

CURRICULUM VITAE - JOHN A. LUCZAJ

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University of Wisconsin – Green Bay
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ACADEMIC DEGREES

Johns Hopkins University: Department of Earth & Planetary Sciences
Ph.D. in Geology, May 2000; M.A. in Geology, May 1997

University of Kansas: Master of Science in Geology, December 1995 (With Honors)

University of Wisconsin - Oshkosh: B.S. in Geology, May 1993, Magna Cum Laude

TECHNICAL CERTIFICATIONS

Technical Certification: OSHA HAZWOPER 40-Hour Training Certificate

EMPLOYMENT HISTORY

University of Wisconsin – Green Bay: Department of Natural & Applied Sciences: Professor (2015-present); Associate Professor (2010 to 2015); Assistant Professor (Fall 2005 to 2010). Courses Taught: Introduction to Earth Science, Physical Geology, Geologic Evolution of the Earth, Sedimentology & Stratigraphy, Field Methods, Quaternary Geology, Geomorphic Processes, Radioactivity: Past, Present, & Future, Geoscience Field Trip; Hydrogeology, Groundwater Resources & Regulations, Stable Isotopes Seminar, Environmental Technology & Analysis (team), Graduate Seminar. Advise graduate and undergraduate students. Served as chair of Geoscience discipline from Fall 2010 through Spring 2015. Awarded 2015 Founders Award for Community Outreach.

Wisconsin Geological & Natural History Survey (Adjunct): Adjunct Researcher from 2008 to 2010 during a two-year USGS funded STATEMAP grant to map the bedrock geology of Brown County, Wisconsin.

American Hydrogeology Corporation: Senior Scientist/Data Manager (May 2002 to 2005). Project manager responsible for hydrogeologic interpretation and writing of geologic reports submitted to the Michigan Department of Environmental Quality. Co-manage the flow of field, analytical, and survey data. Supervised Drafting and Data Entry Departments.

Western Michigan University: Department of Geosciences - Visiting Assistant Professor (August 2000 to August 2002). Courses Taught: Physical Geology, Earth Studies, Historical Geology, Ocean Systems, Water-Rock Interaction. Other duties included Geology Club Faculty Advisor and M.S. Thesis committee member. Mentored both graduate and undergraduate students. Organized and directed regional 7-day field trips to Wisconsin/Upper Michigan and New York.

Towson University (Maryland): Department of Physics, Astronomy, & Geosciences - Visiting Assistant Professor (August 1999 to June 2000). Courses Taught: Physical Geology, Hydrogeology, Igneous and Metamorphic Petrology, Geochemistry of Natural Waters. Led local and weekend field regional trips.

Johns Hopkins University (Maryland): (September 1996 to May 1999) Graduate Teaching Assistant for Dynamic Earth Laboratory, Global Change & Human Health; Technician for Materials Preparation Equipment Room.

University of Kansas: (September 1993 to May 1995) Graduate Teaching Assistant for Mineralogy, Physical Geology, and Structural Geology.

United States Geological Survey: USGS-NAGT Cooperative Summer Trainee, Hawaiian Volcano Observatory. Summer 1993. Applied geologic and geophysical techniques to the study of volcanic processes and history of Kilauea and Mauna Loa Volcanoes. Performed paleomagnetic and charcoal sampling of basalt flows, described stratigraphic sections of volcanic ash, mapped historic basalt flows on Kilauea and Mauna Loa, installed bench marks via helicopter near Pu'u O'o vent, cataloged aerial photographic collection for the island of Hawaii, participated in land surface elevation surveys.

University of Wisconsin – Oshkosh: Undergraduate Research Assistant, (1991-1993)

Investigated the effects of western Cascade pyroclastic volcanics on Nehalem forearc basin sedimentation in northwest Oregon as part of a Barry M. Goldwater Scholarship. Pollen Laboratory Technician – performed sample digestions and made pollen slides for later investigation by Dr. William Mode. Field Assistant to another undergraduate in Real de Catorce, Mexico for four weeks in January 1991.

UNDERGRADUATE INDEPENDENT RESEARCH PROJECTS:

