

## Sarah L. Hanson, Ph.D.

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### CONTACT INFORMATION:

Adrian College

Geology Department

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### 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 / Planetarium Director, 8/98 – Present

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 for:

Earth and Space Science (Lecture and Lab), Dynamic Earth Lab, Oceans and Atmospheres Lab, Introduction to Igneous and Metamorphic Petrology

Instructor at Adrian College for:

Geology of National Parks, Natural Disasters, Environmental Geology, Astronomy, Mineralogy, Petrology, Structural Geology, US Geology Field Experience, Plate Tectonics, Pegmatology, Weather & Climate, Capstone: Senior Research

Undergraduate Senior Thesis Advisor

Tanner Jones (2017) *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*

Brandon Gomes, (2015), Alaina Paquette (2015) Michael Micallef (2014), Jacob Burt (2014), Michael Herzog (2012) *River Raisin Watershed Water Quality*

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 Bubble Sizes 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): *Synthesis of Gem Minerals*

Nikki Borum (Fall 1999): *Chemical Evaluation of Wodginite Group Minerals*

#### Graduate Thesis Committee Member

TJ Brown University of New Orleans M.S. (2010) *Niobium, Tantalum, and Rare Earth Element Distribution in NYF Pegmatites, Mohave Co., Northwestern Arizona*

#### 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 Env. 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:

Technical Session Chair, Rochester Mineralogical Symposium, 2017 – present

Abstract Review Panel: Rochester Mineralogical Symposium, 2008 – present

Editor: abstract volume, PEG 2013: 6<sup>th</sup> International Symposium on Granite Pegmatites

Scientific editor: Lithographie Special Issue, *Topaz: Perfect Cleavage*

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:**

Department Chair for the Geology Department, 2001 – 2015

Adrian College Science Collegium IV Secretary, 2008 – present

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 10 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)*

**OUTREACH:**

Developed geology program and participated in Science Night at local elementary schools, Fall 2011, 2012, Spring 2016, Spring 2017

Developed and presented interactive geology programs and a planetarium show to assist local scout groups in earning merit badges

Volcano program given to 2<sup>nd</sup> and 4<sup>th</sup> 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

Presented a mineral program to 2<sup>nd</sup> 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:**

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
2006	Characterization and Correlation of Lava Flows in Wupatki National Monument (WNPA Research #06-11).	\$4935

**PROFESSIONAL AFFILIATIONS:**

Geological Society of America, American Geophysical Union, Mineralogical Association of Canada, Mineralogical Society of America, National Association of Geoscience Teachers, Association for Women Geoscientists

**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.)

- Hanson, S.L., Falster, A.U., Simmons, W.B., Sprague, R., Vignola, P., Rotiroti, N, Ando, S., and Hatert, F. (2018) Tantalowodginite,  $(\text{Mn}_{0.5}\square_{0.5})\text{TaTa}_2\text{O}_8$ , a new mineral species from the Emmons pegmatite, Uncle Tom Mountain, Greenwood, Oxford County, Maine Canadian Mineralogist (in press).
- Alfano, F., Ort, M., Pioli, L., Self, S., Hanson, S.L., Clarke, A., Roggensack, K., Allison, C., Amos, R. (2017) The sub-Plinian monogenetic basaltic eruption of Sunset Crater, Arizona, USA. Geological Society of America Bulletin (in press).
- Zito, G. and Hanson, S.L. (2017) Genthelvitte overgrowths on danalite cores from a pegmatite miarolitic cavity in Cheyenne Canyon, El Paso Co., Colorado. Canadian Mineralogist, 55, p. 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 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., 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. (2018) Let's Get it Right: Spherulites, Lithophysae, and Amygdaloids. Guest column author. *Rocks and Minerals* (in press).

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, <http://www.naturepods.com>.

Hanson, S.L. (2011) Northern Arizona Volcanoes: Spectacular Volcanic Eruptions that Changed the Landscape Forever. 38<sup>th</sup> 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](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., Falster, A.U., Simmons, W.B., Vignola, P., Rotiroti, N., Ando, S., and Hatert, F. Tantalowodginite: A New Mineral from the Emmons Pegmatite, Uncle Tom Mountain, Greenwood Co. Maine, USA. International Mineralogical Association Abstracts (in press.)

Hanson, S.L., Falster, A.U., Simmons, W.B., Sprague, R., Vignola, P., Rotiroti, N., Ando, S., and Hatert, F. (2018) Tantalowodginite,  $(\text{Mn}_{0.5}\square_{0.5})\text{TaTa}_2\text{O}_8$ , 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. 8<sup>th</sup> 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. 2<sup>nd</sup> 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 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 Ludwigite 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/finalprogram/abstract\\_246334.htm](https://gsa.confex.com/gsa/2014AM/finalprogram/abstract_246334.htm).

