Dr. Alan D. Chapman

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Personal Information

Born: 30 March 1983; in Minneapolis, MN, USA
Nationality: United States Citizen
Married: 8/11/07 to Kelly A. Chapman
Two children: Gabriel (6) and Jacob (3)

Appointments

- Assistant Professor of Geology: Geology Department, Macalester College, St. Paul, MN, USA (July, 2015 –).
- Assistant Professor of Geology: Department of Geological Sciences and Engineering, Missouri University of Science and Technology, Rolla, MO, USA (August, 2013 – August, 2015).
- NSF Postdoctoral Fellow: Department of Geological and Environmental Sciences, Stanford University, Stanford, CA, USA (July, 2013 – July, 2014). Supervisor: Marty Grove.
- Postdoctoral Researcher: Department of Geosciences, University of Arizona, Tucson, AZ, USA (September, 2011 – April, 2013). Supervisor: Mihai N. Ducea.

Education

B.S. Geology, University of Minnesota – Twin Cities, Minneapolis, MN, USA (2005)
B.S. Geophysics, University of Minnesota – Twin Cities, Minneapolis, MN, USA (2005)
Ph.D. Geology, California Institute of Technology, Pasadena, CA, USA (2011)
Dissertation: "Late Cretaceous gravitational collapse of the southern Sierra Nevada batholith and adjacent areas above underplated schists, southern California" Advisor: Jason Saleeby.

Professional and Learned Societies

- Geological Society of America (member since 2005)
- American Geophysical Union (member since 2005)

Teaching Experience

Instructor

University of Arizona

- Fall 2011, Geos 251: Physical Geology (co-taught w/ Mihai Ducea).
- Summer 2012, Geos 414: Geology Field Camp (co-taught with Mihai Ducea and Jay Quade)

Missouri University of Science and Technology

- Summer 2013, Geo 374: Advanced Field Geology (co-taught with John Hogan and Mike Wizevich)
- Fall 2013, Geo 425: Advanced Physical Geology (co-taught with John Hogan)
- Spring 2014, Geo 320: Advanced Structural Geology
- Summer 2014, Geo 373: Introduction to Field Geology (co-taught with John Hogan and Mike Wizevich)
- Fall 2014, Geo 1110: Introduction to Physical Geology; Geo 5111: Advanced Physical Geology (co-taught with John Hogan)
- Spring 2015, Geo 6311: Advanced Structural Geology
- Summer 2015, Geo 374: Advanced Field Geology (co-taught with John Hogan and Mike Wizevich)

Macalester College

- Fall 2015, Geol/Envi 160: Dynamic Earth and Global Change; Geol 304: Tectonics
- Spring 2016, Geol 255: Structural Geology

- Fall 2016, Geol/Envi 160: Dynamic Earth and Global Change; Geol 304: Tectonics

Teaching assistant
University of Minnesota
Spring 2001, 2002, 2003, 2004, AST 1001: Introduction to Astronomy

California Institute of Technology
- Spring 2007, 2008, 2009, 2010, 2011 Ge 121b: Advanced Field Geology. Instructor: Jason Saleeby
- Fall 2007, Ge 121a: Advanced Field Geology. Instructor: Joann Stock
- Summer 2010, Ge 120: Advanced Summer Field Geology. Instructor: Jason Saleeby

RESEARCH INTERESTS
I apply a combination of structural, petrologic, geochemical and isotopic techniques to understand the formation and deformation of continental material at convergent margins.

