Curriculum Vitae

Kari M. Cooper

Contact Information

Department of Earth and Planetary Sciences University of California, Davis 2119 Earth and Physical Sciences Building 462 Crocker Lane Davis, CA 95616-5270 voice: 530.754.8826 fax: 530.752.0951 kmcooper@ucdavis.edu

Education

Ph.D. in Geochemistry, 2001, University of California, Los Angeles.

M.S. in Geology, 1995, University of Washington.

B.A. magna cum laude with distinction in Geology, 1991, Carleton College.

Professional Experience

2015-present: Professor, Department of Earth and Planetary Sciences, University of California, Davis2009-2015: Associate Professor, Department of Earth and Planetary Sciences, University of California, Davis

2005-2009: Assistant Professor, Department of Geology, University of California, Davis

2002-2005, Assistant Professor, Department of Earth and Space Sciences, University of Washington (on leave 2002-2003 to complete postdoctoral work)

2001-2003, Postdoctoral Scholar in Geochemistry, California Institute of Technology. Advisors: John Eiler and Paul Asimow.

1991-1993, Geologist, GS-7, USGS Branch of Alaskan Geology. Supervisor: Cynthia Dusel-Bacon.

1991, Geologist, GS-5, NAGT-USGS Summer Field Internship, Hawaiian Volcano Observatory, Kilauea. Supervisor: Jim Kauahikaua.

Memberships in Professional Societies

American Association for the Advancement of Science, American Geophysical Union, Geochemical Society, Geological Society of America, International Association of Volcanology and Chemistry of the Earth's Interior

Fellowships and Awards

University of Canterbury Visiting Erskine Fellow, Department of Geological Sciences, 2019 Fellow of the American Association for the Advancement of Science, elected in 2017 Fellow of the Geological Society of America, elected in 2015

Extramural Funding

PI or co-PI on 13 research awards totaling \$3.3M (\$1.9M to UC Davis), including two recent NSF research awards:

NSF EAR GeoPRISMS program (current). "Collaborative research: Assessing changes in the state of a magma storage system over caldera-forming eruption cycles, a case study at Taupo Volcanic Zone, New Zealand" 7/1/17-6/30/20. Collaboration with Adam Kent (OSU) and Chad Deering (MTU).

NSF EAR Petrology and Geochemistry program (9/1/14- 8/31/18): Collaborative Research: Quantifying the thermal history of crustal magma storage through crystal records and numerical modeling. Collaboration with Adam Kent (OSU) and Christian Huber (GA Tech).

Advising and Mentoring

Postdoctoral advisees:

Dr. Erik Klemetti, 2006-2009 (now Associate Professor at Denison University)

Graduate students (primary advisor):

Elizabeth Grant, PhD, expected completion 2022, UC Davis

Tyler Schlieder, PhD, expected completion 2020, UC Davis

Kevin Schrecengost, PhD, expected completion 2019, UC Davis

Allison Rubin, PhD, 2016, UC Davis

Mark Stelten, MS, 2010, UC Davis; PhD, 2014, UC Davis

Gary Eppich, MS, 2010, UC Davis

Philipp Ruprecht, PhD, 2009, University of Washington

Kathryn Flynn, MS, 2009, UC Davis (co-advised with Rob Zierenberg)

Theresa Kayzar, MS, 2007, University of Washington

Carrie Donnelly, MS, 2006, University of Washington

Undergraduate research supervised:

Sophia Stuart, BS thesis, UC Davis – in progress

Sam Shipman, BS thesis, 2018, UC Davis

William Bennett, BS thesis, 2018, UC Davis

Ellyn Huggins, BS thesis, 2016, UC Davis

Cassandra King, BS thesis, 2016, UC Davis

Rosana Goncalves Oliveira, intern (Brazil Scientific Mobility Program of the Brazilian Government), 2015, UC Davis

Guadalupe Vargas, CAMP intern, 2014, UC Davis

Marissa Leever, BS thesis, 2014, UC Davis

Darryl Berberi-Hill, BS thesis, 2013, UC Davis

David Houchins, BS thesis, 2013, UC Davis

Tracy Compton, BS thesis, 2007, UC Davis

Jennifer Glass, BS thesis, 2005, University of Washington (currently an Assistant Professor at Georgia Tech)

Teaching

UC Davis and University of Washington: 14 years of teaching experience, including Introductory Volcanology courses for majors and non-majors, Physical Geology, Igneous Petrology, Advanced Field Geology, and graduate courses in Advanced Petrology and Geochemistry.