- Jason Hoffmann – Stable Isotope Analysis of Groundwater in Kewaunee County, WI (1 cr. Sp. 2017).
- Jonathan Odekirk – Undergraduate Senior Thesis: Pumping history, water levels, and contour maps for the confined aquifer in the Northeast Groundwater Management Area of Wisconsin (3 cr., Spr. 2016).
- Christa Kananen – A Study of the Potentiometric Surface of the Cambrian-Ordovician Aquifer in Marinette County, Wisconsin. (1 cr, Spring 2014).
- Patrick Harrington – Well Rehabilitation (2 cr. ES&P 798, Spring 2014)
- Tyler Johnson - Method Development for the Analysis of Trace Gases in Fluid Inclusions by Gas Chromatography Using a Custom Built Inline Bulk Crushing Apparatus. (1 cr, Chemistry 495 – Research in Chemistry, Fall 2013).
- Josie Robertson – Naturally Occurring Fluoride in Wisconsin's Groundwater. (1 cr. Fall 2014)
- Alex Edler – Two credits independent study (over Spring & Summer 2013) involving laboratory sampling of calcite crystals: "Midwest Calcite Compendium and Geochemistry."
- Mick Kiehl – Mapping wells with data on dissolved strontium. (Spring 2013)
- Clarissa Justmann – 2 credits of independent study (Fall 2012 & Spring 2013) on "Biostratigraphy of Sclerodonta in Northeast Wisconsin."
- Tyler Hischke – 1 credit independent study (Fall 2012) on "GIS Analysis of Bedrock Slump Features along Niagara Escarpment in Brown County, Wisconsin."
- Alex Edler – 3 credits (two projects; summer 2012). One project was on "Pond dam piping and geohydrology" and the other was "Soil and Geological Characterization of a Farm in Oconto County".
- Brenda Fritsch – One credit independent study (spring 2012) on Attending the 2012 Institute for Lake Superior Geology Annual Field Conference in Thunder Bay, Ontario along with visiting geological field localities in Minnesota.
- Heather Phelan and Julie Van Deuren (Spring 2010) – 1 credit independent studies (coworkers at Tetra Tech, Inc.) Project involved examining sediment cores from PCB study on lower Fox River sediments and was entitled "Soil Formation and Properties Utilizing River Sediments"
- Jacqueline Krall, Effects of Pleistocene Glaciation on Confined Aquifer of Eastern WI, (in conjunction with Dr. Tim Grundl at UW-Milwaukee), 1 cr. (Fall 2009).
- Brian Henrickson, Geochemistry of the Neda Formation, 1 cr. (Fall 2009).
- Andrea Duca, Advanced Mineralogy and Petrology, 2 cr. (Fall 2009).
- Andrea Duca, Volcanogenic Sulfides in Michigan and Wisconsin, 1 cr. (Spring 2009)
- Chris Kassel-Blakeney, The Baldwin Conglomerate, Environmental, 2 credits. (Fall 2007)
- Arlyn Rosenow, Glacial & Soil Investigation of NE Wisconsin, 3 credits. (Fall 2007)
- Jennifer Wessel, NE WI Karst/Glacial Sediment Study, 3 cr. (Spring 2007)

GRADUATE STUDENT THESIS PROJECTS – MAJOR ADVISOR

- Joseph B. Baeten. Thesis Title: Spatial Distribution and Source Identification of Dissolved Strontium in Eastern Wisconsin's Cambrian-Ordovician Aquifers. Joe defended his thesis and graduated on July 21, 2015. He now works for the Wisconsin DNR. In Library: QD181.S8 B34 2015X
- Gary Wauters. Thesis Title: "Paleoecological Perspectives: The Brussels Hill Pit Cave Faunal Assemblage, With a Focus on Short-tailed Shrews and Graphical Explorations of Holocene Paleomammalogy in Wisconsin." Gary defended his thesis and graduated in Fall 2013. In Library: QE720.2.W5 W38 2013X
- Julie Maas. Thesis Title: *Drawdown in Wisconsin's Northeast Groundwater Management Area*. Julie defended her thesis and graduated in Fall 2009.
- Amanda (Amy) Hamby. Tentative Thesis Title: "The Role of Natural and Induced Fractures in Supplying Surface Water to the Confined Deep Aquifer in Northeastern Wisconsin". Amy is nearly finished writing her thesis and should defend her thesis and graduate in 2017.
- Alex Edler. Project Title: "A local multi-aquifer analysis along the Niagara Escarpment using chemical and isotopic analysis of groundwater." Alex was the first non-thesis Master's student in the ES&P program. His research is complete, but he needs to finish writing. He will finish in 2017.
- Tyler Hischke. Thesis Title: Stratigraphy and Diagenesis of the Cambrian Sandstone Aquifer in Northeastern Wisconsin. Tyler intends to graduate in 2017.
- Patrick Harrington. Thesis Topic: An Investigation of Arsenic in Northeastern Wisconsin. Patrick is working on his thesis and is employed full time.

RESEARCH INTERESTS

My training is in hydrogeology, sedimentology and diagenesis, and geochemistry. I use a wide range of tools to understand geologic problems, including groundwater chemistry, stable and radiogenic isotopes, fluid inclusion analysis, cathodoluminescence microscopy, and scanning electron microscopy.

My research interests cover several areas, including groundwater quality and quantity issues, stable isotope systems, water-rock interaction in sedimentary rock systems, and karst geology. Many of my research interests focus on processes of water-rock interaction in sedimentary rocks, while others involve geologic applications to hydrothermal systems. I strive to link these research avenues to both classroom learning, as well as high-impact learning situations, such as independent studies and field courses. A full description of my research plan can be found in my Research Statement.

