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EDUCATION

Ph.D., Department of Geology and Geophysics, University of California, Berkeley, 1995
Thesis Advisor: Donald J. DePaolo

M.Sc., Institute of Meteoritics, Department of Geology, University of New Mexico, 1989
Thesis Advisors: Klaus Keil, Horton Newsom

B.A., Colorado College, Cum Laude, with Honors in Geology, 1986

PROFESSIONAL EXPERIENCE**Woods Hole Oceanographic Institution, Woods Hole, Massachusetts**

Associate Scientist, Department of Geology and Geophysics (2002–present)

Assistant Scientist, Department of Geology and Geophysics (1997–2002)

Postdoctoral Scholar, Department of Geology and Geophysics (1995–1997)

Advisors: Stan Hart, Peter Kelemen, Dan Fornari

Institut Universitaire Européen de la Mer (IUEM), Brest, France

Visiting CNRS Fellow (2002)

Los Alamos National Laboratory, Los Alamos, New Mexico

Guest Scientist, Isotope and Nuclear Chemistry Group (1996–2005)

Graduate Research Associate, Isotope Geochemistry Group (1991–1995)

Graduate Research Associate, Environmental Chemistry Group (1987–1991)

University of California, Berkeley, California

Research Assistant, Berkeley Center for Isotope Geochemistry (1991–1995)

Teaching Assistant, Department of Geology and Geophysics (1991–1994)

University of New Mexico, Albuquerque, New Mexico

Research Assistant, Institute of Meteoritics (1987–1989)

Teaching Assistant, Department of Geology (1987–1989)

AWARDS and FELLOWSHIPS

Mellon Independent Study Awards, Woods Hole Oceanographic Institution (1999; 2001; 2006)

Postdoctoral Scholar, Woods Hole Oceanographic Institution (1995–1997)

IGPP Graduate Study Grant, Institute of Geophysics and Planetary Physics, University of California, Berkeley (1991–1995)

Outstanding Graduate Student Instructor, University of California, Berkeley (1992)

Estwing Outstanding Senior, Colorado College (1986)

Getty Oil Fellowship, Colorado College (1984–1985)

RESEARCH INTERESTS

Application of U-series disequilibria, radiogenic isotope geochemistry, major- and trace- element geochemistry and the principles of physics and chemistry to a variety of fundamental problems in Earth and planetary sciences, including: accretionary and core-formation history and processes in planets; the origin and evolution of the Earth's mantle and continental crust; the generation and transport of basaltic magmas; the evolution of volcanic systems; radiometric methods for dating igneous and sedimentary rocks; and, isotope hydrology.

EDUCATIONAL ACTIVITIES

WHOI Classes and Seminars:

Solid Earth Geochemistry (2003, 2005)
Introduction to Isotope Chemistry (2003-present)
Introduction to Marine Geology and Geophysics (2002-present)
WHOI Geochemistry Seminar (1996 – 2003)

WHOI Students and Postdocs Advised/Supervised:

Chris Waters, Ph.D. Candidate, February, 2007
Lynne Elkins, Ph.D. Candidate, August, 2005
Evelyn Mervine, First-year student (co-advised by Fred Frey), 2006
Jeff Standish, MIT/WHOI (Thesis Advisor: Henry Dick), Ph.D. 2005
Christian Miller, Ph.D. Candidate (Thesis Advisor: Bernhard Puecker-Ehrenrink)
Mathew Jull, WHOI Postdoctoral Investigator (1998-2002)
Alberto Saal- MIT/WHOI (Thesis Advisor: Stan Hart), Ph.D. 1998

WHOI Guest Students, Postdocs and Visiting Scientists:

Sylvain Pichat, École Normale Supérieure de Lyon (Thesis Advisor: Francis Albarede), Ph.D. 2001
Ramananda Chakrabarti, University of Rochester, N.Y. (Thesis Advisor: Asish Basu), Ph.D. 2006
Sarah Aciego, University of California, Berkeley, (Thesis Advisor: Don DePaolo), Ph.D. 2006
Darren Tolstrup, University of California, Santa Cruz, Ph.D. Candidate (Thesis Advisor: Jim Gill)
Peter Kelly, New Mexico Institute of Technology (Thesis Advisor: Philip Kyle), M.Sc. 2006
Chris Wyatt, University of South Carolina, Ph.D. Candidate (Thesis Advisor: Gene Yagodzinski)
Frank Tepley, University of Illinois, Urbana, visiting Postdoctoral Investigator
Mark Reagan, University of Iowa, Associate Professor
Kari Cooper, University of California, Davis, Assistant Professor
Jennifer Garrison, University of Iowa, Margins Postdoctoral Fellow