Service (past 5 years)

Professional service:

Petrology and Geochemistry disciplinary leader, Community Network for Volcanic Eruption Response (CONVERSE) Research Coordination Network, 2019-2020.

Session co-convener: "IAVCEI session II.7 Architecture of magmatic plumbing systems", International Association of Volcanology and Chemistry of the Earth's Interior Scientific Assembly 2017, Portland, Oregon, 14-18 August, 2017.

Guest Editor, "Volcanoes: From Mantle to Surface," Cooper, K.M. and Putirka, K., eds., *Elements* v. 13, no. 1, 2017

Session co-convener, "Volcanic Plumbing and Surface Processes," (2 oral sessions and 1 poster session), AGU Fall meeting, Dec 12-16, 2016, San Francisco, CA

NSF EAR Petrology and Geochemistry Program proposal review panel, October 2016.

Committee Member, National Academies Committee on Improving Understanding of Volcanic Eruptions, Feb 2016-April 2017

Editorial Advisory Board Member, Earth and Planetary Science Letters, 2015-2019

Discussion Leader, Gordon Research Conference Interior of the Earth: June 7-12, 2015.

Member of Macelwane medal committee, American Geophysical Union Volcanology,

Geochemistry and Petrology section (the committee tasked with identifying and coordinating VGP nominations for the AGU young investigator medal), 2015.

NSF EAR Petrology and Geochemistry Program proposal review panel, October 2014.

Co-leader (with Michael Clynne and Patrick Muffler, USGS) for field trip to Lassen Volcanic National Park, June 14-16, 2014. Associated with the Goldschmidt Geochemistry Conference, June 8-13, 2014, Sacramento, CA.

Session co-convener, "Crystallization histories vs. eruption histories: What do geospeedometry and geochronology tell us?" Goldschmidt Geochemistry Conference, June 8-13, 2014, Sacramento, CA.

Public talks, interviews, and outreach:

Science Café talk (general talk open to the public), Jan 8, 2020, Davis CA.

Participant in "Skype a Scientist" program: 12/10/2018 interview with students at Milliken Park Elementary School, Fremont, NE.

Member of "500 Women Scientists" group: https://500womenscientists.org/.

Interviewed for news stories on volcanoes in print and radio:

- Interviewed on Minnesota Public Radio, MPR News with Kerri Miller, 5/10/2018.
- "Hidden Inferno," Scientific American, Dec 2018
- "A Surprise From the Supervolcano Under Yellowstone" https://www.nytimes.com/2017/10/10/science/yellowstone-volcanoeruption.html?searchResultPosition=2, New York Times, 10/10/2017
- "The Cool Beginnings of a Volcano's Supereruption"

 https://www.nytimes.com/2017/11/06/science/the-cool-beginnings-of-a-volcanos-supereruption.html?searchResultPosition=1; *New York Times, 11/6/2017
- Interviewed on NPR Science Friday 08/18/2017: <u>For A Volcanic Prediction, Gaze Into The</u> Crystalline Debris
- Interviewed on NPR Science Friday 02/21/2014: <u>Beneath a Sleeping Volcano, Magma Mush Lies in Wait</u>

Invited Seminars and Talks

2019: University of Canterbury, New Zealand, Departmental seminar, Apr 30, 2019. CIDER research talk, June 20, 2019.

Stanford University Geological Sciences Seminar, Nov. 12, 2019.

2018: Lamont-Doherty Earth Observatory Colloquium, Feb 2, 2018.

Kansas University, departmental seminar, March 8, 2018.

