LAURA SHERROD

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EDUCATION

Ph.D., Geology with emphasis in Geophysics and Hydrogeology – 2007 Western Michigan University, Kalamazoo, MI

Dissertation - Geophysical Monitoring Probes and Their Applications to Some Hydrogeological Problems

B.S., Summa Cum Laude Geology major, Spanish, Physics, Mathematics minors – 2001 Western Michigan University, Kalamazoo, MI

TEACHING EXPERIENCE

Professor, 2017 – present

Associate Professor, 2014 – 2017 **Assistant Professor**, 2009 – 2014 Department of Physical Sciences

Kutztown University of Pennsylvania, Kutztown, PA

- Instruct courses within the Department of Physical Sciences (GEL 020 Introduction to Geology, GEL 050 – Water Wars, GEL 100 – Physical Geology, GEL358 – General Geophysics, GEL 362 – Hydrogeology, ALM 100 – Introduction to Bagpipes and the Physics of Sound)
- Schedule and conduct field experiences within Pennsylvania for geology courses
- Develop and participate in undergraduate research projects
- Participate in departmental meetings and committee assignments
- Form interdisciplinary relationships within the university to broaden the scope of research
- Facilitate interagency relationships outside the university to increase the opportunities available to KU students.

Adjunct Professor, Summer 2008 – 2012

Department of Geosciences

Western Michigan University, Kalamazoo, MI

- Instruct a module of the Hydrogeology Field Course (Geos 5250 Environmental Surface Geophysics)
- Introduce students to the theory of geophysical methods
- Lead field experiences at two geophysical survey sites
- Direct students in the operation of various geophysical instruments
- Train students to process and interpret the geophysical data collected
- Guide students in the development of reports summarizing the field methods, results, and conclusions

TEACHING EXPERIENCE

Visiting Assistant Professor, 2006 – 2009

Geology Department

Grand Valley State University, Allendale, MI

- Instruct courses within the Geology Department (Geo 100 Environmental Geology, Geo 105 Living with the Great Lakes, Geo 202 Hydrosphere for Teachers, Geo 300 Earth and the Environment, Geo 380 Field Geophysics, Geo 470 Geophysics)
- Schedule and conduct field experiences within southwest Michigan for geology courses
- Lead field experiences at locations such as Sleeping Bear Dunes National Lakeshore and Mammoth Cave National Park for Geo 105 and 202 respectively
- Serve as a faculty mentor for students in the seminar course for the Department of Geology
- Develop and participate in undergraduate research projects
- Participate in departmental meetings and assignments such as course evaluation of Geo 300
- Assist with field experiences led by other faculty within the Geology Department
- Form interdisciplinary relationships within the university to broaden the scope of research
- Attend and present at conferences in the fields of geophysics and hydrogeology
- Advance knowledge in the field of geophysics and hydrogeology through submission of publications

Doctoral Associate, 2002 – 2006

Department of Geosciences

Western Michigan University, Kalamazoo, MI

- Serve as a teaching assistant (Geos 560 Introduction to Applied Geophysics, Geos 430 –
 Structural Geology, Geos 525 Environmental Surface Geophysics, Geos 523 Aquifer
 Testing)
- Develop field exercises, train students in the use of geophysical instruments, guide students in the processing and analysis of data for Geos 560
- Serve as the Geos 100 Earth Studies lab coordinator

INDUSTRY EXPERIENCE

Geophysicist/Manager, 2002 – 2006

Geophysical Consulting Services

Geophysical Services International, L.L.C., Kalamazoo, MI

- Detection of underground storage tanks, delineation of contaminant plumes, and exploration for shallow oil through electrical, electromagnetic, and/or magnetic methods
- Produce estimates for geophysical survey work
- Advise companies and potential employers of the application of geophysics to particular sites
- Organize field work and subcontract through students at Western Michigan University
- Process and interpret data
- Compose final reports

AWARDS AND HONORS

- 2022 Best Reviewer for the Journal of Environmental and Engineering Geophysics 27:2
- 2021 Chambliss Faculty Research Award

