

VITA

1. Name

Helge Alsleben

2. Place of Birth and Date

Hamburg, Germany on Sept. 18th, 1970

3. Educational background

1992-1996	University of Hamburg	Vordiplom (equivalent to US Bachelor's degree)
1996-2000	San Jose State University	Master of Science
2000-2005	University of Southern California	Ph.D.

4. Formal continuing education

None

5. Professional certifications

None

6. Present Rank

Associate Professor

7. Year of appointment to the University, and rank

2005, Assistant Professor

8. Year of last promotion

2011

9. Previous teaching and/or research appointments

a. Part time

2003-2004	Department of Earth Sciences, University of Southern California, Research Assistant
2000-2003	Department of Earth Sciences, University of Southern California, Teaching Assistant
Spring 2000	Geology Department, San Jose State University, California, Lecturer
1999-2000	Geology Department, San Jose State University, California, Graduate Assistant
1998-2000	Geology Department, San Jose State University, California, Research Assistant
1998-1999	Geology Department, San Jose State University, California, Teaching Associate

b. Full time

None

10. Previous professional positions

April 2000-August 2000, Questa Engineering Corporation, Richmond, California, Staff Geologist

11. Courses taught

GEOL. 010: Application in Earth Science (Planet Earth)	- San Jose State University
GEOL. 101: General Geology (Physical Geology)	- San Jose State University
GEOL. 115: Earth Materials	- San Jose State University
GEOL. 121: Igneous and Metamorphic Petrology	- San Jose State University
GEOL. 108: Crisis of a Planet (Environmental Geology)	- University of Southern California
GEOL. 215a: Mineralogy	- University of Southern California
GEOL. 215b: Petrology	- University of Southern California

GEOL. 10113: Understanding the Earth	- Texas Christian University
GEOL. 30153: Geology of National Parks	- Texas Christian University
GEOL. 30213: Mineralogy	- Texas Christian University
GEOL. 30423: Structural Geology	- Texas Christian University
GEOL. 40790: Special Problems (Structural Geology)	- Texas Christian University
GEOL. 50413: Global Tectonics and Basin Analysis	- Texas Christian University
GEOL. 60710: Geology Seminar	- Texas Christian University
GEOL. 70970: Field Methods	- Texas Christian University
GEOL. 70970: Special Problems (Structural Geology)	- Texas Christian University

12. External support sought

a. Received

- 2007 Educational NASA grant (Land Processes/Earth Observing System). Valued at \$2500.-
Title: Mapping plutons in Baja California using ASTER
- 2002 Geological Society of America Research Grant; Requested \$2450.-; Received \$1600.-
Title: Employing detrital zircon geochronology for regional stratigraphic and tectonic reconstructions in the Peninsular Ranges batholith
- 2002 University of Southern California Graduate Student Research Fund; Received \$1200.-
Title: Employing detrital zircon geochronology for regional stratigraphic and tectonic reconstructions in the Peninsular Ranges batholith
- 2001 Geological Society of America Research Grant; Requested \$2345.-; Received \$2180.-
Title: Paleozoic to Early Mesozoic deformation in Baja California – Structural evidence for collision along the southern margin of North America?
- 2001 Sigma Xi; Requested \$1154.-; Received \$350.-
Title: The southern margin of Paleozoic and Early Mesozoic North America – an unsolved tectonic puzzle
- 2001 University of Southern California Graduate Student Research Fund; Received \$800.-
Title: Paleozoic to Early Mesozoic deformation in Baja California – Structural evidence for collision along the southern margin of North America?
- 1998 Geological Society of America Research Grant; Requested \$1500.-; Received \$1500.-
Title: Significance of mineral lineations and strain partitioning, Swakane Terrane, North Cascades, WA
- 1997 San Jose State University Instructional Equipment/Supplies category; Received \$350.-

b. Not received

- 2009 Sigma Xi Grants-in-Aid of Research Program submitted by William Cage (under my supervision); Requested \$1000.-
Title: Geomorphic Mapping and Ground Penetrating Radar Survey of the Agua Blanca Fault, Baja California, Mexico
- 2009 GSA Graduate Student Research Grants submitted by Codie Kretzer (under my supervision); Requested \$1650.-
Title: Mapping and Ground-Penetrating Radar Surveys of the Valle Santo Tomas Segment of the Agua Blanca Fault, Baja California, Mexico
- 2008 GSA Graduate Student Research Grants submitted by Sarah Madsen (under my supervision); Requested \$1650.-