Teaching Assistantships:

Theoretical Geochemistry, Igneous Petrology, Geodynamics (University of California, Berkeley)
Optical Mineralogy, Mineralogy/Crystallography (University of New Mexico)
Igneous Petrology, Geochemistry, Mineralogy/Crystallography, Intro to Geology (Colorado College)

FIELD EXPERIENCE and CRUISE PARTICIPATION

Mt. Etna, Italy (2004; 2005; 2006)
Stromboli, Italy (2006)
Vulcan Masaya, Nicaragua (2003; 2006)
9-10°N East Pacific Rise, RV Atlantis, with DSV Alvin (2001; 2004)
Hekla, Thjeistarykur, Krafla Iceland (1999; 2003)
Mt. Erebus, Antarctica (austral summers 1988-89; 1989-90; 1990-91; 1993-94; 1994-95; 2002-03)
Oman Ophiolite, Oman (1997)
Kilauea, Mauna Loa, Hualalai, Mauna Kea and Haleakala, Hawaii (1992; 1993; 1997)
Transantarctic Mountains, Antarctica (austral summers 1991-92; 1995-96)
NASA Erebus Robotics Development Study, Mt. Erebus, Antarctica (austral summer, 1992-93)
Jemez Volcanic Field, New Mexico (1986)

INVITED KEYNOTE AND PLENARY TALKS

Titles listed in “Presented Papers with Published Abstracts”

Keynote speaker, Goldschmidt, Cologne, Germany, 2007
Keynote speaker, International Conference on Evolution, Transfer and Releases of Magmas and Volcanic Gases, Academia Sincia, Taipei, 2007
Keynote speaker, International Association Volcanology and Chemistry of Earth’s Interior, Guangzhou, China, 2006
Keynote speaker, Goldschmidt, Moscow Idaho, USA, 2005
Plenary Lecture, UCSC Keck Laboratory Dedication and Symposium on Isotope Analysis, 2004
Invited talk, Spring EGS/AGU/EUG, Nice, France, 2003
Keynote speaker, Goldschmidt, Davos, Switzerland, 2002
Keynote speaker, Goldschmidt, Oxford, UK, 2000
Invited AGU talks: 1995; 1996; 1999; 2006

INVITED DEPARTMENT COLLOQUIUM TALKS

Boston University, MA (November, 2006)
Air Force Academy, CO (September, 2006)
Harvard University, MA (April, 1999; December, 2005)
Dartmouth College, NH (November, 2004)
Distinguish Lecturer, University of Wyoming, WY (April, 2003)
University of Mainz, Germany (March, 2003)
University of Bristol, UK (October, 2001)
École Normale Superiour, Lyon, France (November, 1999; March, 2001)
Massachusetts Institute of Technology, MA (April, 2001)
Colorado College, CO (September, 1996; October, 2001)
Brown University, RI (March, 1999)
University of Rochester, NY (March, 1999)
Institute of Geophysics and Planetary Physics, Los Alamos, NM (March, 1998; 2002)
Department of Terrestrial Magnetism, Carnegie, Washington DC (October, 1997)
New Mexico Institute of Technology and Mining, NM (April, 1997)
University of Hawaii, HI (April, 1993; March, 1997)
University of Maine, ME (November, 1996)
University of Rhode Island, RI (October, 1996)
University of Florida, FL (April, 1996)
Florida State University, FL (April, 1996)
Hawaiian Volcano Observatory, HI (April, 1993)
University of Arizona, AZ (February, 1993)

PROFFESIONAL ACTIVITIES

WHOI Radiation Safety Committee (2004-present)
WHOI Geology and Geophysics Safety Committee (2002-present)
WHOI ICPMS/PIMMS Oversight Committee (2001–present)
Convecting Mantle Symposium, Goldschmidt Intern. Program Committee, Melbourne, AUS, 2006
Session Organizer and Convener, Goldschmidt 2006, “*Integrated Studies of MORB Petrogenesis: Sources, Melting Processes, and Timescales.*”
Participant RIDGE Y2K Implementation Plan Workshop, Albuquerque, NM, 2002
Invited Discussion Leader RIDGE Y2K Educational Workshop, Long Beach, CA, 2002
Session Chair, Fall AGU, 1997 “*Volcanology II: Timing of Magmatic Processes.*”
Session Organizer and Convener, Goldschmidt 1999. “*Mantle Melting: Sources, Timescales, Melt Migration and Melt-solid Interaction.*”
Session Chair, MELT Workshop, 1996