BOOKS, ARTICLES, GEOLOGIC MAPS, REPORTS, AND THESES

Craddock, J.P.; Malone, D.H., Porter, D.; Compton, J.; Luczaj, J.; Konstantinou, A.; Day, J.E.;

Johnston, S.T., 2017, Paleozoic reactivation structures in the Appalachian-Ouachita-Marathon foreland: Far-field deformation across Pangea. *Earth-Science Reviews*, v. 169, June 2017, p. 1-34. <https://doi.org/10.1016/j.earscirev.2017.04.002>

Luczaj, J.; Maas, J.; Hart, D. J.; Odekirk, J., 2017, Aquifer Drawdown and Recovery in the Northeast Groundwater Management Area, Wisconsin, USA: A Century of Groundwater Use. *Geosciences*, v. 7(1), 25 pages. doi:10.3390/geosciences7010011

Luczaj, J.; McIntire, M.J.; Olson Hunt, M.J., 2016, Geochemical Characterization of Trace MVT Mineralization in Paleozoic Sedimentary Rocks of Northeastern Wisconsin, USA. *Geosciences*, v. 6, no. 2, 29 pages. doi:10.3390/geosciences6020029

- Erb, K.; Ronk, E.; Koundinya, V.; Luczaj, J., 2015, Groundwater Quality Changes in a Karst Aquifer of Northeastern Wisconsin, USA: Reduction of Brown Water Incidence and Bacterial Contamination Resulting from Implementation of Regional Task Force Recommendations. *Resources*, v. 4, p. 655-672. doi:10.3390/resources4030655
- Luczaj, J.; Masarik, K., 2015, Groundwater Quantity and Quality Issues in a Water-Rich Region: Examples from Wisconsin, USA. *Resources*, v. 4, 323-357. doi:10.3390/resources4020323
- Stanley, Steven M. and Luczaj, John A., 2014, *Earth System History*, 4th edition. New York, W.H. Freeman, 587 pages. ISBN-13: 978-1-4292-5526-4
<http://www.macmillanlearning.com/Catalog/product/earthsystemhistory-fourthedition-stanley>
Supplementary materials: revised learning outcomes & web-based interactive timeline.
- Luczaj, J.A., 2013, Geology of the Niagara Escarpment in Wisconsin. *Geoscience Wisconsin*, v. 22, p. 1-34. <http://wgnhs.uwex.edu/pubs/gs22a01/>
- Luczaj, J.A., Zorn, M., 2013, An Evaluation of the Distribution and Sources of Dissolved Strontium in the Groundwater of Eastern Wisconsin, with a Focus on Brown and Outagamie Counties. Final Report Submitted to the UW Water Resources Institute on November 15, 2013, 16 pages.
- Luczaj, J.A., 2011, Preliminary Geologic Map of the Buried Bedrock Surface, Brown County, Wisconsin. Wisconsin Geological and Natural History Survey, Open File Report 2011-2, 1:100,000 Scale Map Sheet. http://wgnhs.uwex.edu/pubs/download_wofr201102/
- Luczaj, J.A., 2010, The Significance of Faulting to the Hydrogeology of the Cambro-Ordovician Aquifer System in Northeastern Wisconsin. *WGWA Newsletter*, v. 24, no. 4.
- Luczaj, J.A. and Hart, D.J., 2009, Drawdown in the Northeast Groundwater Management Area (Brown, Outagamie, and Calumet Counties, WI). Final Project Report submitted to the Wisconsin Department of Natural Resources on July 3, 2009; Wisconsin Geological & Natural History Survey, Open File Report 2009-4 (published online in 2011), 59 p. <http://wgnhs.uwex.edu/pubs/wofr200904/>
- Luczaj, J.A. and McIntire, M.J., 2008, Geochemical Characterization of Sulfide Mineralization in Eastern Wisconsin Carbonate Rocks. Final Project Report submitted to the UW Water Resources Institute on October 6, 2008; 13 pages, plus appendices.
- Luczaj, J. A. and Stieglitz, R., 2008, Geologic History of New Hope Cave, Manitowoc County, Wisconsin. *The Wisconsin Speleologist*, June 2008, p. 7-17.
- Luczaj, J. A., 2006, Evidence against the Dorag (Mixing-Zone) model for dolomitization along the Wisconsin arch – A case for hydrothermal diagenesis. *AAPG Bulletin*, v. 90, p. 1719-1738. [link](#)
- Luczaj, J. A., Harrison, W. B., III, and Williams, N. S., 2006, Fractured Hydrothermal Dolomite Reservoirs in the Devonian Dundee Formation of the Central Michigan Basin. *AAPG Bulletin*, v. 90, p. 1787-1801. DOI:10.1306/06270605082 [link](#)
- Luczaj, J. A., 2006, Sulfur Isotopes from Mississippi Valley-Type Mineralization in Eastern Wisconsin. *in*, J. Day, J. Luczaj, and R. Anderson eds., *New Perspectives and Advances in Understanding of Lower and Middle Paleozoic Epeiric Carbonate Depositional Systems of the Iowa and Illinois Basins*. Iowa Geological Survey Guidebook Series, no. 25, p. 137-142. (published in October 2006)
- Luczaj, J. A., 2001, A mineralized breccia pipe near Racine, Wisconsin: Evidence for post-Silurian igneous activity. *in*, R.D. Hagni ed., *Studies on Ore Deposits, Mineral Economics, and Applied Mineralogy: With Emphasis on Mississippi Valley-type Base Metal and Carbonatite-related Ore Deposits*: University of Missouri-Rolla Press, pp. 31-43.
- Luczaj, J. A. and Goldstein, R. H., 2000, Diagenesis of the Lower Permian Krider Member, southwest Kansas, U.S.A.: Fluid-inclusion, U-Pb, and fission-track evidence for reflux dolomitization during latest Permian time, *Journal of Sedimentary Research*, v. 70, p. 762-773. [http://dx.doi.org/10.1130/0091-7613\(1998\)026<0295:ASEIAF>2.3.CO;2](http://dx.doi.org/10.1130/0091-7613(1998)026<0295:ASEIAF>2.3.CO;2)
- Luczaj, J. A., 2000, Epigenetic dolomitization and sulfide mineralization in Paleozoic rocks of eastern Wisconsin: Implications for fluid flow out of the Michigan Basin, U.S.A. *Ph.D. Dissertation, Johns*

