Fall Meeting, San Francisco, California.
- Nezat, C.A.,** J.D. Blum, R.D. Yanai, and S. Hamburg (2004) The importance of soil mineralogy to plant nutrient availability in the northeastern U.S. *Poster presentation* at American Geophysical Union Fall Meeting, San Francisco, California.
- Nezat, C.A.,** J.D. Blum, and C.E. Johnson (2003) The rate of weathering-derived calcium input to a base-poor forest ecosystem in the northeastern USA. *Poster presentation* at American Geophysical Union Fall Meeting, San Francisco, California.
- Nezat, C.A.,** J.D. Blum, A. Klaue, C.E. Johnson, and T.G. Siccama (2003) Influence of landscape position and vegetation on long-term weathering rates at Hubbard Brook Experimental Forest, New Hampshire, USA. *Poster presentation* at Long-Term Ecological Research All Scientists Meeting, Seattle, Washington.
- Nezat, C. A.,** A. E. Carey, S. J. Kao, W. B. Lyons, and J. S. Owen (2001) The geochemistry of dissolved load and sediments in high sediment-yielding rivers of Taiwan. *Oral presentation* at Geological Society of America Annual Meeting, Boston, Massachusetts.
- Nezat, C.A.,** W. B. Lyons, E. Y. Graham, N. L. Green, A. E. Carey, D. M. Hicks, and K. Neumann (2001) Inorganic and organic composition of suspended load in high sediment-yielding rivers in New Zealand. *Oral presentation* at American Society of Limnology and Oceanography Aquatic Sciences Meeting, Albuquerque, New Mexico.
- Nezat, C.A.,** E.Y. Graham, N.L. Green, W.B. Lyons, K. Neumann, A.E. Carey, and M. Hicks (1999) The physical and chemical controls on rare earth element Concentrations in Dissolved Load, Suspended Load, and River Channel sediments of the Hokitika River, New Zealand. *Oral presentation* at Geological Society of America National Meeting, Denver, Colorado.
- Nezat, C.A.** (1999) Chemical weathering in streams from Taylor Valley, Antarctica. *Invited lecture* at Dauphin Island Sea Lab Fall Seminar Series, Alabama.
- Nezat, C.A.,** W.B. Lyons, E.Y. Graham, K.A. Welch, P.J. Lechler and D.M. McKnight (1997) Chemical weathering in streams from Taylor Valley, Antarctica. *Oral presentation* at Geological Society of America National Meeting, Salt Lake City, Utah.
- Nezat, C.A.,** W.B. Lyons, E.Y. Graham, K.A. Welch and T. Jones (1997) Minor silicate-mineral element geochemistry of the Alabama-Mobile River System, Alabama. *Poster presentation* at American Society of Limnology and Oceanography Aquatic Sciences Meeting, Santa Fe, New Mexico.

#### **SESSIONS CHAIRED AT PROFESSIONAL MEETINGS**

- Nezat, C.A.** and A. Biswas (2016) (Bio)Geochemical Processes in Soils (Theme Session 3). GSA Rocky Mountain Section Meeting, Moscow, Idaho.
- Fortner, S.K., C.B. Dowling, K. Johannesson, K. Neumann, and **C.A. Nezat** (2015) Honoring the Diverse Career of Dr. W. Berry Lyons: Geochemistry from Polar Deserts to Tropical Watersheds. GSA National Meeting, Baltimore, MD.



## **INVITED LECTURES**

- C.A. Nezat (2015) Identifying Plant Water Sources with Geochemical Tracers: A Case Study at Turnbull National Wildlife Refuge.” Columbia Basin Geological Society, October 27, 2015.
- C.A. Nezat (2015) Seasonal and spatial changes in metal concentrations, Spokane River, Washington. Iowa State University Department of Geological and Atmospheric Sciences Brownbag Seminar, April 22, 2015.
- C.A. Nezat (2014) Seasonal and spatial changes in the dissolved load of the Spokane River. UI/WSU Department of Geological Sciences Seminar Series, September, 2014.
- C.A. Nezat (2011) Calcium cycling in a northern hardwood forest following a watershed-scale calcium addition. Central Washington University Department of Geological Sciences Seminar Series, October, 2011.
- C.A. Nezat (2009) Calcium cycling in a northern hardwood forest following a watershed-scale calcium addition. WSU/UI Earth Sciences Seminar Series, October, 2009.

