Sarah L. Hanson, Ph.D.

CONTACT INFORMATION:

Adrian College
Geology & Environmental Science Dept.
110 S. Madison St.
Adrian, MI 49221

Office: 517-264-3944
e-mail address: slhanson@adrian.edu

EDUCATION:

Ph.D., Geology, University of Utah, December 1995
Dissertation: Mineralogy, petrology, geochemistry, and crystal size distribution of Tertiary plutons of the central Wasatch Mountains, Utah
M.S., Geology, University of New Orleans, December 1990
Thesis: Mineralogy, petrology, and geochemistry of the Trout Creek Pass Pegmatite District, Colorado
B.S., Geology, University of New Orleans, December 1987

PROFESSIONAL EXPERIENCE:

Adrian College, Professor, 8/98 – present
Adrian College Robinson Planetarium Director, 8/98 – 5/19
National Park Service, Geologist-in-Park for Flagstaff Area National Monuments, Summer 1998 – 2010
Indiana Univ. of Pennsylvania, Asst. Professor, 1/98 – 5/98
Kennecott Exploration Company, Consultant, 10/97 – 4/98
Indiana Univ. of Pennsylvania, Asst. Professor, 8/96 – 5/97
Utah Geological Survey, Geotechnician, 4/96 – 8/96

ACADEMIC AWARDS AND HONORS:

Creative Activity, Research, and Scholarship Award, Adrian College, 2017
Ross Newsom Award for Outstanding Teaching, 2014
EXCEL Excellent Instructor Award, 2007
Certificate of Recognition for Students with Disabilities Service, Spring 2002
College of Mines and Earth Sciences Outstanding Teaching Assistant Award, 1995
Sigma Xi Graduate Research Award, 1990
Student Leadership Award, 1988

TEACHING EXPERIENCE:

Instructor at Indiana University of Pennsylvania:
Earth and Space Science (Lecture and Lab), Dynamic Earth Lab, Oceans and Atmospheres Lab, Introduction to Igneous and Metamorphic Petrology

Instructor at Adrian College:
Physical Geology, Geology of National Parks, Natural Disasters, Environmental Geology, Mineralogy, Igneous and Metamorphic Petrology, Structural Geology, U.S. Geology Field Experience, Plate Tectonics, Pegmatology, Capstone: Senior Research, Weather & Climate, Introduction to Environmental Science, Astronomy

Online and hybrid courses:

Spring 2020: Geology of National Parks and Structural Geology were taught online for the second half of the semester

2020/2021 academic year: Environmental Geology, Mineralogy and Introduction to Igneous and Metamorphic Petrology utilized a mix of online and in person instructional methods with several pivots between modalities throughout the semester. Geology of National Parks was taught as a hybrid course.

Spring 2021: Completed a short course and earned the Certificate of Completion for the Adrian College Online Learning and Teaching Training Program

Undergraduate Senior Thesis Advisor:

Ty Perin (2025) *Correlation between the Tectonic Origin of Pegmatites: A Tool for Evaluating Rare-Earth-Element Deposits.*

Lauren Falzone (2023), Elliott Wiegolpolski (2023), Caleb Dachenhaus (2022), Caleb Ellis (2022), Brandon Gomes (2015), Alaina Paquette (2015) Michael Micallef (2014), Jacob Burt (2014), Michael Herzog (2012) *River Raisin Watershed water quality; phosphates and nitrates.*

Ashlyn Kast (2023) *Effect of Climate change on Gulf Coast and Chesapeake Bay Wetlands.*

Corissa Hamilton (2021): *Aerosols vs. temperature in the atmosphere*.

Austin Kuhn (2020): *Changes in wildfire occurrences over the last 20 years.*

Brendan Koziol (2019) *Effect of Lenawee County compost site on River Raisin nutrient levels.*

Olivia Ziemba (2019) *Relationship between different soil types and plant life at Walden West.*

Amanda Dangel (2017) Olivia Ziemba (2018/19) *Soil chemistry at Walden West.*

Tanner Jones (2017) Brendan Keller (2018/19) *Water quality at Walden West*.