Hopkins University, 445 pages.

- Luczaj, J. A., 1998, Regional and stratigraphic distribution of uranium in the Lower Permian Chase Group carbonates of southwest Kansas, *The Log Analyst*, v. 39, no. 4, p. 18-26.
- Luczaj, J. A., 1998, Argument Supporting Explosive Igneous Activity for the Origin of 'Cryptoexplosion' Structures in the Midcontinent, United States, *Geology*, v. 26, p. 295-298.
- Luczaj, J. A., 1995, Origin and timing of uranium-bearing diagenetic phases in the lower Krider Member of the Nolans Limestone, Hugoton embayment, southwest Kansas. *M.S. Thesis, Univ. of Kansas*, 136 p.

VOLUMES EDITED

- J. Luczaj and D. Blaney (eds.) 2016, Groundwater Quantity and Quality. (A Special Issue of the Journal *Resources*). ISBN 978-3-03842-205-1 ([PDF](#))
- J. Day, J. Luczaj, and R. Anderson (eds.), 2006, New Perspectives and Advances in Understanding of Lower and Middle Paleozoic Epeiric Carbonate Depositional Systems of the Iowa and Illinois Basins. Iowa Geological Survey Guidebook Series, no. 25, 169 pages. (published in October 2006)

FUNDED AND PENDING EXTERNAL RESEARCH GRANTS AND AWARDS

Total awarded to date, not including pending proposal: \$514,387

- Luczaj, J.A., 2016, A Depth-to-Bedrock Map and GIS database for Kewaunee County, Wisconsin. Submitted to the Wisconsin Department of Natural Resources. **This proposal is pending for \$33,580.**
- Luczaj, J.A., 2014, Evaluation of geology and geologic reports related to an intermittent stream in the Town of Greenville. Services provided to Outagamie County Zoning Department, \$1,500.
- Luczaj, J.A. and Zorn, M., 2011, An Evaluation of the Distribution and Sources of Dissolved Strontium in the Groundwater of Eastern Wisconsin. *The proposal was funded for \$31,700 with a start date of July 2, 2012. Grant included summer and partial academic year support for one graduate student.*
- Luczaj, J.A., 2008, Bedrock Geology of Brown County, Wisconsin (Year 2). This was one of four proposals put forward by the Wisconsin Geological and Natural History Survey to the United States Geological Survey's STATEMAP program. The proposal required 1:1 matching state funds for every federal dollar received. *The proposal was funded for \$142,075 in spring 2009, with a start date of May 1, 2009. This included \$67,047 of federal dollars and \$75,028 of matching state funds.*
- Luczaj, J.A. and Hart, D., 2007, Drawdown in the Northeast Groundwater Management Area (Brown, Outagamie, and Calumet Counties, WI). Wisconsin Joint Solicitation for Groundwater Research. *The proposal was funded by the Wisconsin Department of Natural Resources for \$40,862 on July 1, 2008. The grant included summer and academic year support for one graduate student.*
- Luczaj, J.A. and McLaughlin, P., 2007, Bedrock Geology of Brown County (Year 1). United States Geological Survey STATEMAP Program. This was one of four proposals put forward by the Wisconsin Geological and Natural History Survey to the United States Geological Survey's STATEMAP program. The proposal required 1:1 matching state funds for every federal dollar received and is Year 1 of a two-year project. *The proposal was funded for \$109,686 in spring 2008; Start date of May 1, 2008. Included \$51,470 federal dollars and \$58,218 matching state funds.*
- Knudsen, A.C., Bjornerud, M., Collett, J., **Luczaj, J.A.**, and Thompson, D.E., 2007, MRI: Acquisition of a Powder X-Ray Diffractometer for Multidisciplinary/Multi-institutional Research and Training. National Science Foundation (EAR Major Research Instrumentation) Grant Proposal Number EAR-0722734. An initial proposal (0619297) was submitted in early 2006. The revised and resubmitted proposal was funded for \$180,000 on July 19, 2007.
- Luczaj, J.A. and McIntire, M., 2006, Geochemical characterization of sulfide mineralization in eastern Wisconsin carbonate rocks. Wisconsin Joint Solicitation for Groundwater Research. \$8,554 (funded)