RESEARCH AWARDS (TOTAL = $343,940)
- NSF EAR 1524768: Laramide Relamination of Mantle Lithosphere Beneath the Colorado Plateau: A Xenolith Study; $163,440, 10/1/15 to 9/30/17.
- Keck Geology Consortium: Tectonic evolution of a deeply exhumed arc section: A study of the physical and petrologic evolution of the Salinian Bock, central coastal California; $40,000, 6/1/16 to 5/31/17.
- NSF EAR-PF 1250070: Evaluating the forearc response to shallow subduction: a geo-/thermochronologic investigation of the world's type exhumed shallow subduction complex, southern California; $85,000, 7/1/13 to 8/31/15.
- University of Missouri Research Board: Mechanisms and consequences of supracrustal input into the root zones of continental arcs; $20,000, 5/1/14 to 4/30/15.
- Missouri S&T Materials Research Center: Acquisition of a cathodoluminescence detector for materials characterization at MS&T; $29,500 ($14,750 MST portion), detector installed July, 2014.
- Missouri S&T Rock Mechanics & Explosives Research Center: Refining estimates of the seismic properties and composition of the Mojave Desert, southern California; $6,000, 9/1/14 to 5/31/15.

AWARDS AND ACHIEVEMENTS
- Exceptional Reviewer, *Geosphere* (2015).
- Northern California Geological Society Richard Chambers Memorial Scholarship recipient (2011).
- Richard H. Jahns Teaching Prize, Caltech: GPS Division (2011).
- NSF EAR-0739071 (co-written with P.I.: Jason Saleeby): Constraints on Large-Magnitude Extension Coupled to Subduction Channel Flow Above a Flat Slab Segment - Southern Sierra Nevada Region, California; $208,261, 1/15/2008 to 6/30/2011.
- GSA Graduate Student Research Grant recipient (2006).

SERVICE/PROFESSIONAL DEVELOPMENT
International community
- Reviewer for *GSA Special Paper* (2012), *Geosphere* (2013), *Lithosphere* (2014), *Geochemistry, Geophysics, Geosystems* (2014), *Geosphere* (2015), *Journal of Structural Geology* (2015), *Lithos* (2016), *American Mineralogist* (2016), *International Geology Review* (2016 [2x]), *Progress in Earth and Planetary Science* (2017)
- Reviewer for NSF Tectonics (2013, 2014, 2015[2x], 2016) and NSF Petrology & Geochemistry (2014, 2015[2x]).
- Participant in pre-GSA Annual Meeting (U-Th)/He Workshop (2013).
- Participant in pre-GSA Cordilleran sectional meeting field trip (2014).

- Participant in NSF-NAGT "On the Cutting Edge" Early Career Workshop: Teaching, Research, & Managing Your Career, University of Maryland (2014).
- Convener of GSA session T15 (2014) - Continental Arcs #1: Tectonopetrologic Processes Controlling Arc Tempos and Evolution.
- NSF ExTerra field institute leader (co-led with Mihai Ducea) to the Santa Lucia Mountains, CA (2014).
- Participant in NSF Tectonics New Directions workshop, University of Wisconsin (2016).

Macalester College
- Outreach on STEM night at Expo Elementary in St. Paul, MN.
- Entertainment committee (2016-).

Missouri University of Science & Technology
- K-12 Outreach through Kaleidoscope Discovery Center (2013-) in Rolla, MO.
- Faculty sponsor for C.L. Dake Geological Society (2013-2015).

California Institute of Technology
- Founder and leader of Caltech: GPS Green Team, a group of environmentally conscious students, faculty, and staff working to reduce the energy consumption of Caltech's GPS division (April, 2009 – July 2011).
- Taught classes on the local geology at the Wind Wolves Preserve (summer, 2008 - fall, 2009).
- -Discussed rock types with Hamilton Elementary School students at Science, Math, and ART (SMART) night, Pasadena, California (December, 2008).
- Led four fieldtrips for Don Benito Elementary School students and teachers, grades 2-6, on the geology of Eaton Canyon in Altadena, California (summer, 2008 – winter, 2010).
- Participant in pre-GSA Annual Meeting field trip (2009).
- Participant in Calabrian Arc project summer school (2008).

INVITED TALKS

Conferences

2013 – GSA annual meeting, Denver, CO, session T183 - Rates and Thermomechanical Characteristics of Processes Controlling the Rheologic Evolution of Arc Systems.
2014 - AGU annual meeting, San Francisco, CA, session 3481 - Cordilleran-type arc systems in space and time.

