

CURRICULUM VITAE

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PROFESSIONAL POSITIONS

2010-present *Professor*, Chemistry and Biochemistry, South Dakota State University
2005-2010 *Associate Professor*, Chemistry and Biochemistry, South Dakota State University
2000-2005 *Assistant Professor*, Chemistry and Biochemistry, South Dakota State University
1999-2000 *Lecturer*, Department of Chemistry, Ohio State University
1997-2000 *Senior Research Associate*, Byrd Polar Research Center, Ohio State University
1988-1997 *Research Associate*, Byrd Polar Research Center, Ohio State University

EDUCATION

Ph.D., 1987 Analytical/Environmental Chemistry, University of Maryland at College Park, Maryland
M.S., 1984 Analytical Chemistry, University of Maryland at College Park, Maryland
B.S., 1982 Chemistry, University of Science and Technology of China, Hefei, China

HONORS AND AWARDS

Recipient, Dr. Sherwood and Elizabeth Berg Faculty Award, South Dakota State University, 2005
Lecturer, Sewrey Colloquium, South Dakota State University, 2005
Participant, China-U.S. Polar Regions Partnership Research Roundtable, 2007 George Bush China-U.S. Relations Conference, October, 2007, Washington, D.C.
Distinguished Researcher of College of Arts and Sciences, South Dakota State University, 2009

TEACHING AND MENTORING EXPERIENCE

Graduate Chromatography and Separations, Advanced Analytical Chemistry, Advanced Environmental Chemistry
Undergraduate Elementary/Introductory Chemistry, General Chemistry, Analytical Chemistry, Environmental Chemistry
Mentoring 1 postdoctoral scientist, 4 Ph.D., 2 M.S., 3 current students, >20 undergraduate students

RESEARCH EXPERIENCE

Interest areas Ice core paleoclimatology, global environmental change, environmental chemistry, atmospheric chemistry, analytical method development

Funding Principal Investigator on NSF grants totaling \$3,444,000 since 1994

Funding (active awards in boldface)

Period	Amount	Role	Title
2015-2017	\$408,000	PI	Collaborative Research: SPICE core chronology and climate records using chemical and microparticle measurements
2012-2016	\$267,000	PI	Assessment of the natural perchlorate source using perchlorate history from Greenland ice cores
2011-2015	\$121,000	PI	Collaborative research: Replicate coring at WAIS Divide to obtain additional samples at events of high scientific interest

2009-2013	\$699,000	PI	Major ion chemical analysis of brittle ice in the WAIS Divide ice core
2009-2011	\$552,000	Co-PI	MRI: Acquisition of an ultra high performance LC tandem mass-spectrometer for a multi-user core MS facility
2006-2009	\$336,000	PI	Major ion chemistry of WAIS Divide ice core
2006-2008	\$180,000	PI	Collaborative Research: An isotope MIF study of volcanic events in Greenland ice cores
2003-2007	\$120,000	PI	REU Site: Chemistry research at South Dakota State University for undergraduate students
2004-2006	\$141,000	PI	Collaborative Research: Investigating atmospheric chemistry and dynamics through oxygen and sulfur isotopes in volcanic sulfate from South Pole ice cores
2002-2005	\$151,000	PI	An ion-chromatography based continuous flow analyzer for soluble chemical species in ice cores
2000-2003	\$123,000	PI	A sulfate based volcanic record from South Pole ice cores
2000-2003	\$36,000	PI	US-China Collaborative Research: The Pinatubo signal in snow samples from the Zhongshan-Dome A area, Antarctica
1996-1999	\$154,000	Co-PI	The quantitative assessment of the Mt. Pinatubo signal in Antarctica snow
1994-1998	\$156,000	Co-PI	Reconstructing Earth's volcanic history from high resolution polar ice cores