SCHOLARSHIPS AND GRANTS

- 2024 KU Bears Grant (Three Thrones Geophysical Investigation) with Sierra Smart (\$2,500)
- 2024 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2024 (\$1,000)
- 2023 KU Bears Grant (White Horse Tavern and Douglas House Geophysics Project) with Rebekah Underwood (\$2,500)
- 2022 KU Bears Grant (Geophysical Investigations of the Mouns Jones Archaeological Site) with Giovanna LaSpisa (\$2,000)
- 2021 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2021 (\$305)
- 2019 PSECU Sponsorship for the Kutztown Pipe Band: Purchase of Practice Chanters for KU Students (\$150)
- 2019 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2019 (\$1,000)
- 2018 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2018 (\$1,000)
- 2017 PSECU Sponsorship for the Kutztown Pipe Band: Purchase of Practice Chanters for KU Students (\$250)
- 2017 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2017 (\$1,050)
- 2016 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2016 (\$1,050)
- 2015 PASSHE FPDC Grant (Geophysical investigation of methane-emitting mud volcanoes on the Colorado River delta, Hite Marina, Lake Powell, Utah) Category 1-A: Joint Faculty-Student Basic or Applied Research (\$10,000)
- 2015 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2015 (\$1,000)
- 2014 Kutztown University Research Committee Grant (Investigations of the Shape and Structure of a Buried Bedrock Valley in New York State) to work with undergraduate students to map glacial geology with geophysical techniques (\$5,728)
- 2014 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2014 (\$900)
- 2013 Growing Greener Plus Grant (West Creek Flow Loss Assessment and Remediation Plan) with the Schuylkill Conservation District (\$302,006 total, \$12,008 of that total specifically designated for KU)
- 2013 KU Foundation Grant (Supplemental Student Wage Funds for Schuylkill Watershed and New York Glacial Grants) to fund undergraduate research (\$5,000)
- 2013 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2013 (\$900)
- 2012 Kutztown University Research Committee Grant (Three Dimensional Mapping of Glacial Geology in New York State) to work with undergraduate students to map glacial geology with geophysical techniques (\$7,956)
- 2012 CUAHSI HGP for "Hydrogeophysical Investigations of the Headwaters of the Schuylkill River: Electromagnetic Induction to Characterize a Watershed Impacted by Abandoned Mine Drainage" (\$2,975)

SCHOLARSHIPS AND GRANTS (continued)

- 2012 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2012 (\$800)
- 2011 Kutztown University Research Committee Grant (Geophysical Investigations of Streams Impacting Abandoned Mine Drainage) for expansion of GPR software and surveying capabilities and funding of student work (\$4,650)
- 2011 Department of Energy (DOE) Energy-Related Laboratory Equipment (ERLE) Program Grant to obtain used/retired electromagnetic equipment (a GEM2 system and GEM3 parts, worth \$37,900 new)
- 2011 Travel Assistance Grant from Kutztown University Professional Development Committee to attend SAGEEP 2011 (\$700)
- 2010 Kutztown University Research Committee Grant (Geophysical Investigations of Streams Impacting Abandoned Mine Drainage) for expansion of resistivity system and funding of student work (\$6,650)
- 2008 Grand Valley State University R&D Faculty Scholarly Travel Grant in Aid to present findings of dissertation research at the Ground Water Summit, hosted by the National Ground Water Association (\$500)
- 2005 Michigan Space Grant Consortium Graduate Research Fellowship to develop, test, and implement a long-term resistivity monitoring system (\$5,000)
- 2005 W. David Kuenzi Graduate Student Research Fund, a research-oriented, graduate student support fund available to registered graduate students in the Geology Department at Western Michigan University (\$400)
- 2005 GSH/Charlie & Jean Smith Scholarship (SEG Foundation Scholarship Program) (\$2,000)

PEER-REVIEWED PUBLICATIONS

- *Undergraduate Researchers indicated with an asterisk before the name
- Wizevich, M.C., Simpson, E.L., Underwood, A., **Sherrod, L.**, Livingston, K., Bogner, E., Malenda, M. 2024. Anatomy of modern sedimentary volcanoes produced by gas-charged groundater liquefaction, Lake Powell, Hite, Utah: Implications for the recognition and interpretation of ancient sedimentary volcanoes. The Depositional Record, DOI: 10.1002/dep2.320, 1-17.
- **Sherrod, L.**, *Willever, H., *Shollenberger, K., *Potter, C., Thorne, R., Kline, A., 2020. Geophysical Investigations of United States Revolutionary War Era (1777-1778) Mass Burial Sites in Pennsylvania, USA, Journal of Environmental and Engineering Geophysics, 25:4, 477-496.
- *Malenda, M., Betts, T., Simpson, W., Wizevich, M., Simpson, E., **Sherrod, L.,** 2020. Methane Emissions from Mud during Low Water-Level Stages of Lake Powell, Southern Utah, USA. Geology of the Intermountain West. 7, 97-112.