G. Vandervort (2016) *Origin of line rock from the Mojave Pegmatite District, AZ.*

Paisley Dandenault (2016) *Influence of dams on water quality in the River Raisin Watershed, MI.*

Nicole Morgret (Spring 2013) *Glaciers in Michigan: an educational program for the Stubnitz Environmental Center.*

Jeff Young (Fall 2012) *Determining correlation between distance to volcanic vent and percent phenocrysts.*

Brent Swee (Fall 2012) *Mg-Fe geochemical data resolve vent clusters within the San Francisco Volcanic Field, Northern Arizona.*

Joel Workman (Fall 2011) *Influence of concentrated animal feeding operations on water quality within the River Raisin Watershed.*

Ben Kaczmarek (Fall 2011) *Geochemical analyses of the San Francisco Volcanic Field.*

Jacob Denig (Fall 2011) *Eruptive history of Western Wupatki cinder cones, Northern Arizona.*

Jeremy Sell (Spring 2010) *Analysis of bubbles in vesicular basalt from the Bonito Lava Flow, Sunset Crater National Monument, Arizona.*

Jacob Jones (Fall 2009) *Influence of CAFOs on water quality in the River Raisin Watershed.*

Jeremy McKinney (Spring 2008) *Petrographic evaluation of the Sunset Crater fissure eruption.*
TJ Brown (Spring 2008) Chelsea Strawser (Fall, Spring 2015): *Synthesis of gem minerals.*
Nikki Borum (Fall 1999) *Chemical evaluation of wodginite group minerals.*

Graduate Research Supervised:
Graduate Thesis Committee Member for MS: TJ Brown University of New Orleans (2010) *Niobium, tantalum, and rare earth element distribution in NYF pegmatites, Mohave Co., northwestern Arizona.*
Adjudication Committee Member for Ph.D. Thesis. Nanna Rosing-Shrow University of Oslo (2020) *The Sveconorwegian pegmatite province: identifying the parameters controlling the abundance and genesis of the pegmatites.*

Supervisor for Student Internships:
Brandon Keller (Spring 2018) Adrian College, Natural Resources Conservation Service, USDA.
Chelsea Strawser (Spring 2014) Adrian College, *Jeweler Apprentice*, International Diamond.
Nicole Morgret (Fall 2012) Adrian College, *Education intern*; Stubnitz Environmental Center.
John Parvin, (Summer 2009) Adrian College, *Conservation Aide*; *USDA-NRCS* Adrian, MI.
Laura Kennedy (Summer 2007, 2008), National Park Service Intern, *Inventory of volcanic features on the Bonito Lava Flow, Sunset Crater Volcano, AZ.*
Meagan Beach (Summer 2007, 2008), National Park Service Intern*, Inventory of volcanic features on the Bonito Lava Flow, Sunset Crater Volcano, AZ.*
Erin Doak, (Summer 2005) Wupatki National Monument Geologist-in-Park, *Petrographic evaluation of lava flows at Wupatki National Monument, Arizona.*
Stephanie Shepherd, (Summer 2005) Sunset Crater Volcano NM Geologist-in-Park, *Soil Formation in cinder deposits at Sunset Crater Volcano NM, AZ.*

PROFESSIONAL SERVICE:
Abstract Review Panel: New England Mineral Association Symposium, 2023 – present
Technical Session Chair, Rochester Mineralogical Symposium, 2017 – 2023
Abstract Review Panel: Rochester Mineralogical Symposium, 2008 – 2023
Editor: Lithographie Special Issue, *Rubellite: Tourmaline Rouge*, 2019
Editor: abstract volume, PEG 2019: 9th International Symposium on Granite Pegmatites
Editor: abstract volume, PEG 2013: 6th International Symposium on Granite Pegmatites
Scientific editor: Lithographie Special Issue, *Topaz: Perfect Cleavage,* 2011
Led GSA Field trip: Cordilleran / Rocky Mountain section meeting, *San Francisco Volcanic Field, AZ,* March 2008
Seismograph Technician: *Maintain and repair WUAZ, AZ seismograph station for the USGS National Earthquake Information Center*, 2000 – 2010
Geological Society of America Campus Representative: 2002 – present