Service

2000-2003	Member	Ice Core Working Group (advisory committee to NSF Office of Polar Programs)
2007-present	Panelist	NSF research proposals
1998-present	Reviewer	NSF and NASA research proposals
1997-present	Reviewer	<i>Nature, Scientific Reports, Annals of Glaciology, Antarctic Science, Journal of Geophysical Research, Geophysical Research Letters, Environmental Science and Technology, Journal of Glaciology, Atmospheric Environment, Analytica Chimica Acta, Proceedings of National Academy of Science of USA, Tellus, The Cryosphere, Climate of the Past</i>
2012	Convener	Goldschmidt Conference

Field Work

2012-2013	Member	Replicate ice coring at WAIS Divide, Antarctica
2007	Leader	Team to drill ice cores at Summit, Greenland
2006-2007	Leader	Team to sample snow at WAIS Divide, Antarctica
2004-2005	Leader	Team to drill ice cores at South Pole, Antarctica
1997-1998	Leader	Team to drill ice cores at Siple Dome and Byrd Station, Antarctica
1996-1997	Member	Team to sample snow at South Pole, Antarctica

PROFESSIONAL AFFILIATION

American Chemical Society (since 1984), American Geophysical Union, American Association for the Advancement of Science, Geochemical Society

INVITED LECTURES AND PRESENTATIONS

Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, 2015
Polar Research Institute of China, Shanghai, China, 2011, 2013, 2015
University of Science and Technology of China, Hefei, China, 2011, 2013, 2015
Institute of Cold and Arid Region Environmental Research, Chinese Academy of Sciences, Lanzhou, China, 2011, 2013, 2015
American Geophysical Union Fall Meeting, 2013
American Chemical Society Sioux Valley Local Section, Sioux Falls, SD, 2013
University of North Dakota, 2013
Zhejiang University, Hangzhou, ZheJiang, China, 2013
Morningside College, Sioux City, Iowa, March, 2009
Winona State University, Winona, Minnesota, January, 2008
Augsburg College, Minneapolis, Minnesota, December, 2007
Loras College, Dubuque, Iowa, November, 2007
University of Montana, Missoula, Montana, March, 2007
University of Minnesota, Morris, Minnesota, March, 2006
Mount Marty College, Yankton, South Dakota, February, 2005
Southwest State University, Marshall, Minnesota, November, 2004
University of North Dakota, Fargo, North Dakota, February, 2004
Southwest State University, Marshall, Minnesota, April, 2003
University of Nebraska, Lincoln, Nebraska, March, 2003
University of Nebraska, Kearney, Nebraska, October, 2003
College of St. Catherine, St. Paul, Minnesota, October, 2003
St. Olaf College, Northfield, Minnesota, December, 2003
Nanjing University, Nanjing, China, July 2003
University of Science and Technology of China, Hefei, China, July, 2003
Polar Research Center of China, Shanghai, China, June, 2003
US Geological Survey, Denver, Colorado, March, 2002
Mount Marty College, Yankton, South Dakota, March, 2002
University of South Dakota, Vermillion, South Dakota, February, 2002
St. Mary's University, Winona, Minnesota, November, 2000

PUBLICATION RECORD

Peer-Reviewed Publications (* denotes undergraduate student)

- Chen, Q., Geng, L., Schmidt, J. A., Xie, Z., Kang, H., Dachs, J., **Cole-Dai, J.**, Schauer, A. J., Camp, M. G., and Alexander, B. (2016), Isotopic constraints on the role of hypohalous acids in sulfate aerosol formation in the remote marine boundary layer, *Atmospheric Chemistry & Physics Discussion*, doi:10.5194/acp-2016-395, in review.
- Sigl, M., T. J. Fudge, M. Winstrup, D. Ferris, **J. Cole-Dai**, J. R. McConnell, K. C. Taylor, K. C. Welten, T. E. Woodruff, F. Adolphi, E. J. Brook, C. Buizert, M. W. Caffee, N. Dunbar, L. Geng, N. Iverson, B. Koffman, O. J. Maselli, K. McGwire, R. Muscheler, K. Nishiizumi, D. R. Pasteris, R. H. Rhodes, and T. A. Sowers (2016), The WAIS Divide deep ice core WD2014 chronology - Part 2: Annual-layer counting (0–31 ka BP), *Climate of the Past*, 12, 769-786, doi:10.5194/cp-12-769-201.
- Peterson, Kari M., Derek L. Brandis, Erica Manandhar*, and **Jihong Cole-Dai** (2015), Assessment of anthropogenic contribution to perchlorate in the environment using an ice core record, in