ORGANIZATIONS THAT HAVE FUNDED MY RESEARCH (Pre-UWGB)

- United States - Israel Binational Science Foundation (2000); Consulting Researcher. Research Grant Agreement #9700419 awarded to Grant Garven (Johns Hopkins University, United States) and Haim Gvirtzman (Hebrew University, Israel). Grant covered travel, lodging, and field work that led to a fluid-inclusion study of epigenetic dolomite and calcite in Cretaceous dolostones near the Dead Sea.
- U.S. Department of Energy (Multiyear grant; Consulting Researcher) DOE project number DE-AC26-00BC15122 awarded to J. R. Wood, T.J. Bornhorst, W.B. Harrison III, W. Quinlan. Grant covered my summer salary and expenses for core, petrographic, and fluid-inclusion analyses of Devonian fractured dolomite reservoir rocks in Michigan.
- Johns Hopkins University, Department of Earth and Planetary Sciences - Hans Eugster Fund (1999); Robert Balk Fund (1997-98) - David Elliott Fund for Research, Stuart Mossom Fund (1996);
- Kansas Geological Foundation: Competitive Grant Award to John Luczaj (\$250) – 1994; Supported research on the Origin and timing of uranium-bearing diagenetic phases in the lower Krider Member of the Nolans Limestone, Hugoton embayment, southwest Kansas.
- Society of Professional Well Log Analysts: Competitive Grant Award to John Luczaj (\$1,500) – 1994; Supported research on the Origin and timing of uranium-bearing diagenetic phases in the lower Krider Member of the Nolans Limestone, Hugoton embayment, southwest Kansas.

ARTICLES AND BOOKS IN DEVELOPMENT (Student Names in Bold)

- Luczaj, J.A., *in preparation*, The Roadside Geology of Michigan. Mountain Press, Missoula, Montana.
- Luczaj, J.A., **Baeten, J.B.**, Zorn, M., and Shiel, A., *in preparation*, The Distribution and Sources of Dissolved Strontium in the Cambrian-Ordovician Aquifer of Eastern Wisconsin. *Science of the Total Environment*.
- Luczaj, J.A., **Baeten, J.B.**, **Hamby, A.**, **Konrad, A.**, *in preparation*, Fossil groundwater isoscapes and challenges for forensic science: A case example from northeastern Wisconsin.
- Luczaj, J.A. and Schauer, A., *in preparation*, A meteoric water line for Green Bay, Wisconsin.
- Hamby, A.** and Luczaj, J.A., *in preparation*, The Role of Natural and Induced Fractures in the Confined Aquifer in Northeastern Wisconsin. *Groundwater*. (based upon a pending Master's thesis).
- Luczaj, J.A., Martin, J.B., Millen, T.M., *in preparation*, A Pb-isotopic Study on Galena from Eastern Wisconsin and the Upper Mississippi Valley: Implications for Lead Sources and Regional Fluid-Flow Systems. *Economic Geology*.
- Luczaj, J.A. and **Robertson, J.**, *in preparation*, Fluoride in Wisconsin Groundwater: Distribution and Sources.
- Edler, A.**, and Luczaj, J.A., *in preparation*, A local multi-aquifer analysis along the Niagara Escarpment using chemical and isotopic analysis of groundwater. *Hydrogeology Journal*.

ABSTRACTS FROM SCIENTIFIC MEETINGS (Student Names in Bold)

- Poros, Z., Jagniecki, E., Luczaj, J.A., Kenter, J., Gal, B., Correa, T., Ferreira, E., Heumann, M., Elifritz, A., Johnston, M., McFadden, K., and Matt, Veit, *in preparation/accepted*, Origin of Silica in Pre-Salt Carbonates, Kwanza Basin, Angola. AAPG Annual Conference and Exhibition, 2017.
- Hamby, A.** and Luczaj, J., 2016, Detection and Evaluation of an Inadvertent Cross-Connection of a Water Supply Pipeline to a Deep Well Using Time-Series Geochemical and Stable Isotopic Indicators. *American Water Resources Association – Wisconsin Section, 40th ANNUAL MEETING, Wisconsin Dells, Wisconsin, March 10-11, 2016*.
- Konrad, A.**, Luczaj, J., Schauer, A., 2016, Using Stable Isotopes of Well Water to Assess Contamination Vulnerability in a Karst Aquifer, Kewaunee County, Wisconsin, USA. *American Water Resources Association – Wisconsin Section, 40th ANNUAL MEETING, Wisconsin Dells, Wisconsin, March 10-11, 2016*.