Seminar Presentations

2017 – Speaker for Minnesota Geological Society
2016 - Colloquium speaker at Wayne State University; Brownbag speaker at Minnesota Geological Survey; University of Minnesota, Twin Cities; Conversations About our Scholarly Lives, Macalester College.
2015 - Colloquium speaker at University of Missouri, Columbia.
2014 - Colloquium speaker at University of Missouri, Kansas City; Indiana University; Macalester College.
2013 - Colloquium speaker at University of Toronto; Missouri University of Science and Technology.
2012 - Colloquium speaker at California State University, Bakersfield; Colorado State University; University of Washington; Idaho State University; and University of Saskatchewan.
2009 - University of Southern California, lithosphere dynamics seminar.
2008 - L.A. Basin Symposium, Southern California Earthquake Center.

PRINCIPAL COLLABORATORS

Jean-Philippe Avouac (Caltech), Sarah Brownlee (Wayne State University), Matthew Coble (Stanford University), Mihai N. Ducea (University of Arizona), Trevor Dumitru (Stanford University), John Eiler (Caltech), W. Gary Ernst (Stanford University), Ken A. Farley (Caltech), Eric Gottlieb (Stanford University), Marty Grove (Stanford University), Derek Hoffman (University of Arizona), Carl E. Jacobson (Iowa State

University), Steven B. Kidder (City University of New York), Peter I. Luffi, (Rice University), Nadine McQuarrie (University of Pittsburg), Ellen Metzger (San Jose State University), Sierra Petersen (Harvard University), Lucian Petrescu (University of Bucharest), Vladislav Powerman (Stanford University), Alison Piasecki (Caltech), Jason B. Saleeby (Caltech), John Wakabayashi (Cal State Fresno, David J. Wood (Caltech), Liyun Zhang (Inst. Tibet. Plateau Res.).

STUDENTS

Research advisor

Macalester

Grady Johnson (capstone) 2016-
Emily Gross (senior thesis) 2016-
Jennifer Grischuk (senior thesis) 2015-
Glen Hartford (senior thesis) 2015-
Brooke Hunter (capstone) 2016-
Meghan Klapper (senior thesis) 2015-
Jessie Shields (post-baccalaureate researcher) 2016-
Kovas Zygas (capstone) 2015-2016

Keck Consortium

Alison Horst (Union College) 2016-
Molly Kover (Smith College) 2016-
Veronica Vriesman (Colgate College) 2016-
Erica Watts (Mt. Holyoke College) 2016-
Rachel Surprenant (Macalester College) 2016-2016

Missouri University of Science & Technology

Bo Yuan: M.S. (nonthesis) 2013-2016
Bing Li: M.S. 2013-2016
Lisa Arnold: M.S. 2014-2016
Joseph Coons: M.S. 2014-
Daniel Meehan: M.S. 2014-2016
Jianjun Li (B.S. 2014): undergraduate research – Electron backscatter diffraction on clinopyroxenites from beneath the Colorado Plateau.
Jing Hua (B.S. 2015): Opportunities for Undergraduate Research student
Xiaokun Ma (B.S. 2015): Opportunities for Undergraduate Research student

Graduate committee member

Azael Salinas: M.S. 2017 (John Wakabayashi; California State Universiity, Fresno)
Angelica Alvarez Naranjo: Ph.D. 2015 (John Hogan; Missouri S&T)
Hanadi Al-Doukhi: Ph.D. 2014 (Mohamed Abdel Salam; Missouri S&T)
Liang Xue: M.S. 2014 (John Hogan; Missouri S&T)

PEER-REVIEWED PUBLICATIONS

(For zipped file, visit: https://dl.dropboxusercontent.com/u/47832879/adc_publications.zip)

Attia, S. Paterson, S.R., Wenrong, C., **Chapman, A.D.,** Saleeby, J., Dunne, G., Stevens, C., Stone, P., Memeti, V., in review, Paleogeographic affinity and tectonic assembly of pre-Mesozoic Sierra Nevada framework terranes, submitted to *Geosphere*.