Fresno State University, departmental seminar, May 3, 2018

2 Invited talks at GSA Annual Meeting, November 2018

2017: Vanderbilt University, departmental seminar, Feb 17, 2017.

UC Berkeley, departmental seminar, November 9, 2017.

Invited talk: Magma Architecture and Dynamics, Royal Society Theo Murphy international scientific meeting, Chichley Hall, England, Nov 27-28, 2017.

- 2016: UCLA, departmental seminar, Feb 11, 2016.
- 2015: Keynote, "Thermal histories of magma storage and implications for magma mixing", Goldschmidt Geochemistry conference, August 2015.

Departmental seminar, Oregon State University College of Ocean, Earth, and Atmospheric Sciences, October 2015.

Invited presentation at AGU Fall Meeting, December 2015

Coauthor on invited presentation by student advisee, AGU Fall Meeting, December 2015

2014: Keynote, "Insights into magmatic processes in the crust from U-series disequilibria." Uranium-series Symposium: The Frontiers of U-series Research, Quarantine Station, Manly, Sydney, Australia, February 2014.

- Invited to speak at the Geological Society of America Annual Meeting, October 2014 (declined)
- Invited presentation at a pre-GSA short course entitled "EarthScope: Geochronology and the Earth Sciences" October 2014
- UC Santa Barbara, Departmental Seminar, November 2014
- Two invited presentations at AGU Fall Meeting, December 2014

Peer-Reviewed Publications

- **Cooper Kari M**, (2019), Time scales and temperatures of crystal storage in magma reservoirs: implications for magma reservoir dynamics. Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences 377(2139):20180009 doi:10.1098/rsta.2018.0009.
- Kent AJR, Cooper Kari M (2018) How well do zircons record the thermal evolution of magmatic systems? *Geology* 46(2):111-114 doi:10.1130/G39690.1
- Degruyter W, Huber C, Bachmann O, Cooper KM, Kent AJR (2017) Influence of Exsolved Volatiles on Reheating Silicic Magmas by Recharge and Consequences for Eruptive Style at Volcán Quizapu (Chile). *Geochemistry, Geophysics, Geosystems* 18(11):4123-4135 doi:10.1002/2017GC007219
- **Cooper KM**, Till CB, Kent AJR, Costa F, Rubin AE*, Gravley D, Deering C, Cole J, Bose M (2017) Response to Comment on "Rapid cooling and cold storage in a silicic magma reservoir recorded in individual crystals". *Science* 358(6370) doi:10.1126/science.aap9145
- Reiners PW, Renne PR, Carlson RW, Cooper KM, Granger DE, McLean NM, Schoene B, 2018, *Geochronology and Thermochronology*. Wiley, ISBN 978-1-118-45585-2.
- Allison E. Rubin*, **Kari M. Cooper**, Christy B. Till, Adam J.R. Kent, Fidel Costa, Maitrayee Bose, Darren Gravley, Chad Deering, and Jim Cole, 2017, Rapid cooling and cold storage in a silicic magma reservoir recorded in individual crystals, *Science*, v. 356 no. 6343, pp. 1154-1156 doi:10.1126/science.aam8720.
- Mary R. Reid, W. Kirk Schleiffarth, Michael A. Cosca, Jonathan R. Delph, Gonca Gencalioglu-Kuscu, Janne Blichert-Toft, and **Kari M. Cooper**, 2017, Shallow melting of MORB-like mantle under hot continental lithosphere, Central Anatolia. *Geochemistry, Geophysics, Geosystems, v.* 18, doi: 10.1002/2016GC006772.
- National Academies of Sciences, Engineering, Medicine (2017) Volcanic Eruptions and Their Repose, Unrest, Precursors, and Timing. The National Academies Press, Washington, DC
- Mark E. Stelten*, **Kari M. Cooper**, Josh B. Wimpenny, Jorge A. Vazquez, and Qing-zhu Yin, 2017, The role of mantle-derived magmas in Yellowstone's isotopic evolution, *Geochemistry, Geophysics, Geosystems*, DOI 10.1002/2016GC006664.
- Barbara E. Wortham, Corinne I Wong, David McGee, Lucas C Silva, Isabel P Montañez, E. Troy Rasbury, **Kari M Cooper**, Warren D Sharp; Justin G Glessner, Roberto V Santos (2017) Assessing response of local moisture conditions in central Brazil to variability in regional monsoon intensity using speleothem ⁸⁷Sr/⁸⁶Sr values. Earth and Planetary Science Letters 463:310-322, doi:https://doi.org/10.1016/j.epsl.2017.01.034
- **Kari M. Cooper**, 2017, What Does a Magma Reservoir Look Like? The 'Crystal's-Eye' View, *Elements* v. 13, no. 1, p. 23-28.
- **Kari M. Cooper**, Kenneth W.W. Sims, John M. Eiler, and Neil Banerjee, 2016, Time scales of storage and recycling of crystal mush at Krafla Volcano, Iceland, *Contributions to Mineralogy and Petrology*, v. 171, no. 54, DOI 10.1007/s00410-016-1267-3.
- Allison Rubin*, **Kari M. Cooper**, Marissa Leever, Josh Wimpenny, Chad Deering, Tyrone Rooney, Darren Gravley, Qing-zhu Yin, 2016, "Changes in magma storage conditions following caldera collapse at Okataina Volcanic Center, New Zealand" *Contributions to Mineralogy and Petrology*, v. 171, no. 4, DOI 10.1007/s00410-015-1216-6.
- Wim Degruyter, Christian Huber, Olivier Bachmann, **Kari Cooper**, and Adam Kent, 2016, "Magma reservoir response to transient recharge of new magma: the case of Santorini volcano" *Geology*, doi:10.1130/G37333.1
- Mark E. Stelten*, **Kari M. Cooper**, Jorge A. Vazquez, Andrew T. Calvert, and Justin J.G. Glessner, 2015, "Mechanisms and timescales of generating eruptible rhyolitic magmas at Yellowstone caldera