COLLEGE SERVICE:

Adrian College of Associated Professors, Secretary, September 2024 – present
Adrian College of Associated Professors, President, May 2023 – September 2024
Adrian College of Associated Professors, Vice President, September 2022 – May 2023
Adrian College of Associated Professors, at large member, 2018 – 2022
Department Chair for the Geology Department, 2001 – 2015, Spring 2020
Adrian College Science Collegium IV Secretary, 2008 – 2020
Science Representative for Convocation Speakers Committee, 2005 – 2010
Math Department Faculty Search committee, Spring 2009
Peer Review Committee, Spring 2004
Collegium IV Meeting Coordinator, 2001 – 2002
Faculty Advisor: *average advising load is 18 students per academic year*
Faculty Advisor: *Adrian College Geology Club,* 1999 – 2012
Faculty Advisor: *Sigma Gamma Epsilon* (National Geology Honor Society), 2010 – present
Student worker supervisor: *Supervise an average of four student workers each year*
Webmaster: *developed and maintained the Geology Department web page until 2013*
Assessment: *developed and implemented departmental and course assessment rubrics for the Geology Department*
Recruiting: *Meet with prospective students and lead a Natural Disaster Exercise for prospective students on 1-3 Saturdays per year.*
Sponsored five Native American speakers in the Robinson Planetarium, Fall 2002, Spring 2002, Fall 2005, Fall, 2009, Fall 2012
Led Geology Club sponsored field trips: *North Carolina (3/97), Big Bend Texas (2/00), Southern Indiana (4/01), Colorado Plateau, (2/02), West Virginia (4/05), Fossil Park, OH (9/07), River Raisin kayak trip (9/08, 10/09)*
Commencement speaker, December 2017

OUTREACH:

Invited speaker for the Toledo Gem and Mineral Club (2022)
Invited speaker the monthly meeting of the Rochester Academy of Sciences, Topic: *Volcanoes of northern Arizona* (Jan. 19, 2021)
Invited speaker at the Detroit Mineral show educational series, Topic: *Tantalowodginite* (Oct. 12, 2019)
Geology program presented for local children at Schultz-Holmes Memorial Library, Summers of 2023, 2022, 2019, 2022, 2024.
Presented eclipse program at Adrian Public Library, August 2017
Developed geology program and participated in Science Night at local elementary schools, Fall 2011, Fall 2012, Spring 2016, Spring 2017, Spring 2018. Spring 2020
Developed and presented interactive geology programs and a planetarium show to assist local scout groups in earning merit badges
Volcano program given to 2nd and 4th grade students, Sutton Elementary, March 2009
Led classroom and field exercises for the Northern Arizona University Summer Enrichment Program, Summer 2006, Summer 2007
Presented a program on careers in geology for Tri-County middle schools, Spring 2006
Tri-County Science Fair Judge, 1999 – 2005
Developed and proctored an exam for the Tri-County Science Olympiad, 1999 – 2005, 2014, 2015, 2018, 2020 (event cancelled)

Presented a mineral program to 2nd grade students, Lincoln Elementary, 2003, 2004
Presented campground volcano talks, Summer 1998 – 2009
Taught short course on rocks and minerals for K-12 teachers, sponsored by Lenawee Intermediate School District, 1999
Developed and presented an After-School Astronomy Program, Tecumseh Acres Elementary School, 1999, 2000, 2001, 2002

AUTHORED RESEARCH GRANTS:

Internal Funding:

2018/2019	Trace Element Chemistry of Gem Tourmaline from Li, B, and Cs Enriched Pegmatites in the Oxford Pegmatite Field, Maine	$2412
2017/2018	Geochemical and Tectonic Evaluation of Pegmatite / Parent Geological Systems: Examples from Norway and Maine, USA	$2720
2016/2017	Geochemical Evaluation of Pegmatite/Parent Granite Geological Systems	$3679
2013/2014	Eruption History of Sunset Crater Volcano, San Francisco Volcanic Field, Northern Arizona	$2084
2011/2012	Geochemical Evaluation of Plate Tectonic Environments in Mohave County, Northwestern AZ: A Case Study in the Mojave Pegmatite District	$2059
2010/2011	Evaluation of Potential Source Vents for Lava Flows in the Western San Francisco Volcanic Field, Northern Arizona	$279
2009/2010	Evaluation of Potential Source Vents for Lava Flows in Wupatki National Monument, Northern Arizona	$1070
2008/09	Eruptive History of Western Wupatki Lava Flow, Northern Arizona	$2673
2008/09	Eruptive History of the Grand Falls Lava Flow, Northern Arizona	$1928
2007/08	Basaltic Volcanism in the San Francisco Volcanic Field, Northeastern Arizona	$1387
2006/07	Age Determination of Lava Flows at Wupatki National Monument, Arizona	$1510
2005/06	Age Determination of Lava Flows at Wupatki National Monument, Arizona	$1000
2004/05	Mineralogy and Petrology of Rare-Earth-Element Bearing Pegmatites in Mohave County, Northwestern AZ: A Study of Pegmatite Evolution	$2588
2003/04	REE-bearing Oxide Minerals as Indicators for Pegmatite Evolution	$1829
1998/99	Goldsmith Foundation grant for planetarium upgrades	$2500

External Funding:

1999-10	Ten Geologist-in-Park Awards for research in the Flagstaff Area National Monuments	$2500/summer

2008	Eruption History of Sunset Crater Volcano: A Proposed Study of the Fissure Eruption that Produced Sunset Crater (WNPA Research # 08-14)	$5630
2007	Age Determination of Lava Flows at Wupatki National Monument (WNPA Research #07-17)	$7500
2007	American Women Geologists Geologist in the Park Grant	$2500

PROFESSIONAL AFFILIATIONS:

Geological Society of America, American Geophysical Union, Mineralogical Association of Canada, Association for Women Geoscientists, Sigma Gamma Epsilon (Geology Honor Society), National Association of Geoscience Teachers, Online Learning Consortium

PEER REVIEWED PAPERS:

Hanson, S.L. Age, geochemistry and origin of lava flows from Wupatki National Monument in the northeastern San Francisco Volcanic Field, northern Arizona, USA. (in prep.).

Zito, G., Hanson, S.L., and Falster, A.U. (2022) Beryllium minerals of the Mount Rosa Complex area near Colorado Springs, Colorado, USA. Rocks & Minerals; 97:5, 412-423.

Alfano, F., Ort, M., Pioli, L., Self, S., Hanson, S.L., Clarke, A., Roggensack, K., Allison, C., Amos, R. (2019) Sub-Plinian monogenetic basaltic eruption of Sunset Crater, Arizona, USA. Geological Society of America Bulletin, 131/3, 661-674.

Hanson, S.L., Falster, A.U., Simmons, W.B., Sprague, R., Vignola, P., Rotiroti, N, Ando, S., and Hatert, F. (2018) Tantalowodginite, $(Mn_{0.5}\square_{0.5})TaTa_2O_8$, a new mineral species from the Emmons pegmatite, Uncle Tom Mountain, Maine, U.S.A. Canadian Mineralogist , v. 56, p. 543-553.

Zito, G. and Hanson, S.L. (2017) Genthelvite overgrowths on danalite cores from a pegmatite miarolitic cavity in Cheyenne Canyon, El Paso Co., Colorado. Canadian Mineralogist, 55, 195-206.

Hanson, S.L. (2016) A tectonic evaluation of pegmatite parent granite. Canadian Mineralogist, 54, 917-933.