Garzione, C. N., McQuarrie, N., Perez, N. D., Ehlers, T. A., Beck, S. L., Kar, N., Eichelberger, N., **Chapman, A. D.,** Ward, K. M., Ducea, M. N., Lease, R. O., Poulsen, C. J., Wagner, L. S., Horton, B. K., Saylor, J. E., and Zandt, G., in press, The Tectonic Evolution of the Central Andean Plateau and Geodynamic Implications for the Growth of Plateaus, submitted to *Annual Reviews of Earth and Planetary Sciences*.

Chapman, A.D., Wood, D.J., Saleeby, J.B, and Saleeby, Z., in press, Late Cretaceous to early Neogene

tectonic development of the southern Sierra Nevada region, California, submitted to *Geological Society of America Field Guides*.

Chapman, A.D., 2016, The Pelona–Orocopia–Rand and related schists of southern California: a review of the best-known archive of shallow subduction on the planet, *International Geology Review*, v. XX, no. X, p. 1–38, doi: 10.1080/00206814.2016.1230836.

Chapman, A.D., Jacobson, C.E., Ernst, W.G., Grove, M., Dumitru, T., Hourigan, J., and Ducea, M., 2016, Assembling the world's type shallow subduction complex: detrital zircon geochronologic constraints on the origin of the Nacimiento block, central California Coast Ranges, *Geosphere*, v. 12, no. 2, p. 1–25, doi:10.1130/GES01257.1.

Dumitru, T. A., Elder, W. P., Hourigan, J. K., **Chapman, A. D.**, Graham, S. A., and Wakabayashi, J., 2016, Four Cordilleran paleorivers that connected Sevier thrust zones in Idaho to depocenters in California, Washington, Wyoming, and, indirectly, Alaska. *Geology* v. 44, p. 75-78, doi: 10.1130/G37286.1.

Chapman, A. D., Ducea, M. N., McQuarrie, N., Coble, M., Petrescu, L., and Hoffman, D., 2015, Constraints on Plateau Architecture and Assembly From Deep Crustal Xenoliths, Northern Altiplano (SE Peru). *GSA Bulletin*, doi: 10.1130/B31206.1.

Chapman, A. D., Ernst, W.G., Gottlieb, E., Powerman, V., and Metzger, E., 2015, Detrital zircon geochronology of Neoproterozoic-Lower Cambrian passive margin strata of the White-Inyo Range, east-central California: Implications for the Mojave-Snow Lake fault hypothesis. GSA Bulletin, doi: 10.1130/B31142.1.

Chapman, A. D., Ducea, M. N., Kidder, S., and Petrescu, L., 2014, Geochemical constraints on the petrogenesis of the Salinian arc, central California: Implications for the origin of intermediate magmas. *Lithos* v. 200-201, p. 126-141, doi: 10.1016/j.lithos.2014.04.011.

Zhang, L.-Y., Ding, L., Pullen, A., Xu, Q., Liu, D.-L., Cai, F.-L., Yue, Y.-H., Lai, Q.-Z., Shi, R.-D., Ducea, M.N., Kapp, P., and **Chapman, A.D.**, 2014, Age and geochemistry of western Hoh-Xil–Songpan-Ganzi granitoids, northern Tibet: Implications for the Mesozoic closure of the Paleo-Tethys ocean. *Lithos* v. 190-191, p. 328-348, doi: 10.1016/j.lithos.2013.12.019.

Kidder, S.B., Herman, F., Saleeby, J., Avouac, J.-P., Ducea, M.N., and **Chapman, A.D.,** 2013, Shear heating not a cause of inverted metamorphism. *Geology* v. 41, p. 899–902, doi: 10.1130/G34289.1.

Chapman, A.D., Saleeby, J.B., and Eiler, J.M., 2013. Slab flattening trigger for isotopic distur- bance and magmatic flare-up in the southernmost Sierra Nevada batholith, California. *Geology* v. 41, p. 1007–1010. doi: 10.1130/G34445.1.