PEER-REVIEWED PUBLICATIONS (continued)

- *Undergraduate Researchers indicated with an asterisk before the name
- **Sherrod, L.,** Sauck, W., Simpson, E., Werkema, D.D.Jr., *Swiontek, J., 2019. Case histories of GPR for animal burrow mapping and geometry. Journal of Environmental and Engineering Geophysics. 24:1, 1-17.
- *Miller, K., Simpson, E., **Sherrod, L.**, Wisevich, M., *Malenda, M., *Morgano, K., *Richardson, A., *Livingston, K., *Bogner, E. 2018. Gas bubbles cavities in deltaic muds, Lake Powell delta, Glen Canyon National Recreation Area, Hite, Utah. Marine and Petroleum Geology: 92, 904-912.
- Cravotta, C.A. III, **Sherrod, L.**, Galeone, D., Lehman, W., Ackman, T., and Kramer, A. 2017. Hydrological and geophysical investigation of streamflow losses and restoration strategies in an abandoned mine lands setting: Environmental & Engineering Geoscience, 23: 4, 243-273.
- **Sherrod, L.**, Simpson, E.L., *Higgins, R., *Miller, K., *Morgano, K., *Snyder, E., *Vales, D., 2016. Subsurface structure of water-gas escape features revealed by ground-penetrating radar and electrical resistivity tomography, Glen Canyon National Recreation Area, Lake Powell delta, Utah, USA. Sedimentary Geology. 344, 160-174.
- **Sherrod, L.,** *Schlosser, K., Kozlowski, A., Bird, B., Werkema, D.D.Jr., *Swiontek, J., 2014. Geophysical Characterization of the Keene Valley Landslide in New York State. Journal of Environmental and Engineering Geophysics. 19: 3, 139-155.
- Blewett, W., Drzyzga, S., **Sherrod, L.**, Wang, H. 2014. Geomorphic relations among Glacial Lake Algonquin and the Munising and Grand Marais moraines in Eastern Upper Michigan, USA. Geomorphology. 219, 270-284.
- Gaff, D., **Sherrod, L.**, Brashler, J., 2013. Interpreting the South Flats Earthwork (20MU2): Insights Gained from Geophysical Surveys. Michigan Academician. 41: 3, 261-288.
- **Sherrod, L.**, Sauck, W.A., Werkema, D.D.Jr., 2012, A Low-Cost, In Situ Resistivity and Temperature Monitoring System. Groundwater Monitoring and Remediation. 32: 2, 31-39.
- Atekwana, E.A., Atekwana, E.A., Werkema, D.D.Jr., Allen, J.P., **Smart (Sherrod), L.**, Duris, J.W., Cassidy, D.P., Sauck, W.A., Rossbach, S., 2004, Evidence for microbial enhanced electrical conductivity in hydrocarbon-contaminated sediments. Geophysical Research Letters. 31, L23502, 4 pp.

FIELD TRIP GUIDEBOOK

*Musa, D., **Sherrod, L.**, 2014. Application of Geophysical Surveys in the Montezuma Wetlands Complex: Monitoring the changes in sediment and locations of subsurface waters. In: Kozlowski, A.L. (ed) 77th Friends of the Pleistocene Annual Reunion, Auburn, NY. Field trip Guidebook, pp. 107-119.

BOOK REVIEWS

Sherrod, L., 2011, Environmental Engineering: Water, Wastewater, Soil and Groundwater Treatment and Remediation. Ground Water, 49 (3), p. 459.