- Emerging Micro-Pollutants in the Environment*, eds. Sudarshan Kurwadkar, Xiaoqi Zhang, David Ramierz, and Forrest L. Mitchell, American Chemical Society Symposium Series, Vol. 1198, 175-185, doi: 10.1021/bk-2015-1198.ch010.
- Peterson, Kari M., **Jihong Cole-Dai**, Derek L. Brandis, Thomas Cox, and Scott Splett* (2015), Rapid measurement of perchlorate in polar ice cores down to sub-ng L⁻¹ levels without pre-concentration, *Analytical and Bioanalytical Chemistry*, in press, doi:10.1007/s00216-015-8965-y.
- WAIS Divide Project Members, C. Buizert, and 77 others including **J. Cole-Dai** (2015), Precise inter-polar phasing of abrupt climate change during the last ice age, *Nature*, 520, 661-665, doi:10.1038/nature14401.
- Fitzpatrick, Joan J., Donald E. Voigt, John M. Fegyveresi, Nathan T. Stevens, Matthew K. Spencer, **Jihong Cole-Dai**, Richard B. Alley, Gabriella E. Jardine, Eric D. Cravens, Lawrence A. Wilen, T.J. Fudge, Joseph R. McConnell (2014), Physical properties of the WAIS Divide ice core, *Journal of Glaciology*, 60, 1181-1198, doi: 10.3189/2014JoG14J100
- Geng, Lei, Becky Alexander, **Jihong Cole-Dai**, Eric J. Steig, Joël Savarino, Eric D. Sofen, and Andrew J. Schauer (2014), Nitrogen isotopes in ice core nitrate linked to anthropogenic atmospheric acidity change, *Proceedings of the National Academy of Sciences*, 111, 5808-5812, doi:10.1073/pnas.1319441111.
- Geng, Lei, **Jihong Cole-Dai**, Becky Alexander, J. Erbland, Joël Savarino, Andrew J. Schauer, Eric J. Steig, Pu Lin, Qiang Fu, and Maria G. Zatzko (2014), On the origin of the occasional springtime nitrate concentration maximum in Greenland snow, *Atmospheric Chemistry and Physics Discussion*, 14, 9401-9437, doi:10.5194/acpd-14-9401-2014.
- Cole-Dai, Jihong**, Joël Savarino, Mark H. Thiemens, and Alyson Lanciki (2014), Comments on “Climatic impact of the long-lasting Laki eruption: Inapplicability of mass-independent sulfur isotope composition measurements” by Schmidt et al. [2012], *Journal of Geophysical Research-Atmospheres*, 119, 6629-6635, doi: 10.1002/2013JD019869.