Chapman, A. D., Saleeby, J. B., Wood, D. J., Piasecki, A, Farley, K. A., Kidder, S., and Ducea, M. N., 2012, Late Cretaceous gravitational collapse of the southern Sierra Nevada batholith, California. *Geosphere*, doi: 10.1130/GES00740.1, v. 8, p. 314-341.

Chapman, A. D., and Saleeby, J., 2012, Geologic map of the San Emigdio Mountains. *Geological Society of America digital map and chart series*, MCH-101, 1:24,000 scale.

Chapman, A. D., Luffi, P., Saleeby, J., and Petersen, S., 2011, Metamorphic evolution, partial melting, and rapid exhumation above an ancient flat slab: Insights from the San Emigdio Schist, southern California: *Journal of Metamorphic Geology*, doi:10.1111/j.1525-1314.2011.00932.x, v. 29, no. 6, p. 601.

Chapman, A.D., Kidder, S., Saleeby, J.B., Ducea M.N., 2010, Role of extrusion of the Rand and Sierra de Salinas schists in Late Cretaceous extension and rotation of the southern Sierra Nevada and vicinity. *Tectonics,* v. 29, no. 5, p. TC5006.

MEETING ABSTRACTS

*denotes student author

Chapman, A.D., 2016, Detrital zircon geochronology of the Warrensburg-Moberly channel sandstone, central Missouri: A paleoriver that connected the Appalachian orogen to Grand Canyon and adjacent depocenters? Abstracts with programs - Geological Society of America, 48(7), p. XXX.

Hartford, G.*, and **Chapman, A.D.,** 2016, Search for the lost arc: A U-Pb zircon geochronologic and isotopic study of the Las Tablas unit, Franciscan complex of central California. Abstracts with programs - Geological Society of America, 48(7), p. XXX.

Shields, J.*, and **Chapman, A.D.,** 2016, Late Cretaceous tectonic displacement of sub-continental mantle lithosphere beneath the SW U.S. Cordillera: Mantle xenolith constraints from the Colorado plateau transition zone (central Arizona). Abstracts with programs - Geological Society of America, 48(7), p. XXX.

Meehan, D.*, **Chapman, A.D.,** and Little, W., 2016, Detrital zircon evidence for Late Ordovician uplift, paleokarsting, and drainage reorganization in the Ozark Dome and vicinity, south-central Missouri. Abstracts with programs - Geological Society of America, 48(7), p. XXX.

Chapman, A.D., Jacobson, C.E., Ernst, W.G., Grove, M., Dumitru, T., Hourigan, J., and Ducea, M., 2015, Assembling the world's type shallow subduction complex: detrital zircon geochronologic constraints on the origin of the Nacimiento block, central California Coast Ranges. Abstracts with programs - Geological Society of America, 47(7), p. 387.

Arnold, L.*, and **Chapman, A.D.**, 2015, The origin of the Nacimiento block: A geo-/thermochronologic analysis. Abstracts with programs - Geological Society of America, 47(7), p. 388.

Coons, J.R.*, and **Chapman, A.D.**, 2015, Structural and U-Pb detrital zircon geochronologic constraints on the origin of the Condrey Mountain schist, California – Oregon. Abstracts with programs - Geological Society of America, 47(7), p. 162.

Hua, J.*, **Chapman, A. D.**, Li, B.*, Hogan, J.P.., Bridges, D.L., Mulvany, P., 2015, Detrital zircon geochronology of Paleozoic to Late Cretaceous siliciclastic strata of the Ozark Dome, southern Missouri. Abstracts with programs - Geological Society of America, 47(1), p. 17.

Chapman, A. D., 2014, Testing the relamination hypothesis in exhumed cordilleran shallow subduction complexes: a call to arms. [*INVITED TALK*]. Eos Trans. AGU, Fall Meet. Suppl., Abstract TXXX-XXXX.