- from zircon and sanidine geochronology and geochemistry." *Journal of Petrology* 2015; doi: 10.1093/petrology/egv047.
- Jessica L, Oster, Isabel P. Montañez, Corinne Wong Warren D. Sharp, **Kari M. Cooper**, Laura Santare, 2015, "Stalagmite records of hydroclimate in central California during Termination 1." *Quaternary Science Reviews*, v. 127, p. 199-214.
- **Kari M. Cooper**, 2015, "Time scales of crustal magma reservoir processes: Insights from U-series crystal ages", *in* Luca Caricchi and Jonathan Blundy, eds., "Chemical, Physical and Temporal Evolution of Magmatic Systems," Geological Society of London Special Publications, **422**, http://doi.org/10.1144/SP422.7, first published online May 2015.
- Heather M. Wright, Jorge A. Vazquez, Duane E. Champion, Andrew T. Calvert, Margaret T. Mangan, Mark Stelten, **Kari M. Cooper**, Charles Herzig, Alexander Schriener Jr., 2015, "Episodic Holocene eruption of the Salton Buttes rhyolites from paleomagnetic, U-Th, and Ar/Ar dating", *Geochemistry Geophysics Geosystems*, DOI 10.1002/2015GC5714, first published online 30 Apr 2015.
- **Kari M. Cooper** and Adam J.R. Kent, 2014, Rapid remobilization of magmatic crystals kept in cold storage, *Nature*, v. 506 no. 7849, p. 480-483, DOI 10.1038/nature12991
- Mark E. Stelten*, **Kari M. Cooper**, Jorge A. Vazquez, Mary R. Reid, Gry H. Barfod, Josh Wimpenny, and Qing-zhu Yin, 2013, Magma mixing and the generation of isotopically juvenile silicic magma at Yellowstone caldera inferred from coupling ²³⁸U-²³⁰Th ages with trace-elements and Hf and O isotopes in zircon and Pb isotopes in Sanidine, *Contributions to Mineralogy and Petrology*, v. 166, no. 2, p. 587-613, DOI 10.1007/s00410-013-0893-2.
- Y. Gao, F.Vils, T. Elliott, J. Hoefs, C. Laverne, **K.M. Cooper**, N. Banerjee, D.A.H. Teagle, J. F. Casey, and J. C. Alt, 2012, Down-Hole variation of lithium and oxygen isotopic compositions of oceanic crust at East Pacific Rise, ODP Site 1256D, *Geochemistry, Geophysics, Geosystems* v. 13, no. 10, doi: 10.1029/2012GC004207.
- Ruprecht, Philipp*, George W. Bergantz, **Kari M. Cooper**, and Wes Hildreth, 2012, The crustal magma storage system of Volcán Quizapu, Chile, and the effects of magma mixing on magma diversity, *Journal of Petrology*, v. 53 no. 4, p. 801-840.
- Ruprecht, Philipp* and **Kari M. Cooper**, 2012, Integrating the Uranium-series and elemental diffusion geochronometers in mixed magmas from Volcán Quizapu, Central Chile. *Journal of Petrology*, v. 53 no. 4, p. 841-871.
- Mark E. Stelten* and **Kari M. Cooper**, 2012, "Constraints on the nature of the subvolcanic reservoir at South Sister volcano, Oregon from U-series dating combined with sub-crystal trace-element analysis of plagioclase and zircon" *Earth and Planetary Science Letters*, v. 313-314, p. 1-11.
- Gary R. Eppich*, **Kari M. Cooper**, Adam J.R. Kent, and Alison M. Koleszar, 2012, Constraints on crystal storage timescales in mixed magmas: Uranium-series disequilibria in plagioclase from Holocene magmas at Mount Hood, Oregon. *Earth and Planetary Science Letters*, v. 317-318, p. 319-330.
- Erik W. Klemetti**, Chad D. Deering, **Kari M. Cooper** and Sarah M. Roeske, 2011, Magmatic perturbations in the Okataina Caldera Complex at thousand-year timescales recorded in single zircon crystals from the Mt. Tarawera region, New Zealand, *Earth and Planetary Science Letters*, v. 305, p. 185-194.
- R.D. Gold, E. Cowgill, J. Ramòn Arrowsmith, X. Chen, W. Sharp, K. Cooper & X.-F. Wang, 2011, Faulted terrace risers place new constraints on the late Quaternary slip rate for the central Altyn Tagh Fault, northwest Tibet, *Geological Society of America Bulletin*, v. 123, no. 5/6, p. 958-978, doi:10.1130/B30207.1.
- Axel K. Schmitt, Florian Wetzel, **Kari M. Cooper**, Haibo Zou, and Gerhard Worner, 2010, Magmatic longevity of Laacher See Volcano (Eifel, Germany) indicated by U-Th dating of intrusive carbonates, *Journal of Petrology*, v. 51, no. 5, p. 1053-1085.
- Adam J.R. Kent, Cristina Darr, Alison M. Koleszar, Morgan J. Salisbury, and **Kari M. Cooper**, 2010, Preferential eruption of andesitic magmas through recharge filtering, *Nature Geoscience*, v.3, p. 631-636, DOI 10.1038/NGE0924.
- **Kari M. Cooper,** John M. Eiler, Kenneth W.W. Sims, and Charles H. Langmuir, 2009, Distribution of recycled crust within the upper mantle: Insights from the oxygen isotope composition of MORB from