Zito, G. and Hanson, S.L. (2014) Minerals from miarolitic pegmatites in the Stove Mountain Area, Colorado Springs, Colorado. Rocks and Minerals, 89, p. 224-237.

Simmons, W.B., Hanson, S.L., Webber, K.L. and Falster, A.U. (2012) A comparison of the mineralogical and geochemical character and geologic setting of Proterozoic REE-rich granitic pegmatites of the North-Central and South-Western US. Canadian Mineralogist, 50, p. 1695-1712.

Hanson, S.L., Falster, A.U., Simmons, W.B., and Brown, T.A. (2012) Allanite-(Nd) from the Kingman Feldspar Mine, Mojave Pegmatite District, northwestern Arizona, USA. Canadian Mineralogist, 50, p. 815-824.

Hanson, S.L., Falster, A.U. and Simmons, W.B. (2008) Mineralogy of fumarole deposits at Sunset Crater Volcano National Monument, northern Arizona. Rocks and Minerals, 83 (6) p. 534-544.

Hanson, S.L, Duffield, W., and Plescia, J. (2008) Quaternary volcanism in the San Francisco Volcanic Field: Recent basaltic eruptions that profoundly impacted the northern Arizona landscape and disrupted the lives of nearby residents. *In* Field Guide to plutons, volcanoes, faults, reefs, dinosaurs, and possible glaciation in selected areas of Arizona, California, and Nevada (E.M. Duebendorfer and E.I. Smith, eds.). Geological Society of America Field Guide 11, p. 173-186.

Simmons W. B., Hanson, S. L., and Falster, A. U. (2006) Samarskite-(Yb): A new mineral from the Little Patsy Pegmatite, Jefferson County, CO. Canadian Mineralogist. 44, p. 1119-1125.

Hanson, S.L. (2003) Roadside Geology: Wupatki and Sunset Crater Volcano National Monuments. Arizona Geological Survey Down-to-Earth Series 15, 32 p.

Hanson, S. L., Simmons W. B., Falster, A. U., Foord, E. E. and Lichte F. E. (1999) Proposed nomenclature for samarskite group minerals: new data on ishikawaite and calciosamarskite. Mineralogical Magazine. 63 (1), p. 27-36.

Hanson, S. L., Simmons W. B. and Falster, A. U. (1998) New data on Nb-Ta-Ti oxides from the Topsham Pegmatite District, Eastern Maine. Canadian Mineralogist. 36, p. 601-608.

Vogel, T.A., Cambray, W., Feher, L., Constenstenis, K.N. and the Wasatch Intrusive Research Team (1997) Petrochemistry and emplacement history of the Wasatch Intrusive Belt. *In*: D. A. John and G. H. Ballantyne, Eds., GSA Guidebook Series: Geology and Ore Deposits of the Oquirrh and Wasatch Mountains, Utah, p. 47-63.

Hanson, Sarah L., Simmons, Wm. B., Webber, Karen L., and Falster, Alexander U. (1992) Rare-earth-element mineralogy of granitic pegmatites in the Trout Creek Pass Pegmatite District, Chaffee County, Colorado. Canadian Mineralogist. 30, p. 673-686.

OTHER PAPERS:

Hanson, S.L. (2023) Book review: Frank Perham: Adventures in Pegmatite Mining 2023 by Karen L. Weber, Raymond A. Sprague, and William Skip Simmons. Rubellite Press. 222 pages; 2023; $70 (hardbound).

Hanson, S.L. (2020) Spherulites, lithophysae, and amygdaloids. Word to the Wise: Guest column author. Rocks and Minerals, 95, 183-187.

Hanson, S.L and Friends (2019) A world of rubellite, Lithographie: Tourmaline Rouge, p. 120-135.

Hanson, S.L., Falster, A.U., Simmons, W.B., Sprague, R., Vignola, P., Rotiroti, N., Andó, S. and Hatert, F. (2018) Tantalowodginite, IMA 2017-095. CNMNC Newsletter No. 41, February 2018, page 185; European Journal of Mineralogy, 30,183–186.

