# **Adam Charles Simon**

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# **EDUCATION**

2003 - 2005	Postdoctoral Fellow, Earth & Planetary Sciences, The Johns Hopkins University
2000 - 2003	PhD, Geology, University of Maryland
1995 - 1997	M.S., Earth & Space Sciences, Stony Brook University
1992 - 1995	B.S., Geology, University of Maryland

# PROFESSIONAL POSITIONS

2018-	Professor, University of Michigan, Earth & Environmental Sciences
2012 - 2018	Associate Professor, University of Michigan, Earth & Environmental Sciences
2011 - 2012	Associate Professor, University of Nevada, Las Vegas, Geosciences
2005 - 2011	Assistant Professor, University of Nevada, Las Vegas Department of Geosciences
2004 - 2005	Postdoctoral Fellow, The Johns Hopkins University Earth and Planetary Sciences
2003 - 2004	Research Associate, University of Maryland Department of Geology

# HONORS/AWARDS

2017	University of Michigan Provost's Teaching Innovation Prize (one of 5 campus wide)
2017	Best Professor, selected by department undergraduate and graduate students
2016	Best Professor, selected by department undergraduate and graduate students
2015	Elected as a Fellow of the Society of Economic Geology
2012	Graduate and Professional Student Association, Outstanding Contribution Award, UNLV
2010	Distinguished Teacher Award for College of Sciences, UNLV
2009	Graduate and Professional Student Association, Faculty Service Award, UNLV
2006	Antarctica Service Medal

# PROFESSIONAL SERVICE (panels, editorial duties, professional society duties) 2018 National Science Foundation Graduate Research Fellowships Panel

2018	National Science Foundation Graduate Research Fellowships Panel
2017	U. of Michigan Ross Business School, Renewable Energy Case Competition, judge
2017 – present	Associate Editor, Frontiers in Earth Science
2017	Society of Economic Geologists Awards Committee
2017	Estonian Research Council, Grant Proposal Reviews
2017	National Science Foundation postdoctoral fellowship review panel
2017	National Sciences and Engineering Council of Canada (NSERC) panel
2016 – present	Associate Editor, Journal of Economic Geology
2016	Tenure and Promotion review for University of Leuven (KU Leuven), Belgium
2016	Spring Panel, National Science Foundation, Petrology and Geochemistry
2016	Reviewed proposals for England's National Environmental Research Council (NERC)
2016	Reviewed proposals for the National Science and Engineering Research Council of
	Canada (NSERC)
2016	Fall Panel, National Science Foundation, Petrology and Geochemistry Panel
2016 - 2018	Councilor, Society of Economic Geologists (elected position; global governing board)
2016	Reviewer for Fellowship Program at the Wissenschaftskolleg zu Berlin, Institute for
	Advanced Study
2016	Co-chair responsible for organizing all technical sessions in Theme 11: Mineral
	Resources, 2016 Goldschmidt Conference in Yokohama, Japan (Keiko Hattori, Co-chair)

2014 - present	Faculty sponsor, Student Chapter of Society of Economic Geologists
2014 – present	
2014	Organized and convened technical session for AGU Fall Meeting
2014	Co-chair responsible for organizing all technical sessions in Theme 11: Mineral
	Resources, 2014 Goldschmidt Conference (Holly Stein, Co-chair)
2013	National Science Foundation Graduate Fellowship Review Panel
2012	Organized and convened one technical session for AGU Fall Meeting
2012	Gordon Conference Geochemistry of Mineral Deposits, Session Organizer/Chair
2011	National Science Foundation Graduate Fellowship Review Panel
2010	Reviewer for NSF Engineering Research Centers
2010	Convened Pan-American Current Research on Fluid Inclusions (PACROFI), UNLV
2010	National Science Foundation Graduate Fellowship Review Panel
2010	Geological Society of American Session Convener
2008	National Science Foundation Petrology and Geochemistry Review Panel
2009	Reviewer for NSF Engineering Research Centers
2009	Geological Society of American Session Convener
2008	AGU Fall Meeting Session Convener
2008	GSA Cordilleran Sectional Meeting Session Convener
2007	AGU Fall Meeting Session Convener
2006	Chemical Geology, Guest Editor for Special Issue on Subduction Zone Geology
2006	AGU Spring Meeting Session Convener
2005	AGU Fall Meeting Session Convener
2005	Goldschmidt Session Convener
2002	GSA Annual Meeting Session Convener
2001	AGU Spring Meeting Session Convener
2001	1100 opinig inceding occasion convener
UNIVERSIT	Y SERVICE
2017 - 2018	University of Michigan Energy Institute, Director search committee
2017	Co-chair, Committee responsible for the transition of the undergraduate Program in the
	Environment (PitE) program to shared governance between School for Environment and
	Sustainability, and College of Literature, Science and the Arts
2017 - 2018	President Schlissel's Committee on Greenhouse Gas Reduction
2016 - 2017	Curricular Innovations Working Group, developing graduate curriculum
	recommendations for UM's new School of Environment and Sustainability (SEAS)
2016 - 2017	Michigan Sustainability Case Studies (MSC) curriculum review committee
2016 - 2017	Committee responsible for 5-year review of the University of Michigan Energy Institute
2016	Member, Program in The Environment (PiTE) committee to revise Natural Sciences major
2016	T & P Committee for Department of Communications candidate Sol Hart
2014 - 2015	Chair, Program in The Environment (PiTE) Committee to develop 'Energy science and
_011 _010	policy" minor to UM's College of Literature, Science and the Arts (LSA); minor became
	effective fall, 2016
2011 - 2012	Chair, UNLV Graduate College Student Funding Committee
2011 - 2012 $2011 - 2012$	Member, UNLV Graduate College Executive Advisory Committee
2011 - 2012 $2011 - 2012$	University Best Graduate Thesis/Dissertation Committee
2010 - 2012	UNLV Faculty Senate Academic Standards Committee