- the Australian-Antarctic Discordance, *Geochemistry, Geophysics, Geosystems*, v.10 no. 12, Q12004, DOI 10.1029/2009GC002728
- Jessica L. Oster, Isabel P. Montanez, Warren D. Sharp, and **Kari M. Cooper**, 2009, Late Pleistocene California droughts during deglaciation and Arctic warming, *Earth and Planetary Science Letters*, v. 288, p. 434-443.
- **Kari M. Cooper**, 2009, Comment on "On the recent bimodal magmatic processes and their rates in the Torfajökull –Veidivötn area, Iceland" by G.F. Zellmer, K.H. Rubin, K. Grönvold, and Z. Jurado-Chichay, *Earth and Planetary Science Letters*, v. 281, p. 110-114.
- Theresa M. Kayzar*, **Kari M. Cooper**, Mark K. Reagan, and Adam J.R. Kent, 2009, Gas transport model for the magmatic system at Mount Pinatubo, Philippines: insights from (²¹⁰Pb)/(²²⁶Ra), *Journal of Volcanology and Geothermal Research*, v. 181, p. 124-140.
- **Kari M. Cooper** and Carrie T. Donnelly*, 2008, ²³⁸U-²³⁰Th-²²⁶Ra Disequilibria in dacite and plagioclase from the 2004-2005 eruption of Mount St. Helens, *in* Sherrod, D.R., Scott, W.E., and Stauffer, P.H., A volcano rekindled: the first year of renewed eruption at Mount St. Helens, 2004–2006: U.S. Geological Survey Professional Paper 1750, p. 827-846.
- Mark K. Reagan, **Kari M. Cooper**, John S. Pallister, Carl R. Thornber, and Matthew Wortel, 2008, Effects of degassing on ²¹⁰Po-²¹⁰Pb-²²⁶Ra disequilibria in lavas erupted from Mount St Helens 2004-2005, *in* Sherrod, D.R., Scott, W.E., and Stauffer, P.H., A volcano rekindled: the first year of renewed eruption at Mount St. Helens, 2004–2006: U.S. Geological Survey Professional Paper 1750, p. 847-856.
- **Kari M. Cooper** and Mary R. Reid, 2008, Uranium-series crystal ages, *in* Minerals, Inclusions and Volcanic Processes, K.D. Putirka and F.J. Tepley III, eds., *Reviews in Mineralogy and Geochemistry*, v.69, p. 479-544.
- Adam J.R. Kent, Jon Blundy, Katharine V. Cashman, **Kari M. Cooper**, Carrie Donnelly*, John S. Pallister, Mark Reagan, Michael C. Rowe, Carl R. Thornber, 2007, Vapor transport prior to the October 2004 eruption of Mount St. Helens, Washington, *Geology* v. 35, no. 3, p. 231-234.
- A.B. Jeffcoate, T. Elliott, S.A. Kaseman, D. Ionov, **K. Cooper**, and R. Booker, 2007, Li isotope fractionation in peridotites and mafic melts, *Geochimica et Cosmochimica Acta*, v. 71, p. 202-218.