PROFESSIONAL AFFILIATIONS

Geological Society of America, Member (2005-present)
American Geophysical Union, Member (1994-present)
Opticad Corporation, Member of the Board of Directors (1990-present)
Rocky Mountain Field Institute, Member of the Board of Directors (1996-present)
Ritt Kellogg Memorial Scholarship Fund, Colorado College, President of the Board of Directors (1999-present)
Big Brothers & Big Sisters of Cape Cod and the Islands, Member of the Board of Directors (1996-2001)

PUBLIC OUTREACH, EDUCATION AND SERVICE

Oceanus, Fall, 2006, "*Into the 'Mouth of Hell': A journey into the crater of an active volcano.*"
<http://www.who.edu/oceanus/viewArticle.do?id=13350§ionid=1000>
Popular Mechanics, SA, November, 2006, "*Into the 'Mouth of Hell'.*"
National Geographic Magazine, October, 2004, "*Sniffing for Clues to the Dinosaurs Demise.*"
Miracle Continent Antarctica- Mt Erebus. Initially Broadcast on NHK Public Television, Japan, 2001

Elementary, Middle and High School Lectures on Volcanology and Geology
Berkeley High School and Oakland Regional Science Fair Judge
Falmouth Schools Science Fair Judge

OUTDOOR EDUCATION AND GUIDING

Contractual Climbing Guide

Antarctica, Seven Austral summer seasons from 1988-1997
Mountain guide for science parties in Transantarctic Mountains and on Mt. Erebus, Ross Island.
Peru, Cordillera Blanca
June, 1981; June, 1982; August, 1999. Private climbing guide. Successfully guided several individual clients, including a group of ten Colorado College students, to the summits of several high altitude and technical Peruvian peaks, including Nevada Maparaju (5326 meters), Nevado Urus (5495 meters), Nevado Copa (6188 meters), Nevado Tocllaraju (6032 meters), and Nevado Ishinca (5530).
Alaska, Alaska Range
Denali/Mt. McKinley (20,320 feet)
May, 1984. Successfully guided several Associates of the Santa Fe Mountain Center to the summit of Denali via the West Buttress, including NM congressman Tom Udall.
May, 1989. Guided one of the medical doctors (Ben Levine, MD) for Dr. Peter Hackett, MD up to the Denali Medical Research Camp situated at 14,500 feet on the West Buttress Route of Denali.
Mexico, Volcanoes
December, 1983. Private climbing guide. Successfully guided a private client to the summit of volcano Iztaccihual (5286 meters), Popocatepetal (5452 meters), and Orizoba (5700 meters).

Rock and Ice Climbing Guide and Instructor

Eastern Mountain Sports Climbing School, North Conway, NH (1976-1978)
Vertical World Climbing School and Guide Service, Colorado Springs, CO (1974-1976)

Wilderness Instructor

Colorado Outward Bound School, Colorado Springs Project Center, Colorado Springs, CO (1984-1986)

Project Director and Wilderness Instructor

Santa Fe Mountain Center, Santa Fe, NM (1980-1985)
Extended wilderness programming for adult and juvenile criminal offenders and youth at risk.

Patagonia, Inc.

Product testing and technical design (1994-present).