FILMOGRAPHY

Escobar's Hidden Millions, 2017 Discovery Channel production through Network Entertainment – expert geophysicist (Episodes 2, 5, and 6)

PRESENTATIONS AND ABSTRACTS

- *Undergraduate Researchers indicated with an asterisk before the name
- _ Presenter indicated with the name underlined
- *Underwood, R., *Zúñiga, L., *LaSpisa, G., *Tripp, K., Delaplane, G., **Sherrod, L.** Uncovering the Past: A Glimpse into the Colonial History of Douglassville, PA. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Tucson, AZ (24 March 28 March 2024)
- *Vallejo, K., Williams, R., *<u>Smart, S.</u>, *Zúñiga, L., *<u>Messner, T.</u>, *Perez, J., *Rivera, N., **Sherrod, L.**, Oakley, A. The Untold History of Lincoln Cemetery. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Tucson, AZ (24 March 28 March 2024)
- *Vallejo, K., **Sherrod, L.** The Suspected Dryville Cabin Grounds Cemetery, 2023 PASSHE STEM Conference, Kutztown, PA (*11 November 2023*)
- *Zúñiga, L., **Sherrod, L.** Pine Forge Mansion, 2023 PASSHE STEM Conference, Kutztown, PA (11 November 2023)
- Csongor, G., Szatmari, G. Árvai, M., Sherrod, L., Meszaros, J. Preliminary results of the study of using ground-penetrating radar (GPR) as a tool to locate artificial burrows similar to souslik burrows and future directions of mapping burrow systems of sousliks or other burrowing mammals alike. European Geosciences Union General Assembly 2023, Vienna, Austria (23-28 April 2023)

- *DeLong, L., *Dovin, T., *Cox, S., *Workman, N., *Hand, L., Sewall, J., **Sherrod, L.** 2022

 Paleochannels in the Kutztown University Ronald R. Rhein Environmental Study Area.

 Northeastern Section Geological Society of America, Lancaster, PA (20-22 March 2022).
- *Potter, C., *Willever, H., Kline, A., *Shollenberger, K., Thorne, R., **Sherrod, L.** 2021. Comparative Study of the Geophysical Response of Revolutionary War Era Mass Burials. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO (14 March 18 March 2021).
- *Sivak, T. and <u>Sherrod, L.</u> 2019. Graveyard Preservation through Geophysical Investigation. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Portland, OR (17-21 March 2019).
- **Sherrod, L.** and *Doyle, L., 2018. School House Search. *Invited Speaker* at Augustus Lutheran Church, Trappe PA (10 June 2018).
- **Sherrod, L.** and *Willever, H., 2018. Charlestown Cemetery: Search for Revolutionary War Mass Burial Grave. *Invited Speaker* for the Charlestown Historical Society, Charlestown Elementary School Cafeteria (16 May 2018).
- *Willever, H., **Sherrod, L.** 2018. Lost but not Forgotten: Geophysical Investigation of Revolutionary War Mass Burial Site. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Nashville, TN, (25-29 March 2018).
- *Doyle, L., *Evans, S., *Vales, D., **Sherrod, L.** 2018. Geophysical Investigation of an 18th Century Schoolhouse in Trappe, PA. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Nashville, TN, (25-29 March 2018).
- *Sutter, B., *Milinic, B., *Moriarty, S., Oakley, A., Cornell, S., **Sherrod L.**, Bochicchio, C., *Cooper, A. 2018. Geophysical and Stratigraphic Investigation of Assateague Island, Virginia: Unraveling the Evolution of the Only Mid-Atlantic Duplexed Barrier Island System. Northeastern Section Geological Society of America, Pittsburgh, PA (19-21 March 2018).
- *Sivak, T., *Reichard-Flynn, W., *Willever, H., Sewall, J., **Sherrod, L.**, 2018. Potential Palsa Relicts in Eastern Pennsylvania. Northeastern Section Geological Society of America, Pittsburgh, PA (19-21 March 2018).
- **Sherrod, L.**, Kozlowski, A., Bird, B., *Swiontek, J., *Schlosser, K., 2017. Geophysical Investigation of the 2011 Keene Valley Landslide. *Invited Speaker* at SUNY Geneseo Department of Geological Sciences Seminar Series (*3 November 2017*).
- Cravotta, C.A. III, **Sherrod, L.**, Galeone, D. Lehman, W., Ackman, T., Kramer, A. 2017. Hydrological and Geophysical Methods to Investigate Streamflow Losses and Restoration Strategies in Abandoned Mine Lands of Schuylkill River Watershed,