Hanson, S.L., Falster, A.U., Simmons, W.B., Sprague, R., Vignola, P., Rotiroti, N., Andó, S., Hatret, F. (2017) Tantalowodginite: a new mineral from the Emmons Pegmatite, Maine, USA. Proposal: International Mineralogical Association – Commission on New Minerals, Nomenclature, and Classification for approval of a new mineral species.

Hanson, S.L. (2017) Geologically interesting locations in the Midwestern United States. Rocks and Minerals 92, p. 92-100.

Hanson, S.L. and Koltunak, M.J. (2012) Flagstaff Area National Monuments: natural resources in Sunset Crater Volcano, Wupatki, and Walnut Canyon. Script for a downloadable IPOD program, NaturePods (company out-of-business).

Hanson, S.L. (2011) Northern Arizona volcanoes: spectacular volcanic eruptions that changed the landscape forever. 38th Rochester Mineralogical Symposium Proceedings, p. 44-49.

Hanson, S.L. (2009) Eruption history of the fissure eruption that produced Sunset Crater Volcano, Western National Parks Association Research Report no. 08-14, 11p.

Hanson, S.L. (2009) Sunset Crater Volcano: a cinder cone eruption that impacted the Ancestral Puebloan Indians. Arizona Geology, v. 39, no.1. Online publication: http://www.azgs.az.gov/arizona_geology/april09/article_sunsetcratervolcano.html

Hanson, S.L. (2008) Age Determination of lava flows at Wupatki National Monument, Western National Parks Association Research Report no. 07-17, 12 p.

Hanson, S.L. (2008) Volcanoes, lava flows and fissure eruptions, oh my! Gaea, v. XXXI, No 1, p. 6-7, 10.

Hanson, S.L. (2006) Characterization and correlation of lava flows in Wupatki National Monument, Northern Arizona, Western National Parks Association Research Report no. 06-11, 12 p.

PUBLISHED ABSTRACTS / CONFERENCE PRESENTATIONS:

Hanson, S.L. and Zito, G. (2025) Aluminofluoride minerals of the St. Peters Dome area, El Paso County, Colorado. Mineral News, v. 41, no 9, p. 9-10.

Hanson, S.L. (2024) Mineralogy, Petrology, and origin of the Mojave District Pegmatites, Mojave Co. Northwestern AZ. New England Mineral Association Annual Conference Proceedings.

Wall. K.T., Johnson, E., Stelten, M., Gallant, E. Riggs, N., Ort, M., Hanson, S., Nasholds, N., Brennan, K., Arroyo, Y., Pivarunas, A., Rees, S. (2023) Timing and petrogenesis of recent eruptions from the San Francisco Volcanic Field, Arizona. Abstract V33D-0184 presented at AGU23, 11-16 Dec. https://agu.confex.com/agu/fm23/meetingapp.cgi/Paper/1266744

Hanson, S.L. (2023) Teaching Mineralogy During Covid: A much-needed assist from the mineral collecting community, Rocks and Minerals 98, p. 456-457.

Hanson, S.L., Falster, A.U. and Simmons, W.B. (2022) Arsenic minerals in the Emmons Pegmatite, Uncle Tom Mountain, Greenwood, Oxford Co. Maine: Genetic implications. 2022 Rochester Mineralogical Symposium Abstracts, p. 14-15.

Hanson, S.L., Falster, A.U. and Simmons, W.B. (2020) An unusual uraninite replacement mass from the Hayes pegmatite, Noyes Mountain, Greenwood, Oxford Co., Maine. 2020 Rochester Mineralogical Symposium Abstracts, p. 14-15.

Hanson, S.L. and Zito, G. (2019) Beryllium mineralization in pegmatites and quartz dikes of Mount Rosa Complex Area, Colorado Front Range, Colorado, USA. Pegmatite 2019: 9th International Symposium on Granite Pegmatites, Conference Proceedings. p. 42-44.