UNLV High Pressure Science and Engineering Center Deputy Director Search

UNLV High Pressure Science and Engineering Center faculty search committee

Chair, UNLV Faculty Senate Academic Standards Committee

University Faculty Senate Sabbatical Leave Committee

Faculty Advisor to UNLV Graduate Professional Student Association

University Faculty Senate Academic Integrity Appeal Panel Member

Organized and hosted NSF Program Director site visit to UNLV

2010 - 20122007 - 2009

2008 - 2012

2008 - 2012

2008 - 2009

2006 - 2008

2006 - 2007

# **DEPARTMENT SERVICE**

DEFACTMEN	VI SERVICE
2016 – present	Organize and host career panels each semester for undergraduate/graduate students
2016	7-day field trip for 18 undergraduate/graduate students to Ontario and Michigan's UP
2016	Monthly department electronic newsletter
2016	Annual department print Newsletter
2016	Alumni Relations Committee
2015	7-day field trip for 12 undergraduate/graduate students to Ontario
2014 - 2015	Alumni Relations Committee
2014 - 2015	Executive Committee
2014	2-week field trip for 21 students to Chile
2014	7-day field trip for 29 undergraduate/graduate students to Michigan's Upper Peninsula
2014	Member, Committee for the Promotion Review of Fuxiang Zhang
2014	Turner Postdoctoral Applicants Committee
2013 - 2014	Executive Committee
2013	Graduate Admissions Committee
2012	Member, Committee for Promotion Review of EMAL Scientist Gordon Moore
2011 - 2012	Geoscience Graduate Coordinator (n = 60 students; no salary compensation provided)
2006 - 2012	Supervisor of the Electron Microanalysis and Imaging Laboratory (EMIL)
2010 - 2010	Chair, Search Committee, Director of EMIL
2009 - 2010	Faculty Mentor, Introductory Geology Course Graduate Lecturers
2006 - 2010	Geoscience Promotion and Tenure Committee
2008 - 2009	Chair, Search Committee for Director of EMIL
2006 - 2008	Faculty Supervisor, Geoscience Student GeoSymposium
2006 - 2007	Geoscience Scholarship Committee
2006 - 2007	Chair, Undergraduate Enrollment Working Group
2006	Geoscience Colloquium Coordinator
2005 - 2006	Geoscience Increasing Undergraduate Numbers Working Group
2006	Chair, Geoscience Undergraduate Awards Committee
2006	Committee, Best Graduate Thesis

#### **INVITED TALKS**

2018	Gordon Conference.	Coopleaniature	of Minaral Dangaite	(Irorranta)
2010	Gordon Conference.	Geochemistry (	or mineral Debosits	s (Keviiote)

University of British Columbia

Michigan Law School, Journal of Law Reform Annual Symposium (keynote)

University of Iowa

Gordon Research Conference: Geochemistry of Mineral Deposits (keynote)

2017 Cornell University

Advancing Health Communities through Environmental Engineering and Science

Society for Geology Applied to Mineral Deposits (SGA; keynote) Society of Economic Geologists, Annual Meeting (Beijing) (keynote)

Prospectors and Developers Association of Canada (PDAC) Annual Meeting

Akita University, Japan (International Center for Research and Education on Mineral and

Energy Resources)

International Cooperation Agency Research Institute, Tokyo, Japan

California State University Fullerton

Brigham Young University Miami University of Ohio

2016 Geological Society of America Annual Meeting (keynote)

Stanford University (two talks)

Gordon Conference, Geochemistry of Mineral Deposits (keynote)

University of Chile

2015 American Geophysical Union Fall Meeting

	University of Hannover, Germany Goldschmidt Geochemistry Conference, Prague, Czech Republic
	Ralph J. Roberts Center for Research in Economic Geology (Reno, NV) (keynote)
2014	Geological Society of America Annual Meeting (Vancouver, Canada)
2017	Society of Economic Geologists, Annual Meeting (Keystone, CO)
	Goldschmidt Geochemistry Conference
	Western Michigan University
2013	University of North Dakota
2013	North Dakota State University
	AGU Fall Meeting, San Francisco
	Goldschmidt Geochemistry Conference, Florence, Italy
2012	University of Illinois Urbana-Champaign
	Geological Society of Nevada, Reno
	American Museum of Natural History (New York, NY)
	University of Michigan, Department of Earth & Environmental Sciences
2011	Mineralogical Society of America, Sulfur Short Course, Goslar, Germany
2010	Hebrew University of Jerusalem
	McGill University
2009	University of Southern California
	Geological Society of Nevada, Las Vegas Chapter
2008	University of Nevada, Reno
	Geological Society of Nevada, Elko Chapter
2007	Tohoku University, Sendai, Japan, September
	Bern University, Switzerland
2006	Barrick Gold Corporation
2006	Northern Arizona University
2006	Institute of Seismology and Volcanology, Petropavlovsk, Russia
2006	Geological Society of Nevada, Las Vegas Chapter
	University of Nevada Reno
	Colorado School of Mines Colloquium Series
2005	Johns Hopkins University

# **COMMUNITY OUTREACH**

COMMUNICIALI	TOUTKEACH
2017	Co-organized, secured funding, and taught Coastal Oceanography Environment Science
	School (COESS) summer school in Accra, Ghana for 150 students from Ghana, Nigeria,
	and Liberia
2017	Science Olympiad Coach, Map Reading, 4th and 5th grade, Lawton Elementary School
2016	Master event coordinator, 5th grade Battle of the Books, Lawton Elementary School
2016	Organized, secured funding, and taught Coastal Oceanography Environment Science School
	(COESS) summer school in Accra, Ghana for 107 students from Ghana
2015	Master event coordinator, Battle of the Books, 4th grade Lawton Elementary School
2015	Guest lecturer, Pioneer High School AP Environmental Science
2015	Team Leader, Battle of the Books, 3rd grade Lawton Elementary School
2014	Team Leader, Battle of the Books, 4th and 5th grades, Lawton Elementary School
2013	Rock cycle demonstration, 2 <sup>nd</sup> grade, Lawton Elementary School
2013	5th grade Science Olympiad Coach, Lawton Elementary School
2013	Earth Science content mentor, 6th grade FLL robotics teams at Bloomfield Hills
	Middle School
2010 - 2011	Geoscience Content Specialist, 2011 UNLV – Clark County School District
	Summer School VISIONS Program for K-5 Teachers
2009 - 2011	Cub Master for Boy Scout Troop 713
2006 - 2009	Nevada Southern Regional K-12 Science Fair Judge

# **ACTIVE GRANTS**

2015-2018, \$350,000, (Simon lead PI) 55.5%, NSE EAR, Sulfur Isotope Fractionation and Sulfur Partitioning between Apatite and Silicate Melts, Co-I Adrian Fiege, American Museum of Natural History

#### **EXPIRED GRANTS**

2013-2017, \$388,582 (Simon lead PI; portion \$214,683), 55.5%, NSE EAR, Collaborative Research: The Behavior of Sulfur During Magma Mixing and Implications for Magma Degassing and Ore Formation, Co-I Philipp Ruprecht, Columbia University Lamont-Doherty Earth Observatory

2016-2017 \$33,000, University of Michigan Provost's Third Century Initiative to develop inquiry-based sustainability case studies.

2016, \$20,000, NSF EAR Geochemistry of Mineral Deposits Gordon Research Conference (GRC). Funded students and early career scientists to attend the GRC, held every 4 years.