PUBLICATIONS IN REFEREED JOURNALS AND BOOKS

- 37) Elkins, L., G.A. Gaetani, and K.W.W. Sims (in review). “*Partitioning of U and Th during garnet pyroxenite melting: constraints on sources of alkaline ocean island basalts.*” Submitted to Earth and Planetary Science Letters.
- 36) Sims, K.W.W., S.R. Hart, M.K. Reagan, J. Blusztajn, H. Staudigel, R.A. Sohn, G.D. Layne, L.A. Ball and J. Andrews (in review). “ *^{238}U - ^{230}Th - ^{226}Ra - ^{210}Pb - ^{210}Po , ^{232}Th - ^{228}Ra and ^{235}U - ^{231}Pa constraints on the ages and petrogenesis of Vailulu and Malumalu Lavas, Samoa.*” Submitted to Geochemistry, Geophysics, and Geosystems.
- 35) Giammanco, S., M. Neri, and K.W.W. Sims (in review). “*Shallow rock stresses and gas transport at Mt. Etna (Italy) monitored through ^{220}Rn , ^{222}Rn and soil CO_2 emissions in soil and fumaroles.*” Submitted to Geochemistry, Geophysics, and Geosystems.
- 34) Sims, K.W.W., J. Gill, A. Dossetto, D. Hoffmann, C.C. Lundstrom, R. Williams, L.A. Ball, D. Tollstrup, S.P. Turner, J. Prytulak, J. Glessner, J.J. Standish, and T. Elliott (in review). “*An inter-laboratory assessment of the Th Isotopic Composition of Synthetic and Rock standards.*” Submitted to Geostandards and Analytical Research.
- 33) Ball, L.A., K.W.W. Sims, and J. Schwieters (in review). “*Measurement of $^{234}\text{U}/^{238}\text{U}$ and $^{230}\text{Th}/^{232}\text{Th}$ in volcanic rocks using the Neptune PIMMS.*” Submitted to Journal of Analytical Atomic Spectrometry.
- 32) Turner, S.P., K.W.W. Sims, and M.K. Reagan (in review). “*A ^{210}Pb - ^{226}Ra - ^{230}Th - ^{238}U study of Klyuchevskoy and Bezymianny volcanoes, Kamchatka.*” Submitted to Geochimica Cosmochimica Acta.
- 31) Kelly, P.J., P.R. Kyle, N.W. Dunbar, and K.W.W. Sims (in review). “*Geochemistry and mineralogy of the phonolite lava lake, Mount Erebus volcano, Antarctica: 1972 – 2004 and comparison with older lavas.*” Invited article submitted to special volume on Mt Erebus in Journal of Volcanology and Geothermal Research.
- 30) Standish, J.J. and K.W.W. Sims (in review). “*Young Diffuse MORB volcanism within an Ultraslow-Spreading Rift Valley.*” Revised version submitted to Geology.
- 29) Pichat, S., K.W.W. Sims, L.A. Ball, R. Francois, and S. Brown-Legger (in review). “*Sector field inductively coupled plasma mass spectrometry determination of ^{231}Pa and ^{230}Th in sediments: methodology, optimization, precautions and corrections.*” Invited article submitted to High Resolution ICPMS, ed. C.B. Douthitt, Elsevier Press. (Note that this article has been reviewed and the book has been pending for some time, so we may withdraw and submit elsewhere.)
- 28) Sims, K.W.W., J. Blichert-Toft, P.R. Kyle, S. Pichat, J. Bluzstajn, P.J. Kelly, L.A. Ball, and G. D. Layne (2007). “*A Sr, Nd, Hf, and Pb isotope perspective on the genesis and long-term evolution of alkaline magmas from Erebus volcano, Antarctica.*” Invited article for special volume on Mt Erebus in Journal of Volcanology and Geothermal Research (Accepted).
- 27) Moune, S., F. Faure, P.-J. Gauthier, and K.W.W. Sims (2007). “*Pele’s hairs and tears: natural probe of volcanic plume.*” Journal of Volcanology and Geothermal Research (Accepted).
- 26) Sims, K.W.W., R.P. Ackert, Jr., F. Ramos, R.A. Sohn, M.T. Murrell, and D. J. DePaolo (2007). “*Determining eruption ages and erosion rates of Quaternary basaltic volcanism from combined U-series disequilibria and cosmogenic exposure ages.*” Geology, vol 35, pp 471-474, doi:10.1130/G23381A.1.