Brownlee, S.J., Hacker, B.R., **Chapman, A.**, Saleeby, J., 2014, Seismic Anisotropy of the Pelona-Orocopia-Rand schist beneath the Mojave block, southern California. Eos Trans. AGU, Fall Meet. Suppl., Abstract S21C-4455.

Chapman, A. D., 2014, Testing the relamination hypothesis in exhumed cordilleran shallow subduction complexes: a call to arms. Abstracts with programs - Geological Society of America, 46(6), p. 231.

Chapman, A. D., Ernst, W.G., Grove, M., Powerman, V., and Metzger, E., 2014, Detrital zircon geochronology and sources of Neoproterozoic-Lower Cambrian siliciclastic strata, White-Inyo Range, east-central California. Abstracts with programs - Geological Society of America, 46(5), p. 18.

Chapman, A.D., Ducea, M.N., 2013, Small-scale lithospheric foundering beneath the Peruvian Altiplano: evidence from back arc potassic volcanic rocks and lower crustal and mantle xenoliths. Eos Trans. AGU, Fall Meet. Suppl., Abstract T53B-2581.

Brownlee, S.J., Hacker, B.R., Feinberg, J.M., **Chapman, A.D.**, Saleeby, J.B., Seward, G., 2013, Seismic anisotropy and anisotropy of magnetic susceptibility (AMS) in the Pelona-Orocopia-Rand schist in the Mojave region of southern California. Eos Trans. AGU, Fall Meet. Suppl., Abstract GP34A-08.

Chapman, A.D., Stoking the lower crust of continental arcs with subduction accretion assemblages: an example from southern California [*INVITED TALK*]. Abstracts with programs - Geological Society of America, 45(7), p. 813.

Chapman, A.D., Jacobson, C.E., Grove, M., Dumitru, T., 2013, Detrital zircon geochronology of Franciscan metaclastic rocks from the Nacimiento block, Central coastal California. Abstracts with programs - Geological Society of America, 45(7), p. 519.

Jacobson, C.E., Barth, A.P., Grove, M., **Chapman, A.D.**, Wooden, J.L., Dumitru, T., Ingersoll, R.V., 2013, Use of Th/U in detrital zircon for provenance analysis: implications for Late Cretaceous-Paleogene tectonic evolution of the North American Cordillera. Abstracts with programs - Geological Society of America, 45(7), p. 519.

Brownlee, S.J., Feinberg, J.M., Hacker, B.R., **Chapman, A.,** Saleeby, J., Seward, G., 2013, Anisotropy of magnetic susceptibility (AMS) as a proxy for seismic anisotropy: Evidence from the Pelona-Orocopia- Rand schist, southern California. 2013 EarthScope National Meeting.

Brownlee, S.J., Hacker, B.R., **Chapman, A.**, Saleeby, J., Seward, G., 2013, Seismic anisotropy as a constraint on composition in the lower crust. Geochimica et Cosmochimica Acta, 77(5), p. 781.

Chapman, A.D., Ducea M.N., Kidder, S.B., 2012, Igniting a magmatic flare-up – The Salinian arc, central California. *Abstracts with programs - Geological Society of America*, XX(X), p. X.

Chapman, A.D., Ducea M.N., 2012, Lithospheric raindrops beneath the Peruvian Altiplano: evidence from back arc potassic mafic volcanic rocks. *Abstracts with programs - Geological Society of America*, 44(3), p. 74.

Economos, R., Barth, A., Wooden, J., **Chapman, A.D.**, 2011, Garnet formation and evolution in Cordilleran source rocks: inherited zircon trace element chemistry from the Transverse Ranges, CA. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract T53A-2485.

Chapman, A.D., Saleeby, J.B., Eiler, J. M., 2011, Slab flattening trigger for isotopic disturbance and magmatic flare-up in the southernmost Sierra Nevada batholith, California. *Abstracts with programs - Geological Society of America*, 43(5), p. 43.

Chapman, A.D., Saleeby, J.B., 2010, High temperature deformation and fluid enhanced zircon modification along an exhumed subduction megathrust. *Eos Trans. AGU.* Fall Meet. Suppl., Abstract V32A-06.