2012-2016, \$379,393 (Simon lead PI; portion \$251,458), 55.5%, NSF EAR, Quantifying Rare Earth (REE) and High Field Strength (HFSE) Element Mobility in Fluids at Conditions Appropriate for Forearc to Subarc Cold and Hot Subduction Zones.

2010-2014, \$148,000 (Simon portion), 55.5%, NSF EAR, Collaborative Research: Integrated investigations of isotopic fractionation in magmatic systems. Co-PIs: Chip Lesher, UC Davis; Craig Lundstrom, U. Illinois; Jim Van Orman and Daniel Lacks, Case Western Reserve

2010-2011, \$21,350, 0%, NSF EAR, Pan-American Current Research on Fluid Inclusions (PACROFI) Conference. Co-PI Jean Cline, UNLV.

2007-2013, \$164,763, 48.5%, NSF EAR, Platinum group element fractionation in mafic layered intrusions. Sole PI. 1month

2010-2011, \$20,000 (Simon portion), 44%, U.S. Department of the Interior (USGS) History and origin of mineral deposits in Northern Nye County, Nevada. Co-Is, Andrew Hanson, Jean Cline, UNLV (Simon, 1/2 month)

2009-2010, \$75,000 (Simon portion), 44%, U.S. Geological Survey (USGS), History and origin of mineral deposits in Northern Nye County, Nevada. Co-Is, Andrew Hanson, Jean Cline, UNLV (Simon, 1/2 month)

2006-2012, \$570,733 (Simon portion), DOE NNSA, Quantifying trace element mobility at elevated pressure and temperature with applications to subduction zone recycling. Co-Is, Oliver Tschauner, Malcolm Nichol (Simon, 1month)

2007-2008, \$15,000, NSF EPSCoR, Characterization of unsaturated flow in heap leach piles. Co-I Michael Nicholl (Simon, 1 month, no salary)

# INDUSTRY SUPPORT

2017-present, Lundin Mining Corporation, mineralization in the Candelaria iron oxide - copper - gold system. 2013-present, Compañía Minera del Pacífico (CAP), characterizing mineralization at the Los Colorados magnetite-apatite deposit, Chile. In-kind support.

2011-2013, Characterizing ore mineralization at the Estelle property, Alaska. Millrock Resources and Teck Resources. Funded one M.S. student research project. \$20,000

2009-2010, Defining stratigraphy and determining the influence of metamorphism as an ore control in the lower Paleozoic host rocks of the Getchell Carlin-type gold deposit, Nevada, U.S.A. Barrick Gold Corporation, Co-PI Jean Cline. Funded one M.S. student research project. \$30,000.

2007-2008, Igneous Geochronology and Petrography of the Cortez Hills Carlin-type Gold Deposit, Cortez, Nevada. Center for Research in Economic Geology (CREG), University of Nevada, Reno, U.S.A. Funded one M.S. student research project. \$16,000.

# SYNCHROTRON BEAM TIME AWARDED (competitive, peer-reviewed proposals)

18 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.
18 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.
27 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.
27 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.
9 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.
20 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.
20 shifts at the Advanced Photon Source, Argonne, Illinois, U.S.

#### **COURSES TAUGHT**

Scale of 1 = lowest ranking, to 5 = highest ranking

Q1 = Overall, this was an excellent course.

Q2 = Overall, the instructor was a good teacher.

Resp. = My teaching proportion for the course

NC = Teaching evaluations not collected.

# University of Michigan (u = undergraduate; g = graduate)

Year	<u>Term</u>	<u>Type</u>	<u>Name</u>	<u>Credit</u>	s Resp.	Enrol	. <u>Q1</u>	<u>Q2</u>
2017	Fall	Lecture/Dis.	uEARTH/ENVIRON 380	4	100%	129	4.50	4.83
2017	Fall	Lecture/Dis.	uEARTH/ASTRO 255	3	33%	36	4.42	4.87
2017	Sum.	Lecture	uEARTH/ENVIRON 344	3	50%	19	4.50	5.00
2017	Spring	Lecture	<sup>u</sup> EARTH/ENVIRON 102	1	100%	67	4.50	4.67
2017		Lecture/Dis.	<sup>u</sup> EARTH/ENVIRON 119	4	100%	92	4.73	4.82
2016	Fall	Lecture/Dis.	<sup>u</sup> EARTH/ENVIRON 380	4	100%	133	4.64	4.88
2016	Fall	Lecture/Dis.	<sup>u</sup> EARTH/ASTRO 255	3	33%	32	3.76	4.88
2016	Sum.	Lecture	<sup>u</sup> EARTH/ENVIRON 344	3	50%	22	4.94	5.00
2016	Spring	Lecture	<sup>u</sup> EARTH/ENVIRON 102	1	100%	55	4.00	4.20
2016	Winter	Lecture/Dis.	<sup>u</sup> EARTH/ENVIRON 119	4	100%	92	4.73	4.82
2015	Fall	Lecture/Dis.	<sup>u</sup> EARTH/ENVIRON 380	4	100%	131	4.71	4.88
2015	Fall	Lecture/Dis.	<sup>u</sup> EARTH/ASTRO 255	3	33%	30	3.15	4.75
2015	Fall	Lecture/Dis.	gEARTH 582	4	100%	5	5.00	5.00
2015	Sum.	Lecture	<sup>u</sup> EARTH/ENVIRON 344	1	50%	10	4.67	4.67
2015	Sum.	Field Trip	чEARTH 435	1	100%	8	NC	NC
2015	Spring	Lecture	<sup>u</sup> EARTH/ENVIRON 102	1	100%	80	4.81	4.95
2015	Winter	Lecture/Dis.	uEARTH/ENVIRON 119	4	100%	125	4.62	4.90
2015	Winter	Lecture	чEARTH 435	1	100%	20	5.00	4.33
2014	Fall	Lecture/Dis.	<sup>u</sup> EARTH/ENVIRON 380	4	100%	109	4.72	4.83
2014	Fall	Field Trip	чEARTH 436	1	50%	19	4.90	4.67
2014	Sum.	Lecture	<sup>u</sup> EARTH/ENVIRON 344	3	50%	15	4.83	4.83
2014	Spring	Lecture	<sup>u</sup> EARTH/ENVIRON 380	3	100%	47	4.25	4.70
2014		Lecture/Dis.	gEARTH 582	4	100%	5	4.50	4.83
2013	Fall	Lecture/Dis.	<sup>u</sup> EARTH/ENVIRON 380	4	100%	107	4.43	4.76
2013	Sum.	Lecture	<sup>u</sup> EARTH/ENVIRON 344	3	33%	17	4.93	4.93
2013	Winter	Lecture/Dis.	uEARTH/ENVIRON 380	4	100%	62	4.58	4.81