- 25) Aciego, S.M., D.J. DePaolo, B.M. Kennedy, M.P. Lamb, K.W.W. Sims, and W. Dietrich (2007). "Combining [^3He] cosmogenic dating with U-Th/He eruption ages using olivine in basalt." Earth and Planetary Science Letters, vol 254, number 3-4, pp 288-302, doi: 10.1016/j.epsl.2006.11.039.
- 24) Sims, K.W.W. and S. R. Hart (2006). "Comparison of Th, Sr, Nd and Pb Isotopes in Oceanic Basalts: Implications for Mantle Heterogeneity and Magma Genesis." Earth and Planetary Science Letters, vol 245, pp 743-761, doi: 10.1016/j.epsl.2006.02.030.
- 23) Sohn, R.A. and K.W.W. Sims (2005). "Bending as a mechanism for triggering off-axis volcanism on the East Pacific Rise." Geology, vol 33, number 2, 93-96, doi: 10.1130/G21116.1.
- 22) Pichat, S., K.W.W. Sims, R. François, J.F. McManus, S. Brown-Legger, and F. Albarède (2004). "Lower export production during glacial periods in the equatorial Pacific as derived from ($^{231}\text{Pa}/^{230}\text{Th}$) measurements in deep-sea sediments." Paleoceanography, vol 19, PA 4023.
- 21) Drakos, P., K.W.W. Sims, J. Riesterer, J. Blusztajn, and J. Lazarus (2004). "Chemical and Isotopic Constraints On Source-Waters and Connectivity Of Basin-Fill Aquifers in the Southern San Luis Basin, New Mexico." Invited, peer reviewed article for New Mexico Geological Society Guidebook, Geology of the Taos Region, pp 405-414.
- 20) Frank J. Tepley, III, C.C. Lundstrom, K.W.W. Sims, and R. Hékinian (2004). "U-series Disequilibria in MORB From the Garrett Transform and Implications for Mantle Melting." Earth and Planetary Science Letters, vol 223, number 1-2, pp 79-97.
- 19) Sims, K.W.W., J. Blichert-Toft, D.J. Fornari, M.R. Perfit, S.J. Goldstein, P. Johnson, D.J. DePaolo, and P. Michaels (2003). "Aberrant Youth: Chemical and isotopic constraints on the young off-axis lavas of the East Pacific Rise." Geochemistry, Geophysics, and Geosystems, vol 4, number 10, p 8621, doi:10.1029/2002GC000443.
- 18) Reagan, M.K., K.W.W. Sims, J. Enrich, R.B. Thomas, H. Cheng, R.L. Edwards, G.D. Layne, and L.A. Ball (2003). "Old rhyolite progeny from young mafic parents in North American continental arcs." Journal of Petrology, vol 44, number 9, pp 1703-1726.
- 17) Bourdon, B. and K.W.W. Sims (2003). "U-series constraints on intraplate magmatism." In Uranium Series Geochemistry, eds. B. Bourdon, G.M. Henderson, C.C. Lundstrom and S.P. Turner; Reviews in Mineralogy and Geochemistry, vol 52, pp 215-253.
- 16) Cooper, K., S.J. Goldstein, K.W.W. Sims, and M.T. Murrell (2003). "Uranium-Series Chronology of Gorda Ridge Volcanism: New evidence from the 1996 Eruption." Earth and Planetary Science Letters, vol 206, number 3, pp 459-475, doi:10.1016/S0012-821X(02)01083-X.
- 15) Jull, M., P. Kelemen, and K.W.W. Sims (2002). "Melt migration and uranium series disequilibria: the combined effect of porous and conduit flow." Geochimimica et Cosmochimica Acta, vol 66, number 23, pp 4133-4148.
- 14) Sims, K.W.W., S.J. Goldstein, J. Blichert-Toft, M.R. Perfit, P. Kelemen, D.J. Fornari, P. Michael, M.T. Murrell, S.R. Hart, D.J. DePaolo, G.D. Layne, and M. Jull (2002). "Chemical and isotopic constraints on the generation and transport of melt beneath the East Pacific Rise." Geochimimica et Cosmochimica Acta, vol 66, number 19, pp 3481-3504, doi:10.1016/S0016-7037(02)00909-2.
- 13) Choi, M.S., R. Francois, K.W.W. Sims, M.P. Bacon, S. Legger-Brown, A.P. Fleer, L.A. Ball, D. Schneider and S. Pichat (2001). "Rapid determination of ^{230}Th and ^{231}Pa in seawater by Inductively coupled plasma mass spectrometry." Marine Chemistry, vol 76, pp 99-112.