Chapman, A.D., Luffi, P.I., Saleeby, J.B., Petersen, S., 2010, Partial melting, counterclockwise *P-T* path, and rapid exhumation above an ancient flat slab: Insights from the San Emigdio Schist, southern California. *Abstracts with programs - Geological Society of America*, 42(5), p. 627.

Chapman, A.D., Saleeby, J.B., Wood, D.J., 2010, Regional displacement analysis and palinspastic restoration of dispersed crustal fragments in the southern Sierra Nevada, California. *Abstracts with programs - Geological Society of America*, 42(4), p. 67.

Saleeby, J.B., **Chapman, A.D.**, Kidder, S., Ducea M.N., 2010, Dispersal of southern Sierra Nevada batholith crustal fragments across and along the trace of the San Andreas fault. *Abstracts with programs - Geological Society of America*, 42(4), p. 43.

Chapman, A.D., Kidder, S., Saleeby, J.B., Ducea M.N., 2009, Role of extrusion of the Rand and Sierra de Salinas schists in Late Cretaceous extension and rotation of the southern Sierra Nevada and vicinity. *Abstracts with programs - Geological Society of America*, 41(7), p. 590.

Saleeby, J.B., Saleeby, Z., **Chapman, A.D.**, Nadin, E., 2009, Origin and evolution of the White Wolf fault and the Maricopa basin, southernmost California great valley. *Abstracts with programs - Geological Society of America*, *America*, 41(7), p. 180.

Eiler, J.M., Adkins, J., **Chapman, A.**, Guan, Y., Hofmann, A., Ferry, J., 2009, New capabilities for small-scale and high-precision SIMS analyses. Geochimica et Cosmochimica Acta, 73(13), Supplement 1, A321.

Stock, J., Martin-Barajas, A., **Chapman, A.**, López Martínez, M., 2008, Net slip across the Ballenas transform fault measured from offset ignimbrite deposits. *Eos Trans. AGU*, *89*(53), Fall Meet. Suppl., Abstract T11A-1853.

Martín-Barajas, A., Stock, J.M., López Martínez, M., **Chapman, A.**, 2008, Estratigrafia volcánica del Neogeno en la mitad norte de Isla Angel de la Guarda. 1er congreso sobre la evolucion geologica y ecologica del noroeste de Mexico: Hermosillo, Sonora, Abril 21-23.

Chapman, A.D., Saleeby, J.B., 2008, Rapid exhumation of the Rand schist: Corroborative evidence from garnet-based geospeedometry, thermochronology, and field studies. *Abstracts with programs - Geological Society of America*, 40(1), Abstract 134709.

Kruckenberg, S.C., Teyssier, C., Whitney, D.L., Ferre, E., **Chapman, A.**, Vanderhaeghe, O., 2008, Compatibility of deformation between upper crust and flowing partially molten crust in "hot" orogens. *Geophysical Research Abstracts*, Vol. 10, 11363.

Chapman, A.D., Saleeby, J.B., Luffi, P., 2007, Rapid Exhumation of the Rand Schist: Constraints From Natural Garnet Diffusion Couples. *Eos Trans. AGU*, *88*(52), Fall Meet. Suppl., Abstract T44A-02.

Kruckenberg, S.C., Ferré, E., Teyssier, C., Whitney,D.L., Vanderhaeghe, O., **Chapman, A.**, and Gébelin, A., 2007, Deformation in the migmatitic core of the Naxos Dome: Structural and anisotropy of magnetic susceptibility (AMS) analyses, Presented at: Extending a Continent: Architecture, Rheological Coupling, and Heat Budget, Penrose Conference (8-12 October 2007), Island of Naxos, Aegean Sea, Greece.

Chapman, A.D., Luffi, P., Saleeby, J.B., 2006, The Origin of High-Ca Annuli in Garnets from the Rand Schist of the San Emigdio Mountains, Southern California. *Eos Trans. AGU*, *87*(52), Fall Meet. Suppl., Abstract V31B-0588.