Universi	ity of Neve	ada Las Vegas (u =	= undergraduate; $g = g$ raduate)					
2012	Spring	Lecture/Lab	Physical Geology	4	100%	75	4.7	4.6
2011	Fall	Lecture/lab	Physical Geology	4	100%	45	4.0	4.1
2011	Fall	Lecture/lab	gMetallic Ore Deposits 4	4	50%	18	5.0	5.0
2011	Fall	Lecture/lab	<sup>u</sup> Metallic Ore Deposits 4	4	50%	18	4.8	4.7
2011	Sum.	Lecture	<sup>u</sup> Physical Geography	3	100%	15	N/C	N/C
2011	Spring	Lecture/lab	<sup>u</sup> Physical Geology	4	100%	56	3.9	4.1
2010	Sum.	Lecture	<sup>u</sup> Physical Geography	3	100%	17	N/C	N/C
2010	Spring	Lecture	<sup>u,</sup> Optical Mineralogy	3	100%	13	5.0	4.8
2010	Spring	Lecture	<sup>u</sup> Physical Geology	4	100%	45	4.3	4.9
2009	Fall	Lecture	gMagma PTX	3	100%	6	5.0	4.8
2009	Fall	Lecture/lab	u,gMetallic Ore Deposits 4	50%	20	4.6	4.7	N/C
2009	Sum.	Lecture	<sup>u</sup> Physical Geography	3	100%	15	N/C	N/C
2009	Spring	Lecture gTime	Management/Posters	1	100%	18	N/C	N/C
2009	Spring	Lecture <sup>u</sup> Physic	cal Geology	3	50%	46	4.2	4.5
2009	Spring	Lecture <sup>u</sup> Physic	cal Geology	3	50%	44	4.4	4.5
2009	Spring	Lecture "Optica		3	100%	12	4.8	4.7
2008	Sum.	Lecture	<sup>u</sup> Physical Geography	3	100%	15	N/C	N/C
2008	Spring	Lecture	gMagma evolution	3	100%	5	5.0	4.8
2008	Spring	Lecture <sup>u</sup> Physical Geology		3	50%	12	4.3	4.3
2008	Spring	Lecture "Optica	al Mineralogy	3	100%	12	4.6	4.8
2007	Fall	Lecture/lab	<sup>u</sup> Physical Geology	4	100%	49	4.2	4.5
2007	Sum.	Lecture	<sup>u</sup> Physical Geography	3	100%	21	N/C	N/C
2007	Spring		nics, Petrology &Fluids	3	33%	9	4.6	4.5
2007	Spring	Lecture "Optica		3	100%	12	3.8	4.6
2006	Fall	Lecture/lab	u,gMetallic Ore Deposits	4	50%	6	3.7	3.7
2006	Fall	Lecture/lab	<sup>u</sup> Physical Geology	4	100%	60	4.2	4.7
2006	Sum.	Lecture	<sup>u</sup> Physical Geography	3	100%	20	4.3	4.4
2006	Spring	Lecture	gMagma Emplacement	3	100%	5	5.0	5.0
2005	Fall	Lecture/lab	<sup>u</sup> Physical Geology	4	100%	60	4.8	3.8

# Johns Hopkins University (evaluations not available)

2004-2005 gOre Deposit Geochemistry

# <u>University of Maryland</u> (evaluations not available)

2004-2005 "Optical Mineralogy and "Physical Geology lectures and labs "Optical Mineralogy and "Physical Geology lectures and labs

2002-2003 "Optical Mineralogy lecture and lab

# Northern Virginia Community College (evaluations not available)

1998-2000 uPhysical Geology and uHistorical Geology lectures and labs

# CURRENT GRADUATE STUDENTS (Primary Advisor; underrepresented students)

2018 – present Jackie Wrage

2017 – present Maria Alejandra Rodriguez Mustafa, PhD

2015 – present Nikita La Cruz, PhD 2014 – present Brian Konecke, PhD 2014 – present Tristan Childress, PhD

# FORMER GRADUATE STUDENTS (Primary Advisor; underrepresented students)

University of Michigan

2016 – 2018 Gephen Sadove, M.S.

2015 - 2016	Daniel Korfeh, M.S., Lecturer, Economic Geology, University of Liberia
2013 - 2015	Jaayke Knipping, PhD candidate, visiting from University of Hannover
2012 - 2015	Tom Hudgins, PhD, Assistant Professor, University of Puerto Rico
2011 - 2015	Laura Bilenker, PhD, Postdoc, University of British Columbia
2010 - 2014	Liz Tanis, PhD, Petrophysicist, Shell (2010-2012 at UNLV)

University of Nevada Las Vegas

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2012 - 2014	Kevin Meazell, MS, UNLV, Geologist, Environmental Consulting, Houston, TX
2011 - 2014	Ember Flagg, MS, UNLV, Exploration Geologist
2007 - 2011	Kelly Robertson, PhD, UNLV, Research Scientist, ExxonMobil
2006 - 2010	Aaron Bell, PhD, UNLV, Research Scientist, University of New Mexico
2010 - 2012	Seth Schueler, UNLV, Exploration Geologist (did not finish MS)
2010 - 2013	Lindsey Clark, MS, UNLV, Occidental Petroleum, Exploration Geologists
2011 - 2012	Jane Didaleusky, UNLV, Environmental Consultant (did not finish MS)
2010 - 2012	Nathan Eck, MS, UNLV, Exploration Geology, Barrick Gold Corp.
2009 - 2011	Brian Aillaud, MS, UNLV, Exploration Geology, Independent
2009 - 2001	Steve Maglio, MS, UNLV, Systems Engineer
2008 - 2010	Greg Zellner, UNLV, Environmental Consulting (did not finish MS)
2008 - 2010	Zach Artz, UNLV, Environmental Consulting (did not finish MS)

#### UNDERGRADUATE STUDENTS PEFORMING RESEARCH IN MY GROUP:

University of Michigan (underrepresented students)

2018 (Program in the Environment major) Honors Thesis Gregory Cogut Nathan Hougtheling 2018 (electrical engineering) independent study/research

Elizabeth Rogers 2018 (EARTH major) Honors Thesis

Lydia Whitheck 2018 (Program in the Environment major) independent study/research Elena Essa 2018 (Program in the Environment major) independent study/research

Anne Rosett 2017-2018 (EARTH major) Honors Thesis 2017-2018 (EARTH major) Honors Thesis Will Amuk

2017-2018 (Program in the Environment major) Honors Thesis Sarah Dieck

Alexandria Shand 2017-2018 (Math major, and Computer Science major) independent study/research

2017-2018 (Program in the Environment major) independent study/research Bridget Lockman