- WAIS Divide Members, T. J. Fudge, E. J. Steig, B. R. Markle, S. W. Schoenemann, Q. Ding, K. C. Taylor, J. R. McConnell, E. J. Brook, T. Sowers, J. W. C. White, R. B. Alley, H. Cheng, G. D. Clow, **J. Cole-Dai**, H. Conway, K. M. Cuffey, J. S. Edwards, R. L. Edwards, R. Edwards, J. M. Fegyveresi, D. Ferris, J. J. Fitzpatrick, J. Johnson, G. Hargreaves, J. E. Lee, O. J. Maselli, W. Mason, K. C. McGwire, L. E. Mitchell, N. Mortensen, P. Neff, A. J. Orsi, T. J. Popp, A. J. Schauer, J. P. Severinghaus, M. Sigl, M. K. Spencer, B. H. Vaughn, D. E. Voigt, E. D. Waddington, X. Wang, and G. J. Wong (2013), Onset of deglacial warming in West Antarctica driven by local orbital forcing, *Nature*, 500, 440-444, doi: 10.1038/nature12376.
- Cole-Dai, Jihong**, David G. Ferris, Alyson L. Lanciki, Joël Savarino, Mark H. Thiemens, and Joseph R. McConnell (2013) Two likely stratospheric volcanic eruptions in the 1450s C.E. found in a bipolar, subannually dated 800 year ice core record, *Journal of Geophysical Research-Atmospheres*, 118, 1-8, doi: 10.1002/jgrd.50587.
- Lanciki, Alyson L., **Jihong Cole-Dai**, Mark H. Thiemens, and Joël Savarino (2012), Sulfur isotope evidence of little or no stratospheric impact by the 1783 Laki volcanic eruption, *Geophysical Research Letters*, 39, L01806, doi:10.1029/2011GL050075.
- Jiang, Su, **Jihong Cole-Dai**, Yuansheng Li, Dave G. Ferris, Hongmei Ma, Chunlei An, Guitao Shi, and Bo Sun (2011), A detailed 2840-year record of explosive volcanism in a shallow ice core from Dome A, East Antarctica, *Journal of Glaciology*, 58, 65-75, doi: 10.3189/2012JoG11J138.
- Ferris, David G., **Jihong Cole-Dai**, Angelica R. Reyes, and Drew M. Budner (2011), South Pole ice core record of explosive volcanic eruptions in the First and Second Millennia A.D. and evidence of a large eruption in the tropics around 535 A.D., *Journal of Geophysical Research-Atmospheres*, 116, D17308, doi:10.1029/2011JD015916.
- Cole-Dai, Jihong** (2010), Volcanoes and climate, *Wiley Interdisciplinary Reviews: Climate Change*, 1, 824-839, doi:10.1002/wcc.76.