- **Kari M. Cooper**, 2007, Data Report: Trace-element analyses in whole-rock basement samples, Site 1256, ODP Leg 206, In Teagle, D.A.H., Wilson, D.A., Acton, G.A., and Vanko, D.A. (Eds.), *Proceedings of the Ocean Drilling Program*, *Scientific Results*, v. 206: College Station TX (Ocean Drilling Program), 1–11. doi:10.2973/odp.proc.sr.206.010.2007.
- Josef Dufek* and **Kari M. Cooper**, 2006, Reply to comment on "(²²⁶Ra)/(²³⁰Th) excess generated in the upper mantle and lower crust: Implications for magma transport and storage time scales," *Geology*, doi:10.1130/G23073.1
- Douglas S. Wilson, Damon A.H. Teagle, Jeffrey C. Alt, Neil R. Banerjee, Susumu Umino, Sumio Miyashita, Gary D. Acton, Ryo Anma, Samantha R. Barr, Akram Belghoul, Julie Carlut, David M. Christie, Rosalind M. Coggon, Kari M. Cooper, Carole Cordier, Laura Crispini, Sedelia R. Durand, Florence Einaudi, Laura Galli, Yongjun Gao, Jörg Geldmacher, Lisa A. Gilbert, Nicholas W. Hayman, Emilio Herrero-Bervera, Nobuo Hirano, Sara Holter, Stephanie Ingle, Shijun Jiang, Ulrich Kalberkamp, Marcie Kerneklian, Jürgen Koepke, Christine Laverne, Haroldo L. Lledo Vasquez, John Maclennan, Sally Morgan, Natsuki Neo, Holly J. Nichols, Sung-Hyun Park, Marc K. Reichow, Tetsuya Sakuyama, Takashi Sano, Rachel Sandwell, Birgit Scheibner, Chris E. Smith-Duque, Stephen A. Swift, Paola Tartarotti, Anahita A. Tikku, Masako Tominaga, Eugenio A. Veloso, Toru Yamasaki, Shusaku Yamazaki, Christa Ziegler, 2006, Drilling to Gabbro in Intact Oceanic Crust, Science, v. 312, p. 1016-1020.
- Josef Dufek*and **Kari M. Cooper**, 2005, (²²⁶Ra)/(²³⁰Th) excess generated in the upper mantle and lower crust: Implications for magma transport and storage time scales, *Geology*, v.33, no. 10, p. 833-836.
- **Kari M. Cooper**, John M. Eiler, Paul D. Asimow, and Charles H. Langmuir, 2004, Oxygen-isotope evidence for the origin of enriched material beneath the mid-Atlantic ridge, *Earth and Planetary Science Letters*, v. 220, p. 297-316.
- D.A.H. Teagle, D.S. Wilson, G.D. Acton, and the ODP Leg 206 Shipboard Party, 2004, The "Road to the MoHole" four decades on: Deep drilling at Site 1256, *Eos*, v. 85, no. 49, p. 521, 530-531.