2017-2018 (EARTH major) independent study/research Zachary Brodkey

2017-2018 (Program in the Environment major) independent study/research Erich Eberhard

2017-2018 (EARTH major) independent study/research Elizabeth Oliphant

Katherine Mather 2017 (Economics + Program in the Environment) independent study/research Liam Wolfram 2017 (Economics + Program in the Environment) independent study/research

Emma Forbes 2017 (EARTH major) independent study/research 2017 (EARTH major) independent study/research Will Amuk 2017 (EARTH major) independent study/research Krysten Dorfman

Ahana Shanbhogue 2017 (Environmental Engineering) UROP independent study/research

Anne Rosett 2017 (EARTH major) independent study/research

2017 (Program in the Environment major) independent study/research Lydia Whitbeck

2016 (EARTH major) independent study/research Jessica Hicks Anne Canavati 2016 (Near Eastern Studies) independent study/research 2016 (EARTH major) independent study/research Elizabeth Oliphant

2016 (Program in the Environment major) independent study/research Jayson Toweh

Mark Finlay 2016 (EARTH major), independent study/research

Erich Eberhard 2016 (Program in the Environment major) independent study/research

2016 (EARTH Major) independent study/research Thomas West Christopher Walker 2016 (EARTH Major) independent study/research Emily Schottenfels 2015 (EARTH Major) independent study/research

Avery McIntyre 2015 (Computer Science Major) independent study/research Yuka Yamanishi 2015 (Program in the Environment); senior research project

Andrea Davila 2013-2014 (EARTH Major) Honors Thesis

Alex Wong

Ryan Vanderwoude

Ray Mahaffy

2013-2014 (EARTH Major) independent study/research
2013-2014 (EARTH Major) independent study/research
2013-2014 (EARTH Major) independent study/research

#### University of Nevada Las Vegas

Brett Perry 2010 – 2011 (Geoscience major) independent study/research Kirellos Sefein 2010 – 2011 (Geoscience major) independent study/research Aaron Acena 2009 – 2010 (Geoscience major) independent study/research Lindsey Clark. 2009 – 2010 (Geoscience major) independent study/research 2007 – 2008 (Geoscience major) independent study/research Seth Pages 2007 – 2008 (Geoscience major) independent study/research Jason Norgan Carl Swenberg 2006 – 2008 (Geoscience major) independent study/research Pat DelVecchio 2006 – 2007 (Geoscience major) independent study/research 2006 – 2007 (Geoscience major) independent study/research Jonathan Carter

Annalee Sendis 2007 (Physics major) summer REU 2007 (Physics major) summer REU 2007 (Physics major) summer REU

# Postdoctoral/research fellows hosted (year, name, %sponsor and co-sponsor, current position)

2013 – 2015 Adrian Fiege, 100%, postdoctoral scholar

2013 – 2014 Yuping Yang, 50% (Youxue Zhang = 50%), visiting research scientist

# Visiting scholars hosted (year, name, %sponsor and co-sponsor, current position)

2014 Benjamin Winkler, 100%, visiting MS student from the University of Hannover 2014 Stefan Linsler, 100%, visiting MS student from the University of Hannover 2013 – 2015 Jaayke Knipping, 100%, visiting PhD student from the University of Hannover

#### Member, Ph.D. Committee (Year Completed)

Youngjae Kim (in progress); Sarah Brehm (in progress); Sha Chen (in progress); James Jolles (in progress); Xiaofei Pu (2018) Chenghuan Guo (2017); Jiachao Liu (2017); Peng Ni (2017); Racheal Johnson (2015, UNLV); Laura Waters (2013); Audrey Rager (2012, UNLV); Chris Adcock (2012, UNLV); Denise Honn (2012, UNLV); Timo Hoffman (2009, UNLV Chemistry); Nicolle Keller (2008, Australian National University)

#### External Member, Ph.D. Examination Committee (Year Completed)

Christine Wawryk, University of Adelaide (2017)

Nicole S. Keller, Australian National University (2008)

# Member, Preliminary Examination Committee (Year Exam Taken)

Sarah Brehm (2017); Sha Chen (2017); Nikita La Cruz (2016); Youngjae Kim (2016); Brian Konecke (2016); Tristan Childress (2016); Meredith Cologero (2016); Evan Killeen (2015); James Jolles (2015); Chenghuan Guo (2014); Liz Tanis (2013); Xiaofei Pu (2013); Laura Bilenker (2013); Kate Volk (2013); Tom Hudgins (2012); Chris Adcock (2012, UNLV); Breetha Alagappan (2012, UNLV); Racheal Johnson (2010, UNLV); Denise Honn (2010, UNLV); Kelly Robertson (2011, UNLV); Aaron Bell (2008, UNLV)

# Member, M.S. Thesis Committee (Year Completed)

David Levine (2016, UM); Forrest Gilfoy (2016, UM); Kate Turner (2015, UM); Carla Eichler (2012, UNLV); Jordan Armstrong (2012, UNLV); Jeevan Jayakody (2010, UNLV); John Howard (2010, UNLV Physics); Elizabeth Tanis (2010, UNLV Physics); Ashley Tibbetts (2009, UNLV); Daniel Antonio (2009, UNLV Physics); Lisa Hancock (2008, UNLV)

**PUBLICATIONS** (provided for each citation as: ISI/Scopus/Google Scholar) Google Scholar: h-index = 20; citations = 1,629; citations since 2012 = 1,082

#### **BOOK**

Kesler, S.E., Simon, A.C. (2015) <u>Mineral Resources, Economics and the Environment</u>. Cambridge Press. (258)

# INVITED PAPERS AND SPECIAL ISSUES

- Audétat, A. and **Simon, A.C.** (2012) Magmatic controls on porphyry Cu genesis. In: Economic Geology Monograph in honor of Richard Sillitoe. (Eds. J.W. Hedenquist, M. Harris, F. Camus) Society of Economic Geologists Special Publication Number 16, 553-572. (30)
- Simon, A.C. and Ripley, E. (2011) The role of magmatic sulfur in the formation of ore deposits. In *Sulfur in Magmas and Melts: Its Importance for Natural and Technical Processes* (eds Behrens, H. & Webster, J. D.) Reviews in Mineralogy and Geochemistry, Mineralogical Society of America, 73, 2011), 73, 513–578 (105)
- Simon, A.C., King, R.L., Pettke, T. and Usui, T. (2007), Chemical and physical processes affecting element mobility from the slab to the surface. In Simon, A.C., King, R.L., Pettke, T. and Usui, T., eds., Chemical and physical processes affecting element mobility from the slab to the surface, Chemical Geology, 239, 179-181. (0)

#### PEER-REVIEWED PAPERS

(graduate students italicized; undergraduate students italicized and blue; postdocs underlined)