- Cole-Dai, Jihong**, David G. Ferris, Alyson L. Lanciki, Joël Savarino, Mélanie Baroni, and Mark H. Thiemens (2009), Cold decade (AD 1810-1819) caused by Tambora (1815) and another (1809) stratospheric volcanic eruption, *Geophysical Research Letters*, 36, L22703, doi:10.1029/2009GL040882.
- Li, Yuansheng, **Jihong Cole-Dai**, and Liya Zhou (2009), Glaciochemical evidence in an East Antarctica ice core of a recent (A.D. 1450-1850) neoglacial episode, *Journal of Geophysical Research-Atmospheres*, 114, D08117, doi:10.1029/2008JD011091.
- Baroni, Mélanie, Joël Savarino, **Jihong Cole-Dai**, Vinai K. Rai, Mark H. Thiemens (2008), Anomalous sulfur isotope compositions of volcanic sulfate over the last millennium in Antarctic ice cores, *Journal of Geophysical Research-Atmospheres*, 113, D20112, doi:10.1029/2008JD010185.
- Crowley, T.J., G. Zielinski, B. Vinther, R. Udisti, K. Kreutz, **J. Cole-Dai**, and E. Castellano, Volcanism and the Little Ice Age (2008), *PAGES News*, 16(2), 22-23.
- Cole-Dai, J.**, D.M. Budner, D.G. Ferris (2006), High speed, high resolution and continuous chemical analysis of ice cores using a melter and ion chromatography, *Environmental Science & Technology*, 40, 6764-6769, doi:10.1021/es061188a.
- Zhou, Liya, Yuansheng Li, **Jihong Cole-Dai**, Dejun Tan, Bo Sun, Jiawen Ren, Lijia Wei, and Henian Wang (2006), A 780 year record of explosive volcanic eruptions from the DT263 ice core from East Antarctica, (Chinese) *Science Bulletin*, 51(No. 18), 2189-2197, doi:10.1007/s11434-006-2164-3.
- Xie, Zhouqing, Liguang Sun and **Jihong Cole-Dai** (2005), Non-sea-salt sulfate in the marine boundary layer and its possible impact on chloride depletion, *Acta Oceanol. Sin.*, 24, 162-171, 2005.
- Pohjola, V.A., **J. Cole-Dai**, G. Rosqvist, A.P. Stroeven, and L.G. Thompson (2005), Potential to recover climatic information from Scandinavian ice cores: An example from the small ice cap Riukojietna, *Geografiska Annaler*, 87A, 259-270.
- Savarino, J., S. Bekki, **J. Cole-Dai**, and M.H. Thiemens, Evidence from sulfate mass independent oxygen isotopic compositions of dramatic changes in atmospheric oxidation following massive volcanic eruptions (2003), *Journal of Geophysical Research-Atmospheres*, 108(D21), 4671, doi:10.1029/2003JD003737.
- Savarino, J., A. Romero, **J. Cole-Dai**, S. Bekki, and M.H. Thiemens (2003), UV induced mass-independent sulfur isotope fractionation in stratospheric volcanic sulfate, *Geophysical Research Letters*, 30(21), 2131, doi:10.1029/2003GL018134.
- Budner, D., and **J. Cole-Dai** (2003), The number and magnitude of explosive volcanic eruptions between 904 and 1865 A.D.: Quantitative evidence from a new South Pole ice core, in *Volcanism and the Earth's Atmosphere*, Geophysical Monograph 139, edited by A. Robock and C. Oppenheimer, doi:10.1029/139GM10, pp 165-176, American Geophysical Union.
- Cole-Dai, J.**, E. Mosley-Thompson, S.P. Wight, and L.G. Thompson (2000), A 4100-year record of explosive volcanism from an East Antarctica ice core, *Journal of Geophysical Research (Atmospheres)*, 105(D14), 24,431-24,441.
- Cole-Dai, J.** and E. Mosley-Thompson (1999), The Pinatubo eruption in South Pole snow and its potential value to ice core paleovolcanic records, *Annals of Glaciology*, 29, 99-1005.
- Cole-Dai, J.**, E. Mosley-Thompson, and D. Qin (1999), Evidence of the 1991 Pinatubo volcanic eruption in South Pole snow, (*Chinese*) *Science Bulletin*, 44(No.8), 756-761.
- Thompson, L.G., M.E. Davis, E. Mosley-Thompson, T.A. Sowers, K.A. Henderson, V.S. Zagorodnov, P.-N. Lin, V.N. Mikhalenko, R.K. Campen, J.F. Bolzan, **J. Cole-Dai**, and B. Francou (1998), A 25,000-year tropical climate history from Bolivian ice cores, *Science*, 282, 1858-1864.
- Cole-Dai, J.**, E. Mosley-Thompson, and L.G. Thompson (1997), Annually resolved Southern Hemisphere volcanic history from two Antarctic ice cores, *Journal of Geophysical Research (Atmospheres)*, 102(D14), 16,761-16,771.
- Cole-Dai, J.**, E. Mosley-Thompson, and L.G. Thompson (1997), Quantifying the Pinatubo signal in south polar snow, *Geophysical Research Letters*, 24(21), 2679-2682.