- Pennsylvania, USA, 2012-2015. Joint Conference of the West Virginia Mine Drainage Task Force Symposium, American Society for Mining and Reclamation (ASMR), and Appalachian Regional Reforestation Initiative (ARRI), Morgantown, WV, (9-13 April 2017).
- *Vales, D., Kozlowski, A., Bird, B., *Milinic, B., *Moriarty, S., *Keller, A., *Richardson, A., Sherrod, L. 2017. Mapping Heterogeneous Glacial Sediments in the Finger Lakes Region of New York. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (19-23 March 2017).
- *Vales, D., **Sherrod, L.**, Newlander, K. 2017. Geophysical Investigations of the Stoddartsville Archaeological Site in Northeast Pennsylvania. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (19-23 March 2017).
- Sherrod, L., 2016. The Historical Society Cemetery Survey: Were There Graves Left Behind?
 <u>Invited Speaker</u> for the Historical Society of the Phoenixville Area Annual Banquet, Phoenixville Country Club (25 September 2016).
- *Moriarty, S.N., *Michalowski, C.L., Oakley, A.J., Cornell, S.R., Bochicchio, C., **Sherrod, L.**, *Cooper, A.T., *DeLong, N.C. 2016. Investigating Barrier Island Evolution and Inlet Formation through Stratigraphic Analysis of Vibracores Taken from Assateague and Chincoteague Islands, VA. Geological Society of America (GSA), Denver, CO (25-28 September 2016).
- *Cooper, A.T., Oakley, A., Bochicchio, C., Cornell, S., *Moriarty, S., **Sherrod, L.** 2016. Evaluation of Late Pleistocene to Holocene Sedimentation in Greenbackville, Chincoteague Bay, VA: Implications for Sea Level Change and Barrier Island Evolution. Geological Society of America (GSA), Denver, CO (25-28 September 2016).
- *Miller, K., Simpson, E., Betts, T., **Sherrod, L.**, Wizevich, M., *Morgano, K., *Richardson, A., *Malenda, M., Simpson, W., Livingston, K., *Bogner, E. 2016. Voids: Small-Scale, Gas-Generated Soft Sediment Deformation Structures Found in Deltaic Muds of the Lake Powell Delta, Glen Canyon National Recreation Area, Hite, Utah. Geological Society of America (GSA), Denver, CO (25-28 September 2016).
- Cravotta, C., Sherrod, L., Galeone, D., Lehman, W., Ackman, T. 2016. Hydrological, Geophysical, and Geochemical Investigations in Support of Watershed Restoration in the Upper Schuylkill River, Schuylkill County, Pennsylvania. Pennsylvania Groundwater Symposium, State College, PA, (4 May 2016).
- *Keenhold, Kaitlyn, *McDermott, R., **Sherrod, L.**, Newlander, K. Bringing industry to Northeast Pennsylvania: Insights from a season's work at Stoddartsville. 87th Annual Meeting of the Society for Pennsylvania Archaeology, West Middlesex, PA (15-17 April 2016).

- *Vera, J., *Sammel, R., **Sherrod, L.**, Deveney, A. 2016. Disturbed Gravesites: A Case Study of Geophysical Investigations at the Historical Society of the Phoenixville Area. Geophysical Investigations of a Historic Milling Village in Stoddartsville, PA. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (20-24 March 2016).
- *McDermott, R., *Mascione, J., Newlander, K., **Sherrod, L.**, *Higgins, R. 2016. Geophysical Investigations of a Historic Milling Village in Stoddartsville, PA. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (20-24 March 2016).
- *Higgins, R., *Miller, K., *Morgano, K., *Snyder, E., *Vales, D., **Sherrod, L.**, Simpson, E. 2016. Revealing internal geometry of pockmark structures using ERT and GPR, Glen Canyon National Recreation Area, Hite, Utah. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (20-24 March 2016).
- Sherrod, L., Kozlowski, A., Bird, B., Blewett, W., Drzyzga, S., *Musa, D., *Schlosser, K.,
 *Swiontek, J. 2015. Improving Glacial Geology Maps and Interpretations Through Geophysics. *Invited Speaker* at Geological Society of America (GSA), Baltimore, MD (1-4 November 2015).
- <u>Drzyzga, S.</u>, Blewett, W., **Sherrod, L.**, Wang, H. 2015. Northern Michigan's Comingled Munising and Grand Marais Moraines and Their Relations with Relict Shorelines of Glacial Lake Algonquin. Geological Society of America (GSA), Baltimore, MD (1-4 November 2015).
- *Miller, K., Sherrod, L., *Bogner, E., *Higgins, R., *Livingston, K., *Malenda, M., *Morgano, K., Simpson, E., Simpson, W.S., *Snyder, E., *Vales, D. 2015. Geometry of Small-Scale Fluid/Gas Conduits: Lake Powell, Hite Utah. Geological Society of America (GSA), Baltimore, MD (1-4 November 2015).
- *Livingston, K.M., *Bogner, E., Simpson, E., *Malenda, M., **Sherrod, L.**, Betts, T., Laub, E., 2015. The Proposed Evolution of Shallow-Sourced Methane Mud Volcano Geomorphology: Lake Powell, Hite Utah. Geological Society of America (GSA), Baltimore, MD (*1-4 November 2015*).
- <u>Drzyzga, S.</u>, Blewett, W., **Sherrod, L.**, Wang, H. 2015. Correlation of Relict Shoreline Features along Northern Michigan's Munising and Grand Marais Moraines with Glacial Lake Algonquin Water Planes. Association of American Geographers, Chicago, IL, (*April* 2015).
- <u>Blewett, W.</u>, Drzyzga, S., **Sherrod, L.**, Wang, H. 2015. Correlation of high-level deltas and outwash plains along Michigan's Munising and Grand Marais moraines. Association of American Geographers, Chicago, IL, (*April 2015*).