- 12) Layne, G.D. and K.W.W. Sims (2000). “Analysis of $^{232}\text{Th}/^{230}\text{Th}$ in volcanic rocks by Secondary Ionization Mass Spectrometry.” International Journal of Mass Spectrometry, vol 203, number 1-3, pp 187-198.
- 11) Hart, S.R., H. Staudigel, A.A.P. Koppers, J. Blusztajn, E.T Baker, R. Workman, M. Jackson, E. Hauri, K.W.W. Sims, D.J. Fornari, A. Saal and S. Lyons (2000). “Vailulu’u Undersea Volcano: The New Samoa.” Geochemistry, Geophysics, and Geosystems, vol 1, Paper number 2000GC000108.
- 10) Sims, K.W.W., M.T. Murrell, D.J. DePaolo, W.S. Baldrige, S.J. Goldstein, D. Clague and M. Jull (1999). “Porosity of the melting zone and variations in the solid mantle upwelling rate beneath Hawaii: Inferences from ^{238}U - ^{230}Th - ^{226}Ra and ^{235}U - ^{231}Pa disequilibria.” Geochimica et Cosmochimica Acta, vol 63, number 23, pp 4119-4138, doi: 10.1016/S0016-7037(99)00313-0 (invited paper for a Special volume in honor of Claude Allegre).
- 9) Stracke, A., V.J.M. Salters and K.W.W. Sims (1999). “Assessing the role of pyroxenite in the source of Hawaiian basalts: Hf-Nd-Th isotope evidence.” Geochemistry, Geophysics, and Geosystems, vol 1, Paper number 1999GC0000013.
- 8) Sims, K.W.W. and D.J. DePaolo (1997). “Inferences about mantle magma sources from incompatible element concentration ratios in oceanic basalts.” Geochimica et Cosmochimica Acta, vol 61, number 4, pp 765-784, doi: 10.1016/S0016-7037(96)00372-9.
- 7) Newsom, H.E., K.W.W. Sims, P.D. Noll, W.L. Jaeger, S.A. Maehr, and T.B. Bassera (1996). “The depletion of W in the bulk-silicate Earth: constraints on core formation.” Geochimica et Cosmochimica Acta, vol 60, number 7, pp 1155-1169.
- 6) Sims, K.W.W., D.J. DePaolo, M.T. Murrell, W.S. Baldrige, S.J. Goldstein, and D. Clague (1995). “Mechanisms of magma generation beneath Hawaii and Mid-Ocean ridges: U-Th and Sm-Nd isotopic evidence.” Science, vol 267, pp 508-512, doi: 10.1126/science.267.5197.508.
- 5) Newsom, H.E. and K.W.W. Sims (1991). “Core formation during early accretion of the Earth.” Science, vol 252, pp 926-933, doi: 10.1126/science.252.5008.926.
- 4) Sims, K.W.W., and E.S. Gladney (1991). “Determination of As, Sb, W and Mo in silicate matrices by epithermal neutron activation and inorganic ion exchange.” Analytica Chimica Acta, vol 251, pp 297-303.
- 3) Sims, K.W.W., H.E. Newsom, and E.S. Gladney (1990). “Chemical fractionation during formation of the Earth’s core and continental crust: Clues from As, Sb, W and Mo.” In Origin of the Earth, J. Jones and H.E. Newsom (eds.) New York : Oxford University Press; Houston, Lunar and Planetary Institute. 1990, ISBN 0-19-506619-7.
- 2) Sims, K.W.W., E.S. Gladney, C.C. Lundstrom, and N.W. Bower (1988). “Elemental concentrations in Japanese silicate rock standards: a comparison with the literature.” Geostandards Newsletter, vol 12, pp 379-389.
- 1) Cohen, A.S., D.S. Ferguson, P.M. Gram, S.L. Hubler, and K.W.W. Sims (1986). “The Distribution of Coarse Grained Sediments in Modern Lake Turkana, Kenya: Implications for Clastic Sedimentation Models of Rift Lakes.” In Sedimentation in the African Rift Systems, L.E. Frostik (ed.), Geologic Society of London, Special Publication 23, pp 212-223.

NON-PEER REVIEWED PUBLICATIONS AND CONSULTING REPORTS FROM GROUND WATER CONTRACTS

Drakos, P., J. Lazarus, J. Riesterer, K.W.W. Sims, and M. Hodgins (2006). “*Subsurface Stratigraphy, the Effects of Faults on Groundwater Flow, Chemical and Isotopic Constraints on Source-Waters and Connectivity of Basin-Fill Aquifers in the Southern San Luis Basin, New Mexico.*” Report of the 2006 Ground Water Summit, National Ground Water Association.