- Thompson, L.G., T. Yao, M.E. Davis, K.A. Henderson, E. Mosley-Thompson, P.-N. Lin, J. Beer, H.-A. Synal, **J. Cole-Dai**, and J.F. Bolzan (1997), Tropical climate instability: the last glacial cycle from a Qinghai-Tibetan ice core, *Science*, 276, 1821-1825.
- Cole-Dai, J.**, L.G. Thompson, and E. Mosley-Thompson (1995), A 485-year record of atmospheric chloride, nitrate and sulfate: results of chemical analysis of ice cores from Dyer Plateau, Antarctic Peninsula, *Annals of Glaciology*, 21, 182-188.
- Thompson, L.G., E. Mosley-Thompson, R. Mulvaney, M.E. Davis, P.-N. Lin, K.A. Henderson, **J. Cole-Dai**, J.F. Bolzan, and K.-b. Liu (1995), Late Glacial Stage and Holocene tropical ice core records from Huascarán, Peru, *Science*, 269, 46-50.
- Thompson, L.G., E. Mosley-Thompson, M.E. Davis, P.-N. Lin, **J. Dai**, J.F. Bolzan, and T. Yao (1995), A 1000 year climate record from the Guliya Ice Cap, China: its relationship to global climate variability, *Annals of Glaciology*, 21, 175-181.
- Thompson, L.G., D.A. Peel, E. Mosley-Thompson, R. Mulvaney, **J. Dai**, P.-N. Lin, M.E. Davis, and C.F. Raymond (1994), Climate since AD 1510 on Dyer Plateau, Antarctica Peninsula: evidence for recent climate change, *Annals of Glaciology*, 20, 420-426.
- Dai, J.**, E. Mosley-Thompson, and L.G. Thompson (1993), Ice cores as a unique means of retrieving records of chemical compounds in the atmosphere: evidence of an undocumented tropical volcanic eruption in the early 19th century, in *Sampling and Analysis of Airborne Pollutants*, E.D. Winegar and L.H. Keith, eds., CRC Press, Boca Raton, FL.
- Mosley-Thompson, E., L.G. Thompson, **J. Dai**, M.E. Davis, and P.-N. Lin (1993), Climate of the last 500 years: high resolution ice core records, *Quaternary Research Reviews*, 12, 419-430.
- Thompson, L.G., E. Mosley-Thompson, M.E. Davis, P.-N. Lin, T. Yao, M. Dyurgerov, and **J. Dai** (1993), Recent warming: ice core evidence from tropical ice cores with emphasis on Central Asia, *Global and Planetary Change*, 7, 145-156.
- Dai, J.**, E. Mosley-Thompson, and L.G. Thompson (1991), Ice core evidence for an explosive tropical volcanic eruption six years preceding Tambora, *Journal of Geophysical Research (Atmospheres)*, 96(D9), 17,361-17,366.
- Mosley-Thompson, E., **J. Dai**, L.G. Thompson, P.M. Grootes, J.K. Arbogast, and J.F. Paskievitch (1991), Glaciological studies at Siple Station (Antarctica): potential ice core paleoclimate record, *Journal of Glaciology*, 37(125), 11-22.
- Thompson, L.G., E. Mosley-Thompson, M.E. Davis, J.F. Bolzan, **J. Dai**, T. Yao, N. Gundestrup, X. Wu, L.H. Klein, and Z. Xie (1990), Holocene/Late Pleistocene climatic ice core records from Qinghai-Tibetan Plateau, *Science*, 246, 474-477.
- Thompson, L.G., E. Mosley-Thompson, M.E. Davis, J.F. Bolzan, **J. Dai**, T. Yao, N. Gundestrup, X. Wu, L.H. Klein, and Z. Xie (1990), Glacial stage ice core records from the subtropical Dunde ice cap, China, *Annals of Glaciology*, 14, 288-297.
- Dai, J.** and G.R. Helz (1988), Liquid chromatographic determination of NTA, EDTA and related aminocarboxylic acids using an amperometric detector, *Analytical Chemistry*, 60, 301-305.
- Helz, G.R., **J. Dai**, P.J. Kijak, N.J. Fendinger, and T.C. Radway (1988), Processes controlling the composition of acid sulfate solutions evolved from coal, *Applied Geochemistry*, 2, 427-436.