- 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 Mirolitic 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 Section GSA Abstracts with Programs, p. 95.
- Hanson, S.L., Falster, A.U., and Simmons, W.B. (2010) Kionoite 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.
- Hanson, S.L. (2006) Correlation of Lava Flows at Wupatki National Monument, Northern Arizona. GSA Abstracts with Programs. v. 38, no.7, p. 36.
- Hanson, S.L., Simmons, W.B. and Falster, A.U. (2006) Quest for the Rare Metals Mine, Mojave County Pegmatite District, Northwestern Arizona. Rochester Mineralogical Symposium Abstracts No. 33, p. 18-19.
- Hanson, S.L. (2005) Roadside Geology of Wupatki and Sunset Crater Volcano National Monuments: A Self-guided Interpretative Booklet. GSA Abstracts with Programs. v. 37, no 7, p. 397.
- Hanson, S.L., Falster, A.U. and Simmons, W.B. (2005) Rare-Earth Mineralogy of the Mohave County Pegmatites, Northwestern Arizona. Rochester Mineralogical Symposium Abstracts, p. 14-15.
- Hanson, S.L. Simmons, W.B and Falster A.U. (2004) Samarskite-(Yb): A New Mineral Indicating Extreme HREE Enrichment in the South Platte NYF Pegmatite District, Colorado. GSA Abstracts with Programs. v. 36, No. 5, p. 115.

- Hanson, S.L., Falster, A.U., Nizamoff, J.W. and Simmons, W.B. (2004) Beryllium Mineralization of Pegmatite Pockets in the Wausau Complex, Marathon County, Wisconsin. Rochester Mineralogical Symposium Abstracts, p. 9-10.
- Hanson, S.L. Jarnot, B.M., Falster, A.U. Simmons, W. B., and Nizamoff, J.W. (2003) Nb-Ta-Ti Oxide Minerals from Two Pegmatites of the Middletown Area, Connecticut. Rochester Mineralogical Symposium Abstracts, p. 11-12.
- Hanson, S.L., Falster, A.U. and Simmons, W.B. (2002) A New Occurrence of Cubic Magnetite in Fumarole Deposits on the Summit of Sunset Crater Volcano, Northern Arizona. Rochester Mineralogical Symposium Abstracts, P. 8.
- Hanson, S.L. (2001) Geologic Research as an Educational Tool at Sunset Crater Volcano National Monument, Arizona. GSA Abstracts with Programs. v. 33, No. 6, p. A-122.
- Hanson, S.L. Simmons, W.B. and Falster, A.U. (2001) Yb-Enriched Samarskite from the Little Patsy Pegmatite, Jefferson County, CO. Rochester Mineralogical Symposium Abstracts, p. 10.
- Hanson, S.L., Simmons, W.B. Falster, A.U. and Morrison, S.J. (2000) Eruption History of Sunset Crater Volcano and Associated Fumarole Deposits. GSA Abstracts with Programs, v. 32 No. 7, p. A-501.
- Hanson, S.L., Falster, A.U. and Simmons. W.B. (2000) Mineralogy of Fumarole Deposits from Sunset Crater Volcano, Northern Arizona. Rochester Mineralogical Symposium Abstracts, p. 9.
- Hanson, S.L., Simmons, W.B., Webber, K.L. and Falster, A.U. (1999) Trace-element Chemistry of Micas in "NYF" and "NY" Pegmatites. Canadian Mineralogist. 37, p.849-852.
- Nizamoff, J.W., Falster, A.U., Pezzota, F., Simmons, W.B., Hanson, S.L. and Webber, K.W., (1999) Recent Mining at the Antandrokomby pegmatite, Madagascar. Rochester Mineralogical Symposium Abstracts, p. 13.
- Hanson, S.L., Falster, A.U., Simmons, W.B., Webber, K.L., Buchholz T. (1998) REE-Mineralization of Pegmatites in the Wausau Complex, Marathon County, Wisconsin, USA. Rochester Mineralogical Symposium Abstracts, p. 12-13.
- Hanson, S.L., Sprague, R., Wielkiewicz, T., Simmons, W.B. and Falster, A.U. (1997) Compositional Variation in Wodginite from the Emmons Pegmatite, Buckfield, Oxford County, Maine. Rochester Mineralogical Symposium Abstracts, p. 13.
- Hanson, S.L. and Nash, W.P. (1996) Origin of Enclaves and Schlieren from the Little Cottonwood and Alta Stocks, Central Wasatch Mountains, Utah. GSA Abstracts with Programs, p. A-480.
- Hanson, Sarah L., Simmons, W. B., and Falster, Alexander U. (1996) New Data on Samarskite Group Minerals: Ishikawaite and "Calciosamarskite" Revisited. GAC-MAC Programs with Abstracts, v. 21, p. A-41.

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