- *Spielman, A., Sherrod, L., Cravotta, C. 2015. Temperature and Resistivity Investigations to Determine Zones of Streambed Leakage and Abate Abandoned Mine Drainage in the upper Schuylkill River, Schuylkill County. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Austin, TX, (23-26 March 2015).
- *Hillegas, L., Cravotta, C., Levine, L., **Sherrod, L.** 2014. Chemical Mass Balance Improves Estimates of Total Streamflow Gains and Losses for a Stream Crossing Underground Coal Mines. NE Section GSA, Lancaster, PA, (23-25 March 2014).
- *Musa, D., Sherrod, L., Kozlowski, A., Bird, B., *Snyder, E., *Treciak, S., *Spielman, A. 2014. Geophysical Mapping of Brine Springs in the Montezuma Wetlands Complex, NY. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Boston, MA, (17-21 March 2014).
- *Snyder, E., *Treciak, S., Peterson, C., **Sherrod, L.** 2014. Geophysical Investigations of Local Cemeteries in Eastern Pennsylvania. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Boston, MA, (17-21 March 2014).
- *Musa, D., **Sherrod, L.**, Kozlowski, A., Bird, B. 2013. Geophysical Investigations of Glacial History near the Montezuma Wetlands Complex in New York. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (17-21 March 2013).
- *Kadegis, J., <u>Sherrod, L.</u>, Cravotta, C., *Musa, D., *Hillegas, L., Levine, L., Franz, T. 2013. A multifaceted approach to assessing the conductance of stream channels in an AMD impacted region. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (17-21 March 2013).
- **Sherrod, L.**, Blewett, W. Drzyzga, S. 2013. Unraveling Great Lakes Glacial History Using GPR. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, CO, (17-21 March 2013).
- Sherrod, L., Sauck, W., *Swiontek, J., *Schlosser, K., Simpson, E. 2012. Burrow geometry and hazards: Case histories of GPR for mapping animal burrows. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Tucson, AZ, (25-29 March 2012).
- *Swiontek, J., Sherrod, L., *Kadegis, J., 2012. Stream Channel Resistivity within the Schuylkill Headwaters to Identify Flow Loss in a Watershed Impacted by Abandoned Mine Drainage. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Tucson, AZ, (25-29 March 2012).
- *Swiontek, J., *Schlosser, K., **Sherrod, L.**, Simpson, E. 2012. Ground Penetrating Radar Applications to Resolve Burrow Complexity in Modern Marmota Monax Burrows:

- Implications for the Recognition of Mammal Burrows in the Rock Record. 47th Annual Meeting of GSA, Northeastern Section (*18-20 March 2012*).
- *Schlosser, K., Sherrod, L., Kozlowski, A., Bird, B., *Swiontek, J., 2011. An Exploratory Study of an Active Landslide in the Adirondacks Using Applied Geophysics. Proceedings of the American Geophysical Union (AGU) Fall Meeting, San Francisco, CA, (5-9 December 2011).
- Brashler, J., Sherrod, L., Gaff, D., 2011. Remote Sensing at the South Flats Earthwork, 20MU2. Proceedings of The Society of American Archaeology (SAA) Annual Meeting, Sacramento, CA.
- *Messler, C., Higgins, J., **Sherrod, L**., 2011. Geophysical Investigations at a Potential Mass Grave Site in Bethlehem, PA. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Charleston, SC, (10-14 April 2011).
- Sherrod, L., Brashler, J., Gaff, D., 2011, Previous Excavations and Geophysical Discoveries at a Prehistoric Earthwork Site in Western Michigan. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Charleston, SC, (10-14 April 2011).
- Sherrod, L., 2010, Near-surface geophysical imaging, a non-invasive tool for aiding archaeological site investigation. *Invited Speaker* at Shippensburg University Geography and Earth Science Seminar Series (5 November 2010).
- **Sherrod, L.,** 2010, Application of Long-term Resistivity Monitoring Methods for Groundwater Characterization. *Invited Speaker* at Temple University Department of Earth and Environmental Science Seminar Series (2 April 2010).
- *Ross, C., *Merino, M., **Sherrod, L.**, 2009, Reconstruction of Lost Burial Plot Records with Ground Penetrating Radar. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Fort Worth, TX, (29 March 2 April 2009).
- Sherrod, L., 2008, Long Term Resistivity Monitoring: Imaging Natural Infiltration in the Vadose and Transition Zones of a Shallow Aquifer. Proceedings of the Joint Assembly, Fort Lauderdale, FL, (27-30 May 2008).
- Sherrod, L., Sauck, W.A., 2008, A Long-Term Resistivity Experiment Along Vertical Probes: Implications for Time-Lapse Monitoring. Proceedings of the Ground Water Summit, Memphis, TN, (30 March 3 April 2008).
- **Smart (Sherrod), L.**, Sauck, W.A., 2006, Continuous Monitoring of Vertical Resistivity Probes in the Transition Zone; Field Observations of Resistivity Hysteresis and Other Phenomena. Proceedings of the Joint Assembly, Baltimore, MD, (22-26 May 2006).

- Smart (Sherrod), L., Sauck, W.A., 2006, Geophysical Monitoring Probes and Their Application to Some Hydrogeologic Problems. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Seattle, WA, (3-6 April 2006).
- Sauck, W.A., Smart (Sherrod), L., Nassaney, M., Porsani, J., 2006, Archaeological Geophysics in an Urban Environment; Peeling Back the Layers at Ft. Miami, Michigan. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Seattle, WA, (*3-6 April 2006*).
- <u>Sauck, W.</u>, Kehew, A., Soliman, F., **Smart** (**Sherrod**), **L.**, Mesbah, M., 2005, Basin definition with gravity and resistivity (VES) in the central El Qaa Plain, Sinai, Egypt. Proceedings of the European Geophysical Union Annual Meeting (EGU), Vienna (25-28 April 2005).
- Smart (Sherrod), L., Sauck, W.A., Lynch, D., 2005, Progress in the Geophysical Delimitation of Fort Saint Joseph, Niles, MI. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Atlanta, GA, (4-7 April 2005).
- Smart (Sherrod), L., Sauck, W.A., Nash, M., 2004, Wurtsmith Air Force Base Revisited.

 Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Colorado Springs, CO, (22-26 February 2004).
- Werkema, D.D. Jr., Atekwana, E.A., Atekwana, E.A., Duris, J., Allen, J., Smart (Sherrod), L., Sauck, W.A., 2004, Laboratory and field results linking high bulk conductivities to the microbial degradation of petroleum hydrocarbons. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Colorado Spring, CO, (22-26 February 2004).
- Sherrod, L., Lynch, D., Sauck, W.A., 2003, Geophysical investigations at the archaeological site of Fort St. Joseph, Niles, MI. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), San Antonio, TX, (6-10 April 2003).
- Sherrod, L., Ross, A., Sauck, W.A., Hutchful, M.M., vanDijk, D., Yurk, B., Hansen, E., 2003, Ground-penetrating radar on Green Mountain, a blow-out dune south of Holland, Michigan. Michigan Academy of Arts and Sciences, Holland, MI, (21 March 2003).
- **Sherrod, L.**, Werkema, D., <u>Sauck, W.</u>, Atekwana, E., Rossbach, S., Atekwana, E., 2003, Column experiments and anomalous conductivity in hydrocarbon-impacted sands. 8th International Congress of the Brazilian Geophysical Society, Rio de Janeiro, Brazil. (*14-18 September 2003*).
- <u>Lynch, D.</u>, **Sherrod, L.**, Sauck, W., 2002, Geophysical Survey Techniques and Results at Fort St. Joseph, Midwestern Archaeological Conference, Columbus, Ohio, (*3-6 October 2002*).