Undergraduate Research Papers

- Crawford, Thomas Z., Alexandria Kub, Han Vid Cho (faculty advisor: Jihong Cole-Dai), 2015 Investigation of natural perchlorate levels in Antarctic snow in relation to the ozone hole, *South Dakota State University Journal of Undergraduate Research*, in press.
- Huff, Gary (faculty advisor: Jihong Cole-Dai), 2011 Engineering our climate: a critical review of the geoengineering response to climate change, *South Dakota State University Journal of Undergraduate Research*, 10, 39-48.

Klein, Sharon (faculty advisor: Jihong Cole-Dai), Measurement of ammonium by ion chromatography in high sodium concentration, *South Dakota State University Journal of Undergraduate Research*, 4, 79-84, 2006.

Hansen, Jon (faculty advisor: Jihong Cole-Dai), Determination of trifluoroacetic acid by ion chromatography for snow and ice analysis, *South Dakota State University Journal of Undergraduate Research*, 3, 31-37, 2005.

Abstracted Presentations

Peterson, Kari, Jihong Cole-Dai, Thomas Cox, and Scott Splett*, Seasonal variations of perchlorate concentration in Antarctic and Greenland snow, *XII International Symposium on Antarctic Earth Sciences*, Goa, India, July 2015.

Cox, Thomas, Jihong Cole-Dai, Kari Peterson, Scott Splett*, and Su Jiang, Impact of the stratospheric ozone hole on atmospheric perchlorate production, *XII International Symposium on Antarctic Earth Sciences*, Goa, India, July 2015.

Peterson, Kari, Jihong Cole-Dai, Derek L. Brandis, Thomas Cox, and Scott Splett*, Determination of perchlorate in polar ice cores down to sub-ng L⁻¹ level using ion chromatography-tandem mass spectrometry, *249th National Meeting, American Chemical Society*, Denver, CO, March 2015.

Splett*, Scott, Jihong Cole-Dai, Thomas Cox, and Kari Peterson, Trace analysis of perchlorate in Midwest regional water sources by ion chromatography-electrospray ionization tandem mass spectrometry, *American Chemical Society 2014 Midwest Regional Meeting*, Columbus, MO, November 2014.

Geng, Lei, and Jihong Cole-Dai, Ice core nitrogen isotope trend in 20th century linked to anthropogenic atmospheric acidity change, *2014 China Polar Science Meeting*, Qingdao, China, October, 2014.

Cole-Dai, Jihong, Joël Savarino, and Mark H. Thiemens, Using sulfur isotopes to find climate-impacting volcanic eruptions in ice cores, *2014 China Polar Science Meeting*, Qingdao, China, October, 2014.

Su, Jiang, Yuansheng Li, Guitao Shi, Jihong Cole-Dai, Thomas Cox, and Scott Splett, Perchlorate in Antarctic snow: Temporal and spatial variability, *2014 China Polar Science Meeting*, Qingdao, China, October, 2014.

Peterson, Kari, Jihong Cole-Dai, High resolution chemical characterization of West Antarctica's Main Event, *Open Science Meeting, Scientific Committee for Antarctica Research*, Auckland, New Zealand, August 2014.

Cox, Thomas, Scott Splett, and Jihong Cole-Dai, Investigation of the depositional characteristics and sources of perchlorate in Antarctic snow, *Open Science Meeting, Scientific Committee for Antarctica Research*, Auckland, New Zealand, August 2014.

Peterson, Kari, Jihong Cole-Dai, Derek L. Brandis, and Erica Manandhar, Assessment of anthropogenic contribution to perchlorate in the environment using ice core perchlorate record, *237th National Meeting, American Chemical Society*, Dallas, Texas, March 2014.

Cole-Dai, Jihong, Joël Savarino, and Mark H. Thiemens, Sulfur isotope composition of volcanic sulfate in polar ice cores (invited), *American Geophysical Union Fall Meeting*, San Francisco, California, December, 2013.

Cole-Dai, Jihong, David G. Ferris, Joseph R. McConnell, Michael Sigl, and Chaochao Gao, Improved dating of a mid-fifteenth century volcanic marker in ice cores, *American Geophysical Union Fall Meeting*, San Francisco, California, December, 2013.