Drakos, P., K.W.W. Sims, J. Riesterer and J. Lazarus (2006). “*Source-Waters And Connectivity Of Basin-Fill Aquifers in The San Juan Basin, New Mexico: Constraints from U-series disequilibria, Tritium and Sr, O and H isotopes.*” Invited, peer reviewed article for Desert Society Guidebooks, San Juan Basin Geology, pp 268-279.

Sims, K.W.W. (2006). “*Geology of New Mexico.*” In Rock Climbing New Mexico by Dennis Jackson, Falcon Press Co., Inc, Helena Montana, ISBN 10:00-7627-3132-9.

Sims, K.W.W., and C. Barlow (2005). Various new routes on Huamashraju, The American Alpine Journal, “The World’s Most Significant Climbs”, 79, vol 47, pp 264-265. (Description of the first ascent of the West Face of Huamashraju (5,434 meters)).

Drakos, P., J. Lazarus, J. Riesterer, M. Hodgins and K.W.W. Sims (2005). “*Structural controls on ground water flow and recharge into the southern San Luis Basin near Taos, NM.*” USGS field report on San Luis basin Hydrology.

Drakos, P., J. Riesterer, J. Lazarus, and K.W.W. Sims (2003). “*Evaluation of Pumping Effects at Zuni Salt Lake in the Atarque Sandstone Aquifer from Fence Lake Mine.*” Unpublished Glorieta Geoscience, Inc. consulting report, 19 p. plus Appendices.

Sims, K.W.W. (1996). “*Geology of New Mexico and Texas.*” In Rock Climbing New Mexico and Texas by Dennis Jackson, Falcon Press Co., Inc, Helena Montana, ISBN 1-56044-483-5.

PRESENTED PAPERS WITH PUBLISHED ABSTRACTS (* Invited Keynote talks)

65) *Sims, K.W.W. and P.-J. Gauthier (2007). “From Source to surface: U-series constraints on the processes and timescales of magma generation, evolution and degassing.” International Conference on Evolution, Transfer and Releases of Magmas and Volcanic Gases at Academia Sincia, Taipei, April 2007. INVITED KEYNOTE

64) Gauthier, P.-J, K.W.W. Sims, and S. Moune (2007). “Long-lasting degassing activity at basaltic volcanoes: the bearing of U-series isotopes.” International Conference on Evolution, Transfer and Releases of Magmas and Volcanic Gases at Academia Sincia, Taipei, April 2007.

63) Sims, K.W.W., B. Peucker-Ehrenbrink, T. Mather, D.M. Pyle, R.S. Martin, P.-J. Gauthier, and A. Aiuppa (2007). “Sniffing for Clues to the Dinosaurs Demise: Measurement of Osmium Isotopes Composition and Platinum Group Element Abundances in Volcanic Emissions.” International Conference on Evolution, Transfer and Releases of Magmas and Volcanic Gases at Academia Sincia, Taipei, April 2007.

62) *Sims, K.W.W., L.A. Ball and J. Schweiters (2006). “Measurement of Th Isotopes in Volcanic Rocks by Plasma Ionization Multi-Collector Mass Spectrometry.” Fall AGU EOS Trans 87 (52) V11E-01. INVITED TALK

- 61) Pyle, D.M., S.J. Collins, K.W.W. Sims, M.K. Reagan, J.D. Blundy, C. Oppenheimer, and G.Yirgu (2006). "Rhyolites From the September 2005 Da'Ure (Dabbahu) Eruption, Afar, Ethiopia." Fall AGU EOS Trans 87 (52) T41B-1560.
- 60) Garrison, J.M., M.K. Reagan, K.W.W. Sims, and L.C. Patino (2006). "Timescales of rhyodacite formation in Central America: U-series disequilibrium and implications for petrogenetic processes in El Salvador and Nicaragua." Fall AGU EOS Trans 87 (52) V41B-1734.
- 59) Sims, K.W.W., M. Perfit, J. Blichert-Toft, D.J. Fornari, J. Blusztajn, L.A. Ball, and C.L. Waters (2006). "Progressive melting of a heterogeneous mantle source beneath 9-10°N." EPR Geochimica et Cosmochimica Acta Supplement, v. 70, iss. 18, p. 592.
- 58) Ramos, F.C., M.R. Reid, and K.W.W. Sims (2006). "Re-evaluating the mantle structure underlying the southwestern US." Geochimica et Cosmochimica Acta Supplement, v. 70, iss. 18, p. 515.
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