# 2000

Nekvasil, H., **Simon, A.C.**, and Lindsley, D.H. (2000) Crystal fractionation and the evolution of intra-plate hy-normative igneous suites: Insights from their feldspars. Journal of Petrology, 41, 1743-1757. (21)

# 2003

Simon, A. C., Pettke, T., Candela, P.A., Piccoli, P.M. and Heinrich, C.A. (2003) Experimental determination of Au solubility in rhyolite and magnetite: Constraints on magmatic gold budgets. American Mineralogist, 88, 1644-1651. (44)

#### 2004

Simon, A.C., Pettke, T., Candela, P.A., Piccoli, P.M. and Heinrich, C.A. (2004) Magnetite solubility and iron transport in magmatic-hydrothermal environments. Geochimica et Cosmochimica Acta, 68, 4905-4914. (101)

# 2005

Simon, A.C., Pettke, T., Candela, P.A., Piccoli, P.M. and Heinrich, C.A. (2005) Gold partitioning in melt vapor-brine systems. Geochimica et Cosmochimica Acta, 69, 3321-3335. (98)

#### 2006

**Simon, A.C.**, Pettke, T., Candela, P.A., Piccoli, P.M., Heinrich, C. (2006) Copper partitioning in a melt-vapor-brine-magnetite-pyrrhotite assemblage. Geochimica et Cosmochimica Acta, 70, 5583-5600. (132)

- Boudreau, A. and **Simon, A.C.** (2007) Crystallization and degassing in the basement sill, McMurdo Dry Valleys, Antarctica. Journal of Petrology, 48(7), 1369-1386. (15)
- Hersum, T., Marsh, B., **Simon, A.C.** (2007) Contact partial melting of granitic country rock, melt segregation, and re-injection as dike into Ferrar Sills, McMurdo Dry Valleys, Antarctica. Journal of Petrology, 48(11), 2125-2148. (19)
- Simon, A.C., Frank, M., Pettke, T., Candela, P.A., Piccoli, P.M., Heinrich, C., Glascock, M. (2007) An evaluation of synthetic fluid inclusions for the purpose of trapping equilibrated coexisting immiscible fluids at experimental PVTX conditions. American Mineralogist, 92, 124-138. (20)

**Simon, A.C.**, Pettke, T., Candela, P.A., Piccoli, P.M., Heinrich, C. (2007) The partitioning behavior of As and Au in a S-free and S-bearing magmatic systems. Geochimica et Cosmochimica Acta, 71, 1764-1782. (69)

# 2008

- Simon, A.C., Pettke, T., Candela, P.A., Piccoli, P.M., Heinrich, C. (2008) The partitioning behavior of silver in a vapor brine rhyolite melt assemblage. Geochimica et Cosmochimica Acta, 72(6), 1638-1659. (34)
- Simon, A.C., Candela, P.A., Piccoli, P.M. and Englander, L. (2008) The effect of crystal melt Partitioning on the budgets of Cu, Au and Ag. American Mineralogist, 93, 1437-1448. (51) 2009
- Bell, A., Simon, A.C. and Guillong, M. (2009) Experimental constraints on Pt, Pd and Au partitioning and fractionation in silicate melt sulfide oxide aqueous fluid systems at 800°C, 150 MPa and variable sulfur fugacity. Geochimica et Cosmochimica Acta, 73(19), 5778-5792. (26)
- **Simon, A.C.** and Pettke, T. (2009) Platinum solubility and partitioning in a felsic melt vapor brine assemblage. Geochimica et Cosmochimica Acta, 73(12), 438-454. (27)

# 2011

- Bell, A., Simon, A.C. and Guillong, M. (2011) Gold solubility in oxidized and reduced, water saturated mafic melt. Geochimica et Cosmochimica Acta. 75(7), 1718-1732. (15)
- Bell, A. and Simon, A.C. (2011) Evidence for the alteration of the Fe<sup>3+</sup>/ $\Sigma$ Fe of silicate melt caused by the degassing of chlorine-bearing aqueous volatiles. Geology. 39(5), 499-502. (40)
- Frank, M.R., **Simon, A.C.**, Pettke, T., Candela, P., Piccoli, P. (2011) Gold and copper partitioning in magmatic-hydrothermal systems at 800°C and 100 MPa. Geochimica et Cosmochimica Acta. 75(9), 2470-2482. (57)
- Muntean, J., Cline, J, Simon, A.C. and Longo, A. (2011) Magmatic-hydrothermal origin of Nevada's Carlin-type gold deposits. Nature Geoscience, 4, 122-127. (133)

#### 2012

- Pettke, T., Oberli, F., Audétat, A., Guillong, M., **Simon, A.C.,** Hanley, J.J., Klemm, L.M. (2012) Recent developments in element concentration and isotope ratio analysis of individual fluid inclusions by laser ablation single and multiple collector ICP-MS. Ore Geology Reviews, 44, 10-38. (95)
- Tanis, E.A., Simon, A.C., Tschauner, O., Chow, P., Xiao, Y., Shen, G., Hanchar, J.M., Frank, M. (2012) Solubility of xenotime in 2 M HCl aqueous fluid from 1.2 to 2.6 GPa and 300 to 500C. American Mineralogist, 97, 1708-1713. (13)

# 2013

Robertson, K., Simon, A.C., Pettke, T., Smith, E., Selyangin, O., Kiryukhin, A., Mulcahy, S.R., Walker, J.D. (2013) Melt inclusion evidence for magma evolution at Mutnovsky volcano, Kamchatka. Geofluids, 13, 421-439. (3)

# <u>201</u>4

- Kirk, J.D., Ruiz, J., Kesler, S.E., **Simon, A.C.,** Muntean, J.L. (2014) Re-Os age of the Pueblo Viejo epithermal deposit, Dominican Republic. Economic Geology, 109, 503-512. (8)
- Simon, A.C., Yogodzinski, G.M., Robertson, K., Smith, E., Selyangin, O., Kiryukhin, A., Mulcahy, S.R., Walker, J.D. (2014) Evolution and genesis of volcanic rocks from Mutnovsky Volcano, Kamchatka. Journal of Volcanology and Geothermal Research, 286, 116-137. (9)

- <u>Fiege, A.</u>, Vetere, F., Iezzi, G., **Simon, A.C.**, Holtz, F. (2015) The roles of decompression rate and volatiles (H<sub>2</sub>O+Cl±CO<sub>2</sub>±S) on crystallization in (trachy-) basaltic magma. *Chemical Geology*, 411, 211-322 (2)
- Hudgins, T., Mukasa, S.B., **Simon, A.C.**, Moore, G., Barifaijo, E. (2015) Melt inclusion evidence for CO<sub>2</sub>-rich melts beneath the western branch of the East African Rift: Implications for long-term storage of volatiles in the deep lithosperic mantle. Contributions to Mineralogy and Petrology, 2015, Volume 169, Number 5, 1-18, 10.1007/s00410-015-1140-9 (11)