PROFESSIONAL AFFILIATIONS

• The Environmental and Engineering Geophysical Society (EEGS)

PROFESSIONAL SERVICE

Current Professional Service:

Membership Committee of EEGS Member (July 2023 – present) Nominations Committee of EEGS Member (April 2018 – present)

Past Professional Service:

Immediate Past President of EEGS (April 2018 – April 2019)

Nominations Committee of EEGS Chair (April 2018 – April 2019)

President of EEGS (April 2017 – April 2018)

Finance Committee of EEGS Member (April 2016 – April 2019)

Finance Committee of EEGS Chair (April 2016 – April 2017)

President Elect of EEGS (April 2016 – April 2017)

Board Member At-Large of EEGS (March 2014 – April 2016)

Student Committee of EEGS Member (April 2016 – April 2019)

Student Committee of EEGS Chair (March 2013 – April 2016)

Vice President – Committees of EEGS (April 2012 – March 2013)

Membership Committee of EEGS Member (April 2011 – March 2013)

Vice President Elect – Committees of EEGS (April 2011 – April 2012)

WEBSITES

Kutztown University Geology Program website (maintenance)

https://www.kutztown.edu/academics/colleges-and-departments/liberal-arts-and-sciences/departments/physical-sciences/geology.htm

Dr. Sherrod's faculty website (creation and maintenance)

http://faculty.kutztown.edu/sherrod/

Kutztown Pipe Band website (maintenance)

https://kutztownpipeband.com/

UNIVERSITY AND COMMUNITY SERVICE

Current University and College Service:

Junior Girls in STEM events at KU Volunteer (2022-present)

Girls in STEM event at KU Volunteer (2021-present)

Kutztown Pipe Band Pipe Major (2019-present)

Memorial and Veteran's Services events on campus

Local community festivals, parades, and performances

Sabbatical Leave Committee (2024-2026)

Alumni Course: ALM 100 Introduction to Bagpipes and the Physics of Sound (Fall 2024)

Past University and College Service:

Alumni Course: ALM 100 Introduction to Bagpipes and the Physics of Sound (Fall 2022)

University Conduct Committee (2016-2018)

Grade Appeals Board (2016-2017)

Research Committee (2015-2017)

LAS Curriculum Committee (Spring 2016, sabbatical replacement)

Secretary (sabbatical replacement)

Sabbatical Leave Committee (2015-2016)

Undergraduate Research Committee (Fall 2015, sabbatical replacement)

Chairperson (sabbatical replacement)

Academic Technology Committee (2013-2016)

Secretary (2014-2016)

LAS Tech Committee (2010-2016)

Undergraduate Exceptions Committee (2010-2012)

Graduate Council Committee (2009-2011)

Current Department and Program Service:

Geology Program Prospective Student Visit Coordinator (2021-Present)

Department PET Committee Member (2014-Present)

Geology Program Assessment Committee (2010-Present)

Physical Sciences Scholarship Committee (2009-Present)

Past Department and Program Service:

Co-advisor of Physical Sciences Special Interest Housing Community (2023-2024)

Temporary Oceanography/Marine Geology Position Search Committee Chair (Spring 2019)

External member of PREC committee for Geography Department (2017-2018)

Temporary Oceanography/Geology Position Search Committee Chair (Spring 2016)

Current Advisor of Student Groups:

Kutztown Pipe Band Advisor (2017-Present)

Geophysics Society of Kutztown University Advisor (2015-Present)

Kutztown University EEGS Student Chapter Advisor (2013-Present)

Past Advisor of Student Groups:

Geology Club of Kutztown University Co-advisor (2011-2017)

Equestrian Club of Kutztown University Advisor (2013-2016)

Swimming Club of Kutztown University Advisor (Fall 2011)

Regional Science Olympiad Event Supervisor/Judge:

Chemistry Judge (2023)

Hydrogeology Judge (2016)

Road Scholar Supervisor (2015)

Awesome Aquifers Supervisor (2011-2012)

Road Scholar Supervisor (2010)

Berks Best in Science:

Judge (2014-2016)