Webber, K.L., Simmons, W.B., Falster, A.U. & Hanson, S.L. (2019) Anatectic pegmatites of the Oxford County pegmatite field, Maine, USA. Pegmatite 2019: 9th International Symposium on Granite Pegmatites, Conference Proceedings. p. 87-90.

Hanson, S.L. and Zito, G. (2019) Beryllium minerals of the Mount Rosa Complex Area Near Colorado Springs, Colorado. Rochester Mineralogical Symposium Abstracts, p. 22-24.

Hanson, S.L., Falster, A.U., Simmons, W.B., Vignola, P., Rotiroti, N., Ando, S., and Hatert, F. (2018) Tantalowodginite: A new mineral from the Emmons Pegmatite, Uncle Tom Mountain, Greenwood Co., Maine, USA. International Mineralogical Association Abstracts, p. 279.

Hanson, S.L., Falster, A.U., Simmons, W.B., Sprague, R, Vignola, P., Rotiroti, N., Ando, S., and Hatert, F. (2018) Tantalowodginite, $(Mn_{0.5}\square_{0.5})TaTa_2O_8$, a new mineral species from the Emmons pegmatite, Uncle Tom Mountain, Greenwood, Oxford County, Maine. Rochester Mineralogical Symposium Abstracts, p. 10-12.

Hanson, S.L. and Zito, G. (2017) Geochemical evolution of a pegmatite pocket containing epitaxial overgrowths of genthelvite on danalite cores. 8th International Symposium on Granitic Pegmatites. *In* Abstracts and Proceedings of the Geological Society of Norway, v. 2, 46-49.

Hanson, S.L. and Zito, G. (2017) Genthelvite overgrowths on danalite cores from a pegmatite in Cheyenne Canyon, Stove Mountain Area, Colorado. Rochester Mineralogical Symposium Abstracts, p. 18-21.

Hanson, S.L. (2016) Using Pearce discrimination diagrams to evaluate the tectonic regime for pegmatite parent granite. 2nd Annual Foord Symposium on Pegmatites Abstracts, Short Papers, Posters and Program, p. 43-44.

Hanson, S.L. (2016) A tectonic evaluation of pegmatite parent granite. Rochester Mineralogical Symposium Abstracts. p. 12-13.

Hanson, S.L. (2015) A geochemical evaluation of pegmatite parent granite. Pegmatite 2015: 7th International Symposium on Granite Pegmatites, Conference Proceedings p. 36-37.

Falster, A.U., Simmons, W.B., Sprague, R. and Hanson, S.L. (2015) Tin, niobium and tantalum mineralization in the Emmons pegmatite, Greenwood, Oxford County, Maine, USA. Pegmatite 2015 Conference Proceedings. p. 20-21.

Hanson, S.L, Falster, A.U., and Simmons, W.B. (2015) A new occurrence of ludgwigite from Potrero Chico, Nuevo Leon, Mexico. Rochester Mineralogical Symposium Abstracts. No. 42, p. 12.

Hanson, S.L., Falster, A.U., and Simmons, W.B. (2014) Unusual mineralogy and chemistry of the Kingman Feldspar Pegmatite, Mojave Pegmatite District, northwestern AZ. GSA Abstracts with Programs https://gsa.confex.com/gsa/2014AM/webprogram/Paper246334.html

Hanson, S.L., Simmons, W.B., and Falster, A.U (2014) Contact metamorphic minerals from the Alta aureole, central Wasatch Mountains, Utah. Rochester Mineralogical Symposium Abstracts. No. 41, p. 13-14.

Hanson, S.L., Simmons, W.B., and Falster, A.U (2013) Mineralogy, petrology and origin of the Kingman Pegmatite, Northwestern Arizona, USA. Pegmatite 2013 Conference Proceedings. p. 61-62.

Hanson, S.L., Falster, A.U., Simmons, W.B. and Sprague, R. (2013) Wodginite group species from the Emmons Pegmatite, Greenwood, Oxford County, Maine, USA. Pegmatite 2013 Conference Proceedings. P 59-60.