Sigl, Michael, Joseph R. McConnell, Olivia Maselli, Dan Pasteris, Elisabeth Isaksson, Helgard Anschuetz, Roberto Udisit, Mirko Severi, Jihong Cole-Dai, Tyler J. Fudge, Eric Steig, Sarah Das, Karl Kreutz, Volcanic Synchronization: Application and potential for the WAIS Divide ice core, *American Geophysical Union Fall Meeting*, San Francisco, CA, December, 2012.

- Ferris, David G., Jihong Cole-Dai, and Drew M. Budner, Fast, continuous-flow measurement of major ions with ion chromatography and a melter, *International Partnership in Ice Core Science (IPICS) First Open Science Meeting*, Presqu'île de Giens, Côte d'Azur, France, October, 2012.
- Cole-Dai, Jihong, Richard Alley, Ed Brook, David Ferris, TJ Fudge, Karl Kreutz, Joseph McConnell, Anais Orsi, Jeff Severinghaus, Todd Sowers, Eric Steig, Kendrick Taylor, Bruce Vaughn, Edwin Waddington, Kees Welten, James White, Perspectives on climate variability and forcings in the last 2,000 years from the high-resolution WAIS Divide record, *International Partnership in Ice Core Science (IPICS) First Open Science Conference*, Presqu'île de Giens, Côte d'Azur, France, October, 2012.
- Winstrup, Mai, Anders M. Svensson, Sune Olander Rasmussen, Eric J. Steig, Ole Winther, Jihong Cole-Dai, Annual and sub-annual layer detection in high-resolution impurity records from NGRIP and WAIS using a speech-recognition algorithm, *International Partnership in Ice Core Science (IPICS) First Open Science Conference*, Presqu'île de Giens, Côte d'Azur, France, October, 2012.
- Fudge, T.J., Ryan Bay, Ed Brook, Christo Buizert, Gary Clow, Jihong Cole-Dai, Howard Conway, Kurt Cuffey, Neila Dunbar, Dave Ferris, Joe McConnell, Ken McGwire, Rachael Rhodes, Jeff Severinghaus, Michael Sigl, Todd Sowers, Eric Steig, Kendrick Taylor, Bruce Vaughn, Ed Waddington, and Jim White, Annual resolution and small delta-age: a high precision timescale from WAIS Divide, *International Partnership in Ice Core Science (IPICS) First Open Science Conference*, Presqu'île de Giens, Côte d'Azur, France, October, 2012.
- Su Jiang, Jihong Cole-Dai, Yuansheng Li, Dave G. Ferris, and Bo Sun, Volcanic history between 840 BC and 1998 AD as recorded in the sulfate stratigraphy of a Dome A ice core from East Antarctica, *International Partnership in Ice Core Science (IPICS) First Open Science Conference*, Presqu'île de Giens, Côte d'Azur, France, October, 2012.
- Ferris, David G., Jihong Cole-Dai, Joe R. McConnell, Michael Sigl, Lei Geng, A six thousand year volcanic record from the West Antarctic Ice Sheet Divide Ice Core, *AGU Chapman Conference on Volcanism and the Atmosphere*, Selfoss, Iceland, June 2012.
- Lanciki, Alyson L., Jihong Cole-Dai, Mark H. Thiemens, and Joël Savarino, Little or no stratospheric impact by the 1783 Laki Eruption, *AGU Chapman Conference on Volcanism and the Atmosphere*, Selfoss, Iceland, June 2012.
- Cole-Dai, Jihong, Joël Savarino, Alyson L. Lanciki, and Mark H. Thiemens, Isotopic composition of volcanic sulfate aerosols, *22nd Goldschmidt Conference*, Montreal, Canada, June, 2012.
- Geng, Lei, Jihong Cole-Dai, and B. Alexander, The spring nitrate peak in snow and ice cores at Summit, Greenland, *American Geophysical Union Fall Meeting*, San Francisco, California, December, 2010.
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