- Knipping, J.L., Bilenker, L., Simon, A.C., Reich, M., Barra, F., Deditius, A., Lundstrom, C., Bindeman, I., Munizaga, R. (2015) Giant Kiruna-type deposits form by efficient flotation of magmatic magnetite suspensions. Geology, 43, 591–594, doi:10.1130/G36650.1. Highlighted by the journal editors as the subject of a separate "Focus" article. (56)
- Knipping, J.L., Bilenker, L., Simon, A.C., Reich, M., Barra, F., Deditius, A., Wälle, M., Heinrich, C.A., Holtz, F., Munizaga, R. (2015) Trace elements in magnetite from massive iron oxide-apatite deposits indicate a combined formation by igneous and magnatic-hydrothermal processes. Geochimica et Cosmochimica Acta, 171, 15-38. (36)
- Tanis, E.A., Simon, A.C., Tschauner, O., Chow, P., Xiao, Y., Burnley, P., Cline II, C., Hanchar, J.M., Pettke, T., Shen, G., Zhou, Y. (2015) The mobility of Nb in rutile-saturated NaCl- and NaF-bearing aqueous fluids from 1-6.5 GPa and 300-800 C. American Mineralogist, 100, 1600-1609. Highlighted by the journal editors as a "Notable Paper" (18)

#### 2016

- Bilenker, L., Simon, A.C., Reich, M., Lundstrom, C., Bindeman, I., Munizaga, R. (2016) Fe-O stable isotope pairs elucidate a high-temperature origin of Chilean iron oxide-apatite deposits. *Geochimica et Cosmochimica Acta*, 177, 94-104. (13)
- Childress, T.M., Simon, A.C., Day, W.C., Lundstrom, C.C., Bindeman, I.N. (2016) Iron and oxygen isotope signatures of the Pea Ridge and Pilot Knob magnetite—apatite deposits, southeast Missouri, USA. *Journal of Economic Geology*, 111, 2033-2044. (12)
- Reich, M., Simon, A.C., Deditius, A., Barra, F., Chryssoulis, S., Lagas, G., Tardani, D., *Knipping, J.*, *Bilenker, L.*, Sanchez-Alfaro, P., Roberts, M.P., Munziga, R. (2016) Trace element signature of pyrite from the Los Colorados iron oxide-apatite (IOA) deposit, Chile: A missing link between Andean IOA and IOCG systems? *Journal of Economic Geology*, 111, 743-761. (10)
- Tanis, E.A., Simon, A.C., Zhang, Y., Chow, P., Xiao, Y., Hanchar, J.M., Tschauner, O., Shen, G. (2016) Rutile solubility in NaF-NaCl-KCl-bearing aqueous fluids at 0.5-2.79 GPa and 250-650°C. Geochimica et Cosmochimica Acta, 177, 170-181. (15)
- <u>Yang, Y.</u>, Zhang, Y., Simon, A.C., Ni, P. (2016) Cassiterite dissolution and Sn diffusion in silicate melts of variable water content. Chemical Geology, 441, 162-176. (3)

- Barra, F., Reich, M., Selby, D., Rojas, P., **Simon, A.C.**, Salazar, E., Palma, G. (2017) Unraveling the Origin of the Andean IOCG Clan: A Re-Os Isotopes Approach. *Ore Geology Reviews.* 81, 62-78. (4)
- Bilenker, L.B. Van Tongeren, J., Lundstrom, C.C., Simon, A.C. (2017) Iron isotopic evolution during fractional crystallization of the uppermost Bushveld Complex layered mafic intrusion. Geochemistry, Geophysics, Geosystems, 18 (3), 956-972. (2)
- Maroun, L.R.C., Cline, J.S., Simon, A., Anderson, P., Muntean, J. (2017) High-Grade Gold Deposition and Collapse Breccia Formation, Cortez Hills Carlin-Type Gold Deposit, Nevada, USA. *Economic Geology*, 112, 707-740. (0)
- <u>Fiege, A.</u>, Ruprecht, P., **Simon, A.C.**, Bell, A.S., Göttlicher, J., Newville, M., Lanzirotti, T., Moore, G., (2017) Calibration of Fe XANES for high-precision determination of Fe oxidation state in glasses: Comparison of results obtained at different synchrotron radiation sources. *American Mineralogist*, 102, 369-380. (5)
- <u>Fiege, A.</u>, Ruprecht, P., **Simon, A.C.** (2017) A magma mixing redox trap that moderates mass transfer of sulfur and metals. *Geochemical Perspectives Letters*, 3, 190-199. (0)
- Konecke, B., Fiege, A., Simon, A.C., Parat, F., Stechern, A. (2017) Co-variability of S<sup>6+</sup>, S<sup>4+</sup> and S<sup>2-</sup> in apatite as a function of oxidation state implications for a new oxybarometer. *American Mineralogist*, 102, 548-557. (6)
- Konecke, B., Fiege, A., Simon, A.C., Holtz, F. (2017) Cryptic metasomatism during late-stage lunar magmatism implicated by sulfur in apatite. *Geology*, 45 (8): 739-742. (0)
- Ni, P., Zhang, Y., **Simon, A.C.**, Gagnon, J. (2017) Cu and Fe diffusion in rhyolitic melts during chalcocite "dissolution": Implications for porphyry ore deposits and tektites. *American Mineralogist*. 102, 1287-1301. (0)

- Kim, Y., Konecke, B., Fiege, A., Simon, A.C., Becker, U., An ab-initio study of the energetics and geometry of sulfide, sulfite and sulfate incorporation into apatite: The thermodynamic basis for using this system as an oxybarometer. *American Mineralogist*, 102, 1646-1656. (0)
- 2018 (undergraduate students italicized and blue)
- Oliphant, E., Finlay, M., Simon, A.C., Arbic, B.K., Biofuels: Beneficial or Bad: Should a Ghanaian Chief Sell His Land for Biofuel Crop Cultivation? Sustainability: The Journal of Record.
- Arnuk, W., Dorfman, K., Forbes, E., Shanbhogue, A., Soberal, N., Simon, A., Fancy, S., Knoop, P. (2018) Solar microgrid feasibility study for City of Ann Arbor (2017). University of Michigan Energy Institute.
- <u>Fiege, A., Simon, A.C., Linsler, S.A., Bartels, A., Linnen, R.L., The effect of phosphorous and boron on Nb and Ta ore formation.</u> *Ore Geology Reviews*, 94, 383-395.
- Rojas, P.A., Barra, F., Deditius, A., Reich, M., **Simon, A.**, Rojas, P., Roberts, M., Rojo, M. (2018) New contributions to the understanding of Kiruna-type iron oxide-apatite deposits revealed by magnetite ore and gangue mineral geochemistry at the El Romeral deposit, Chile. *Ore Geology Reviews*, 93, 413-435. https://doi.org/10.1016/j.oregeorev.2018.01.003
- Rojas, P.A., Barra, F., Reich, M., Deditius, A., **Simon, A.C.**, Uribe, F., Romero, R., Rojo, M. (2018)