Hanson. S.L and Zito G. (2013) Mineralogy of miarolitic pegmatites in the Stove Mountain Area, Colorado. Rochester Mineralogical Symposium Abstracts. No. 40, p. 14-15.

Brown, T.A., Hanson, S.L. and Falster, A.U. (2013) New data on planerite from Mauldin Mountain, Montgomery County, Arkansas. Rochester Mineralogical Symposium Abstracts. No. 40, p. 8-9.

Hanson, S.L., Falster, A.U., Simmons, W.B (2012) Hydrothermal mineralization in lithophysal cavities from the Taylor Creek Rhyolite, Sierra County, southwestern New Mexico. Rochester Mineralogical Symposium Abstracts. No. 39, p. 23-24.

Hanson, S.L., Simmons, W.B., Falster, A.U., and Brown TJ (2011) Influence of tectonic setting on geochemical characteristics of post-orogenic pegmatites: an example from the Mojave Pegmatite District, Northern Arizona. American Geophysical Union, Fall Meeting 2011, abstract #V21D-2532, p. D2532.

Hanson, S.L., Falster, A.U., Simmons, W.B., and Brown TJ (2011) Nd-enrichment in the Kingman Feldspar Pegmatite, Mojave Pegmatite District, northwestern AZ. South Central Section GSA Abstracts with Programs, p. 43.

Hanson, S.L., Brown, TJ, Falster, A.U., and Simmons, W.B. (2011) "Allanite-(Nd)": A new mineral from the Kingman Feldspar Mine in the Mojave Pegmatite District, Northwestern Arizona. Rochester Mineralogical Symposium Abstracts. No. 38, p. 20-22.

Simmons, W.B., Webber, K., Falster, A.U., Hanson, S.L., Brown, TJ (2011) Geochemistry of REE-rich pegmatites from different tectono-magmatic provinces in South Platte, CO, Trout Creek Pass, CO, Kingman and Aquarius Range, AZ, North America. Contributions to the 5th International Symposium on Granitic Pegmatites. p 13-17.

Hanson, S.L (2010) Eruptive History of the Sunset Crater Volcanic Chain, Northern Arizona. GSA Abstracts with Programs. v. 42 p. 224.

Hanson, S.L. (2010) Geochemistry and age determinations of lava flows in the northeastern San Francisco Volcanic Field, Northern Arizona. Cordilleran/Pacific Section GSA Abstracts with Programs, p. 95.

Hanson, S.L., Falster, A.U, and Simmons, W.B. (2010) Kinoite from Calumet, MI and the Santa Rita Mountains of Arizona. Rochester Mineralogical Symposium Abstracts. No. 37, p. 13-14.

Hanson, S.L. (2009) Evaluation of potential source vents for the Grand Falls Lava Flow, San Francisco Volcanic Field, Northern Arizona. GSA Abstracts with Programs. v. 41, no.7, p. 644.

Hanson, S.L., Falster, A.U. and Simmons, W.B. (2009) Blue wavellite from the de Linde Quarry, Garland County, Arkansas. Rochester Mineralogical Symposium Abstracts. No. 36, p. 15-16.

Hanson, S.L., Simmons, W.B. and Falster, A.U. (2008) Late stage mineralogy of the Seerie Pegmatite, South Platte Pegmatite District, Jefferson County, Colorado. Rochester Mineralogical Symposium Abstracts. No. 35 p. 19-20.

Hanson, S.L., Falster, A.U. and Simmons, W.B. (2008) Rare-earth element distribution in the Mojave County Pegmatites, northwestern Arizona. Cordilleran / Rocky Mountain Section GSA Abstracts with Programs. v. 40, no.1, p. 34.

Hanson, S.L., Simmons, W.B., and A.U Falster, A.U. (2007) A Reevaluation of Nb-Ta-Ti oxides from the Rare Metals Mine, Mojave County Pegmatite District, northwestern Arizona Rochester Mineralogical Symposium Abstracts. No. 34, p.13-14.

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