- Luczaj, J.A., 2015, Modern Aquifer Chemistry as a Function of Water-Rock Interaction: A Case Example from Eastern Wisconsin (Invited). 2015 Annual Geological Society of America Meeting, Baltimore, Maryland, November 1-4, 2015. (Part of Lawrence A. Hardie Commemorative Session – T192). Geological Society of America *Abstracts with Programs*. Vol. 47, No. 7, p.503
- Zhaoqi, L., Csoma, A., Morantes, J., McLin, K., Luczaj, J. A., Kirschner, R., Tucker, S., Burns, F., Dean, P., 2015, Carbonate Cementation in Clastic Reservoirs: Browse Basin, Australia. AAPG Annual Convention and Exhibition, Denver, Colorado, May 31-June 3, 2015.
- Luczaj, J.A., 2015, Modern Aquifer Chemistry as a Function of Water-Rock Interaction: A Case Example from Eastern Wisconsin. 49th Annual Geological Society of America, North-Central Section Meeting, Madison, Wisconsin, May 19-20, 2015.
- Luczaj, J.A., 2015, Groundwater Quality Issues in the Aquifers of Northeastern Wisconsin (Invited). Wisconsin Society of Professional Engineers – Discovery Conference, May 27, 2015.
- Kananen, C.**, Luczaj, J. A., 2015, Drawdown of the Potentiometric Surface in the Cambrian-Ordovician Aquifer in Marinette County, Wisconsin. *American Water Resources Association – Wisconsin Section, 39th ANNUAL MEETING, Oconomowoc, Wisconsin, March 5-6, 2015.*
- Hamby, A.**, Luczaj, J. A., **Baeten, J.**, 2015, Exploring the Significance of Faults and Fractures in the Confined Aquifer in Northeastern Wisconsin (Brown and Outagamie Counties): Insights From Stable Isotope Patterns. *American Water Resources Association – Wisconsin Section, 39th ANNUAL MEETING, Oconomowoc, Wisconsin, March 5-6, 2015.*
- Luczaj, J. A., 2015, Karst Geology and Groundwater (Invited). 2015 WLWCA/WOWRA Joint Winter Conference, Stevens Point, Wisconsin, January 29-31, 2015.
- Luczaj, J. A., 2014, An Evaluation of the Distribution and Sources of Dissolved Strontium in the Groundwater of Eastern Wisconsin, with a Focus On Brown and Outagamie Counties. *Invited Presentation at the 2014 WGWA Annual State Conference, Waukesha, Wisconsin, March 7, 2014, Waukesha, Wisconsin.*
- Luczaj, J.A., 2014, The Largest Flowing Artesian Well in the State of Wisconsin Is (Sometimes) an Abandoned Deep Quarry. *American Water Resources Association – Wisconsin Section, 38th ANNUAL MEETING, Wisconsin Dells, March 13-14, 2014.*
- Poros, Z., Jacobi, D., Morris, W. R., Luczaj, J. A., Mitchell, R., A. Hartwig, A.E. Csoma, 2014, Unveiling the Fluid History of Unconventional Reservoirs Via Diagenetic Fracture-Fill Studies: An Example From the Avalon and Wolfcamp Formations, Delaware Basin. *AAPG Annual Conference & Exhibition, Houston, Texas, April 6-9, 2014, Houston, Texas.*
- Luczaj, J. A., 2014, Groundwater Quality Challenges in Northeastern Wisconsin. Invited Presentation on as part of the *2014 Water Resources & Environmental Management International Conference held in Green Bay, Wisconsin on June 18, 2014.*
- Miller, R., Luczaj, J., and Evans, T.J., 2013, Delineating shallow basement faults on high-resolution seismic reflection data plagued with extreme static in NE Wisconsin, USA. Society of Exploration Geophysicists, 2013 Annual Meeting in Houston, Texas, September 22-27, 2013, p. 1718-1722.
- Baeten, J.**, Luczaj, J., Zorn, M., and Johnson, D., 2013, Spatial Distribution and Source Identification of Dissolved Strontium in Eastern Wisconsin's Groundwater Aquifers. *American Association of Water Resources Wisconsin Section Meeting in Brookfield, Wisconsin on March 7-8, 2013. (Poster).*
- Csoma, A.E., Phelps, R. M. El-Sobky, H. F., Luczaj, J., Goldstein, R. H., Liu, C, and Liu, X., 2012, Quantifying Karst-filling Anhydrite Distributions from Pore to Log Scales; San Andres Formation, Permian Basin Part 1: Understanding the process. *AAPG Hedberg Conference - Fundamental Controls on Flow in Carbonates, Saint-Cyr Sur Mer, Provence, France, July 8-13, 2012.*
- Luczaj, J.A., 2012, Flooding of the Duck Creek Quarry as an unintended consequence of Deep Aquifer Recovery – An update. *American Association of Water Resources Wisconsin Section Meeting in Stevens Point, Wisconsin on March 1-2, 2012. (Oral Presentation).*