- **Kari M. Cooper** and Mary R. Reid, 2003, Re-examination of crystal ages in recent Mount St. Helens lavas: Implications for magma reservoir processes, *Earth and Planetary Science Letters*, v. 213, p. 149-167.
- **Kari M. Cooper**, Steven J. Goldstein, Kenneth W. Sims, and Michael T. Murrell, 2003, Uranium-series chronology of Gorda Ridge volcanism: New evidence from the 1996 eruption, *Earth and Planetary Science Letters*, v. 206, p. 459-475.
- **Kari M. Cooper**, Mary R. Reid., N.W. Dunbar, and W.C. McIntosh, 2002, Origin of mafic magmas beneath Northwestern Tibet: Constraints from ²³⁸U-²³⁰Th disequilibria, *Geochemistry, Geophysics, Geosystems*, v. 3, no. 11, DOI 10.1029/2002GC000332.
- **Kari M. Cooper**, Mary R. Reid, Michael T. Murrell, and David A. Clague, 2001, Crystal and magma residence at Kilauea Volcano, Hawai'i: ²³⁰Th-²²⁶Ra dating of the 1955 east rift eruption, *Earth and Planetary Science Letters* v. 184, no. 3-4, p. 703-718.
- Dusel-Bacon, Cynthia, and **Kari M. Cooper**, 1999, Trace-element geochemistry of metabasaltic rocks from the Yukon-Tanana Upland and implications for the origin of tectonic assemblages in east-central Alaska, *Canadian Journal of Earth Sciences* v. 36, 1-25.

Other Publications

- Wilson D. S., Teagle D. A. H., Acton G. D., Alt J. C., Banerjee N. R., Barr S. R., Coggon R., Cooper K. M., Crispini L., Einaudi F., Jiang S., Kalberkamp U., Kerneklian M., Laverne C., Nichols H. J., Sandwell R., Tartarotti P., Umino S., Ziegler C., and Peters L. L. (2003) *Proceedings of the Ocean Drilling Program, initial reports; an in situ section of upper oceanic crust formed by superfast seafloor spreading; covering Leg 206 of the cruises of the drilling vessel JOIDES Resolution; Balboa, Panama, to Balboa, Panama, Site 1256, 6 November 2002-4 January 2003*. Texas A&M University, Ocean Drilling Program. 117 p. with CD-ROM.
- **Cooper, K.M.** and Kauahikaua, J.P., 1992, Morphology of extinct lava tubes and the implications for tube evolution, Chain of Craters Road, Hawaii Volcanoes National Park, Hawaii. *U.S. Geological Survey Open-File Report 92-352*, 14 p.