## **SERVICE AND APPOINTMENTS**

- 2017- Society of Inland Northwest Scientists (SINES) Board of Directors
- 2017 Mentor, GeoGirls hosted by Mount St. Helens Institute, July 30-Aug 3 (<https://sites.ewu.edu/Eastern247/2017/08/10/geogirls/>)
- 2014-17 Spokane Regional Clean Air Agency Board of Directors, City of Spokane representative; appointed by Spokane Mayor
- 2013 Spokane Regional Clean Air Agency Board of Directors, City of Spokane representative, Alternate
- 2014-present S-STEM Program Co-PI (adviser, selection committee member)
- 2012-present Sigma Xi, Secretary
- Since 2010 Member of EWU Radiation Safety Committee
- Since 2010 Academic Advisor to EWU Student Geology Club
- Since 2007 Peer-review of articles submitted to the following journals: Applied Geochemistry, Biogeochemistry, Biology Letters, Chemical Geology, Geochimica et Acta Cosmochimica, Journal of Geology, Plant and Soil, Water Resources Research
- Since 2007 Peer-review of grant proposals for NSF and National Institutes for Water Resources
- 2013 Peer-review of On the Cutting Edge on-line earth science teaching activities. October 26, 2013, Denver, CO.
- 2007-11 EWU Academic Senator
- 2004-06 Geological Sciences Faculty Meeting Student Representative, Univ. of Michigan
- 2001 COSI (Center of Science & Industry) Academy Mentor in Columbus, OH
- 2000 Antarctica Service Medal of the United States of America

## **FELLOWSHIPS AND AWARDS**

- 2018 Recognized for “contributions to students, to Eastern, and to your profession” at the 2018 EWU SMA<sub>3</sub>RT Symposium
- 2006 John Dorr Graduate Academic Achievement Award, Geological Sciences, University of Michigan
- 2005 Rackham Predoctoral Fellowship, University of Michigan, top 5% of recipients

- 2004 Geological Sciences Outstanding Graduate Student Instructor Award, University of Michigan
- 2003 Geological Society of America Outstanding Student Research Award
- 1997 Outstanding Teaching in Geology by a Master's Student, University of Alabama

### **PROFESSIONAL AFFILIATIONS**

American Geophysical Union, member since 1997  
American Society of Limnology and Oceanography, member since 2000  
Geochemical Society, member since 1999  
Geological Society of America, member since 1997  
National Association of Geoscience Teachers, member since 2012  
Sigma Gamma Epsilon, member since 1993  
Sigma Xi, Full Member, full member since 2003  
Society of Inland Northwest Environmental Scientists (SINES), member since 2010

### **PROFESSIONAL DEVELOPMENT**

Participant at the "On the Cutting Edge: Workshop for Early Career Faculty," June 15-19, 2008  
College of William and Mary, Williamsburg, VA.  
Participant at Thermo Scientific Elemental User Forum, October 18<sup>th</sup>, 2011, Richland, WA.  
On The Cutting Edge Professional Development Workshop: Teaching Hydrogeology, Soils, and Low-Temperature Geochemistry in the 21<sup>st</sup> Century. University of New Mexico, Albuquerque, June 5-9.

### **TALKS TO LOCAL ORGANIZATIONS**

"Leaded or Unleaded? Getting the Dirt on the Dirt in Your Backyard." Presentation to West Plains Chamber of Commerce, May 17, 2017. Location: EWU, Cheney

"Coal Trains in the Spokane Area" to Cheney Kiwanis Club, January 3, 2013.

"Performing Research in Antarctica" to Spokane Mountaineers, 2009.

"Environmental Issues" to Cheney United Ministries, October, 2008.

"Why is Geochemistry Important to You?" to Cheney Rotary Club, August 2008.

"Research in Antarctica: How I Spent One (Austral) Summer" to the EWU Geology Club, February 11, 2008.

"A Trip to Antarctica" to EWU Women Faculty and Staff Social Club, January 16, 2008.