- Baeten, J.B.**, Luczaj, J., Zorn, M., and Rohr, D., 2012, An Evaluation of the distribution and sources of dissolved strontium in the Groundwater of eastern Wisconsin. *American Association of Water Resources Wisconsin Section Meeting in Wisconsin Dells, Wisconsin on March 1-2, 2012. (Poster Presentation)*.
- Luczaj, J.A., 2011, Bedrock Geology of Brown County, Wisconsin. *Geological Society of America Meeting in Minneapolis, Minnesota on October 9-12, 2011*.
- Luczaj, J.A., 2011, How High Will The Water Rise? Flooding of the Duck Creek Quarry as an Unintended Consequence of Deep Aquifer Recovery (Brown County, Wisconsin). *American Assoc. of Water Resources Wisconsin Section Meeting in Appleton, Wisconsin on March 3-4, 2011*.
- Luczaj, J.A., 2010, Fonferek Glen (Stop 8). Stop description and oral presentation in the field. Published in the Field Guidebook for the 65th Annual Tri-State Geological Field Conference, September 24-26, 2010, “Bedrock Geology of the Niagara Escarpment on the Door Peninsula of Wisconsin – 2010 – The Year of the Niagara Escarpment in Wisconsin.
- Hart, D. and Luczaj, J.A., 2010, Ambient Flow and Heterogeneity in Multi-Aquifer Wells. American Assoc. of Water Resources Wisconsin Section Meeting, Middleton, Wisconsin on March 4-5, 2010.
- Maas, J.C.** and Luczaj, J.A., 2010, Drawdown, Recovery, and Hydrostratigraphy in the Northeast Groundwater Management Area (Brown, Outagamie, and Calumet Counties, WI). American Association of Water Resources Wisconsin Section Meeting in Middleton, Wisconsin on March 4-5, 2010. (Poster Presentation).
- Hart, D., Gotkowitz, M., and Luczaj, J., 2009 (submitted), Ambient Flow and Heterogeneity in Multi-Aquifer Wells. American Geophysical Union National Meeting in San Francisco, California, December 14-18, 2009.
- Luczaj, J.A., McIntire, M.J., **Steffel, A.M.**, and **Duca, A.L.**, 2009, Geochemical Characterization of Sulfide Mineralization in Eastern Wisconsin Carbonate Rocks. American Association of Water Resources Wisconsin Section Meeting. Stevens Point, Wisconsin, March 5-6, 2009. (Poster).
- Maas, J.C.**, Hart, D.J., and Luczaj, J.A., 2009, Groundwater Recovery and Hydrostratigraphy in the Northeastern Groundwater Management Area of Brown, Outagamie, and Calumet Counties, Wisconsin. American Association of Water Resources Wisconsin Section Meeting in Stevens Point, Wisconsin on March 5-6, 2009. (Poster Presentation).
- Luczaj, J.A., 2008, A Genetic Link between Hydrothermal Dolomite and MVT Mineralization in Eastern Wisconsin. American Association of Petroleum Geologists – Society of Petroleum Engineers – Eastern Section Meeting in Pittsburgh, Pennsylvania on October 14, 2008.
- Hart, D., Luczaj, J. A., and Chase, P., 2008, A Large Scale Pumping Test in the Northeastern Wisconsin Groundwater Management Area. American Association of Water Resources Wisconsin Section Meeting in Brookfield, Wisconsin on March 6-7, 2008. (oral presentation)
- Luczaj, J. A., Millen, T., and Martin, J., 2007, A lead-isotopic study of Galena from Eastern Wisconsin: Evidence for lead sources in Precambrian basement rocks. Geological Society of America, North-Central/South Central Meeting in Lawrence Kansas on April 11-13, 2007. GSA Abstracts with Programs, v. 39, no. 3, p. 67. (Poster presentation)
- Evans, K.R., Mickus, K. L., Fagerlin, S., Luczaj, J., Mantei, E., Miller, J. F., Moeglin, T., Pavlowsky, R. T., and Thomson, K. C., 2003, New Dimensions of the Weaubleau Structure: A Possible Meteorite Impact Site in Southwestern Missouri. *Geological Society of America, Abstracts with Program v. 35, no. 2, Feb. 2003*.
- Luczaj, J. A., 2001, Preliminary results of a fluid-inclusion study on fractured carbonate reservoirs of the Dundee Formation, Central Michigan Basin, U.S.A. *Geological Society of America, Abstracts with Program, v. 33, no. 6, November, 2001*.
- Luczaj, J. A., 2001, Epigenetic dolomitization and MVT mineralization in Paleozoic rocks of Eastern Wisconsin: Implications for regional fluid flow. *AAPG Bulletin, v. 85, p. 1534-1535*.
- Luczaj, J. A., Garven, G., and Gvirtzman, H., 2001, Preliminary results of a fluid inclusion study on Upper