  A genetic link between magnetite mineralization and diorite intrusion at the El Romeral iron oxideapatite deposit, northern Chile. *Mineralium Deposita*https://doi.org/10.1007/s00126-017-0777-x

# MANUSCRIPTS ACCEPTED/IN PRESS

(graduate students italicized; postdocs underlined)

Simon, A.C., Knipping, J., Reich, M., Barra, F., Deditius, A.P., Bilenker, L., Childress, T., A holistic model that combines igneous and magmatic-hydrothermal processes to explain Kiruna-type iron oxide – apatite deposits and iron oxide – copper – gold deposits as products of a single evolving ore system. Society of Economic Geology Special Publication: "Metals, Minerals, and Society"

# MANUSCRIPTS SUBMITTED/IN REVIEW

(graduate students italicized; undergraduate students italicized and blue; postdocs underlined)

- Childress, T., Simon, A.C., Reich, M., Barra, F., Arce, M.J., Lundstrom, C., Bindeman, I., Resolving the magmatic-hydrothermal signal using Fe and O stable isotope pairs at the world class Mantoverde iron oxide copper gold deposit, Chile. *Mineralium Deposita*.
- Canavati, A., Toweh, J., Simon, A.C., Arbic, B.K., Electronic Graveyard: What is the Solution to Ghana's E-Waste Dilemma? Environmental Engineering Science
- Eberhard, E., Hicks, J., Simon, A.C., Arbic, B.K., Coping with Cocoa Complications: How do Economic Factors Impact the Land Usage Decisions of Ghanian Cocoa Farmers? World Development Perspectives
- Deditius, A., Reich, M., **Simon, A.C.**, Suvorova, A., *Knipping, J.*, Roberts, M.P., Rubanov, S., Dodd, A., Saunders, M., Nanogeochemistry of hydrothermal magnetite. *Contributions to Mineralogy and Petrology*.
- La Cruz, N., Simon, A.C., Wolf, A., Reich, M., Barra, F., Gagnon, J. The geochemistry of apatite from the Los Colorados Kiruna-type iron oxide apatite deposit, Chile: Implications for ore genesis. *Mineralium Deposita*.
- MANUSCRIPTS TO BE SUBMITTED IN 2018 (graduate students italicized; postdocs underlined)
- Childress, T., Simon, A.C., Reich, M., Barra, F., Bindeman, I. Fe, H and O stable isotopes fingerprint a mantle source for the El Laco iron oxide apatite deposit. *Mineralium Deposita*.
- Konecke, B., Fiege, A., Simon, A.C. Partitioning of sulfide, sulfite and sulfate between apatite and silicate melt. Geochimica et Cosmochimica Acta
- Sadove, G., Konecke, B., Fiege, A., Simon, A.C., Structurally bound S<sup>2</sup>-, S<sup>1</sup>-, S<sup>4+</sup>, S<sup>6+</sup> in apatite: The redox evolution of ore fluids at the Philips Mine ore deposit, New York, USA. *Ore Geology Reviews*.

- Bilenker, L., Simon, A.C., Lundstrom, C., Gajos, N., Experimental determination of iron isotope fractionation among magnetite, fluid, and silicate melt. *Chemical Geology*
- La Cruz, N., Simon, A.C., Reich, M., Barra, F. Geochemistry of magnetite and apatite from the world class El Laco iron oxide apatite deposit. *Mineralium Deposita*.
- Hudgins, T.R., Simon, A.C., Investigating magma mixing by using MELTS modeling and chemical and textural observations of plagioclase from Mutnovsky Volcano, Kamchatka. Contributions to Mineralogy and Petrology

# **BOOK REVIEWS**

Simon, A., Frontiers in Geofluids, Pure and Applied Geophysics, 2013. 170, 2009-2010.

# PEER-REVIEWED TECHNICAL REPORTS (graduate students italicized; postdocs underlined)

- Ludington, S., John, D.A., Muntean, J.L., Hanson, A.D., Castor, S.B., Henry, C.D., Wintzer, N., Cline, J.S., and **Simon, A.C.** (2009) Mineral-resource assessment of northern Nye County, Nevada; a progress report: U.S. Geological Survey Open-File Report 2009-1271, 13 p.
- Eichelberger, J., Kiryukhin, A., and **Simon, A. C.** (2009) The magma-hydrothermal system at Mutnovsky Volcano, Kamchatka Peninsula, Russia. Scientific Drilling, 7.
- **Simon, A.C.** and *Artz, Z.* (2009) An Investigation of Igneous Intrusions at the Cortez Hills Carlin type Gold Deposit. Center for Research in Economic Geology, University of Nevada, Reno, U.S.A.
- Artz, Z. and Simon, A.C. (2008) Igneous Geochronology and Petrography of the Cortez Hills Carlin-type Gold Deposit, Center for Research in Economic Geology, Reno, U.S.A.

# NON-PEER REVIEWED PUBLICATIONS (graduate students italicized; postdocs underlined)

- Jayakody, J., Nicholl, M., **Simon, A.C.** (2011) Spatial and temporal structure of unsaturated flow in porous crushed stone. In: B. Luke (Ed), Symposium on Engineering Geology and Geotechnical Engineering.
- **Simon, A.C.** (2008) The relationship between hydrogen fugacity and copper partitioning at magmatic conditions. In: T. Kazuyuki, T. Noriyoshi and J. Balachandran (Eds.), Water Dynamics, 5th International Workshop on Water Dynamics AIP Conference Proceedings 987, 105-107.

#### **ABSTRACTS**

I no longer keep track of abstract submissions. All of my graduate students attend and present their research at the Prospectors and Developers Association of Canada (PDAC) industry-focused meeting each March in Toronto, Canada. This is the world's largest meeting of the mining industry. My graduate students present their research also at one academic meeting per year, choosing among the annual meetings of the Geological Society of America (GSA), American Geophysical Union (AGU), Goldschmidt Conference, Society of Economic Geologists (SEG), Society for Geology Applied to Ore Deposits (SGA). All of my graduate students also present their research at the annual Michigan Geophysical Union (MGU) symposium here on campus.