- Cretaceous Judea Group dolomites in the Dead Sea Region, Israel. *Geological Society of America, Abstracts with Program*, v. 33, no. 4, p. A-42.
- Luczaj, J. A., 1998, Epigenetic dolomitization and sulfide mineralization in Paleozoic rocks of eastern Wisconsin. *SEPM Research Conference on Fluid Flow in Carbonate Rocks, Program and Abstracts*, Door County, WI, September 20-24, p. 18.
- Goldstein, R. H., Banner, J. A., Luczaj, J. A., Ward, W. B., and Westphal, H., 1998, Importance of brine reflux in diagenesis. *SEPM Research Conference on Fluid Flow in Carbonate Rocks*, Door County, WI, September 20-24.
- Luczaj, J. A., 1998, A mineralized breccia pipe near Racine, Wisconsin: Evidence for post-Silurian igneous activity in the northern midcontinent. *Geological Society of America, Abstracts with Program*, v. 30, no. 2, p. 57.
- Luczaj, J. A., 1998, Sulfide mineralization and massive dolomitization in eastern Wisconsin: Evidence for a common origin during post-Silurian regional hydrothermal activity. *Geological Society of America, Abstracts with Program*, v. 30, no. 2, p. 57.
- Luczaj, J. A., 1996, Diagenesis of the Lower Permian Krider Dolomite, southwest Kansas: Fluid-inclusion, U-Pb, and fission-track evidence for reflux dolomitization during latest Permian time. *PACROFI (Pan-American Current Research on Fluid Inclusions) VI*, Madison, Wisconsin, May 30 - June 1, 1996.
- Bergmann, B. B. and Luczaj, J. A., 1995, Preliminary fluid inclusion evidence for the mechanism of dolomitization in the Lower Permian Chase Group, Hugoton embayment. *American Association of Petroleum Geologists Bulletin*, v. 79, p. 1400.
- Luczaj, J. A. and Franklin, S. T., 1992, Effects of western Cascade pyroclastic volcanics on Nehalem Forearc basin sedimentation, northwest Oregon: Wisconsin Academy of Sciences, Arts, and Letters, Abstracts for oral presentations, p. 24-25.

ACHIEVEMENTS AND AWARDS

Professional Awards and Recognition:

- 2015 Founders Award for Excellence in Community Outreach – Univ. of Wisconsin-Green Bay
- Letter of Commendation from UWGB Chancellor Tom Harden for service to the Green Bay Learning in Retirement Program – February 2014.
- TriBeta Honor Society - Professor of the Month at UW-Green Bay (Feb. 2012)
- UW-Green Bay - Student Nominated Teaching Award Nominee - (Spring 2012)
- 2008 “Rockhound of the Year” – Neville Public Museum Geology Club
- Vincent E. Nelson Memorial Award 2001 – AAPG Eastern Section, Best Poster

Student Awards at Johns Hopkins University:

- Best Student Paper Award (Oral), 1998 GSA-North Central Section
- Obert Fellowship (1996 - 1997)

Student Awards at the University of Kansas:

- Erasmus Haworth Graduate Honors in Geology (1995)
- Ray P. Walters Scholarship (1995)
- H. A. Ireland Scholarship (1994 - 1995)
- Society of Professional Well Log Analysts Scholarship (1994)
- SIPES Foundation Earth Science Scholarship (1994)
- Rocky Mountain Federation of Mineralogical Societies Scholarship (1993-95)
- Frederick T. Holden Scholarship (1993 - 1994)

Student Awards at the University of Wisconsin - Oshkosh:

- Barry M. Goldwater Scholarship (1991 - 1993)

- NAGT-USGS Cooperative Summer Traineeship Award (1993)
- B. E. Karges Award for Achievement in Geology (1993)
- Best Student Paper Award in Geology (Oral), 1992 Wisconsin Academy of Sciences, Arts, and Letters Annual Meeting
- Bartlett Award; James Vedder Award (1991)
- Freshman Scholarship in Geology (1989)

PROFESSIONAL MEMBERSHIP

- AAPG (American Association of Petroleum Geologists) (1992)
- SEPM (Society for Sedimentary Geology) (1995)
- Geological Society of America (1997)
- Society of Economic Geologists (2001)
- American Water Resources Association (Wisconsin Section) (2006)
- Wisconsin Groundwater Association (2010)

SUMMARY OF PAID CONSULTING

ConocoPhillips: 2011- 2016

Completed numerous projects requiring fluid-inclusion petrography and microthermometry, as well as occasional investigation with scanning electron microscopy (SEM). Some of these have lead to presentations at national/international meetings, with the intent of publishing articles in the future.

Outagamie County (Wisconsin) Zoning: May 2014 – May 2015

Field site visit, written evaluations of geologic reports, and conference meetings regarding the geology of an intermittent stream near Greenville, Wisconsin and its potential impact on nearby domestic water wells.

Encap, LLC – 2013

Assisted ENCAP (Green Bay, WI) with a written professional opinion as part of a patent dispute.

Earth Resources International, LLC - 2005

Environmental consulting; prepared CAD drawings, performed field surveying, and wrote environmental compliance reports for submission to the Michigan DEQ. Clients: confidential.