- Title: Using Ground-Penetrating Radar to Characterize the Near-Surface Structure of the Agua Blanca Fault, Baja California, Mexico
- 2007 National Science Foundation – EAR Tectonics; Requested \$60,004.-
Title: Displacement fields in accretionary orogens: Constraints from the integration of process-related strains from thin section to regional observational scales
- 2007 Petroleum Research Fund Type G Proposal; Requested \$50,000.-
Title: Depositional evolution of a Cretaceous intra-arc basin system in the Peninsular Ranges of Baja California, Mexico
- 2003 NSF Tectonics program (written by self, submitted by Ph.D. Advisor); Requested \$318,441.-
Title: Island arc collision and its effects on arc and continental margin processes
- 2002 American Association of Petroleum Geologists; Requested \$2500.-
Title: The Paleozoic of Baja California – Unraveling the tectono-stratigraphy of a poorly understood mineral resource province

c. Pending/To be submitted

N/A

13. Internal grants sought

- 2011 TCU Research and Creative Activities Fund, Requested \$3600.-; Received \$3000.-
Title: Investigation of a proposed tilted crustal section in the northern Sierra Nevada, California
- 2009 TCU Science and Engineering Research Center (submitted by Ella Angue under my supervision), Requested \$1234.-; Received \$1234.-
Title: Geologic mapping of the northeastern part of the Sombrero Peak quadrangle, Brewster County, Texas
- 2009 TCU Junior Faculty Summer Research Program (JFSRP), not received
- 2009 TCU Research and Creative Activities Fund, Requested \$3930.-; Received \$3930.-
Title: Evaluating the Geology and Seismic Hazard of the Agua Blanca Fault, Baja California, Mexico
- 2007 TCU Science and Engineering Research Center (submitted by Dave McCleery under my supervision), Requested \$1374.-; Received \$1374.-
Title: Testing kinematic fold models using inverted strain estimates from magnetic susceptibility
- 2007 TCU Research and Creative Activities Fund, Requested \$3890.-; Received \$3890.-
Title: Testing the Exotic Nature of the Alisitos Volcanic Island Chain, Peninsular Ranges, Baja California, Mexico

14. Graduate theses directed

a. Graduated (* indicates students that were taken as advisees after John Breyer retired from TCU)

- 2012 Tyler Hair, Constructing a geomechanical model for the Woodford Shale, Arkoma Basin, Oklahoma (August 2012)

*Clark Osterlund, The Barnett Shale (Mississippian) in the Central Midland Basin (Andrews, Ector, Martin, and Midland Counties) (August 2012)
- 2011 Marc Elasmr, Geologic mapping and fracture analysis of the northeastern Rosillos Mountains, Brewster County, TX (May 2011)
- 2010 Milton Enderlin, A method for evaluating the effects of stresses and rock strength on fluid flow along the surfaces of mechanical discontinuities in low permeability rocks (December 2010)

Amy Patterson (co-advised with Dr. John Breyer), Structural Geology and Hydrocarbon Production, Barnett (Mississippian) Shale, Northwestern Johnson County, TX (December 2010)

William Cage, Geomorphic mapping and ground-penetrating radar survey of the Agua Blanca fault in Valle de Santo Tomas, Baja California, Mexico (August 2010)

Codie Kretzer, Geologic mapping and ground-penetrating radar surveys of the Valle Santo Tomas segment of the Agua Blanca Fault, Baja California, Mexico (August 2010)

2009 Sarah Madsen, Geomorphic mapping and ground-penetrating radar survey of the western segment of the Agua Blanca fault, Baja California, Mexico (August 2009)

b. In progress

*Tyler Ashley, A Detailed Stratigraphic and Depositional Analysis of a (Mississippian) Barnett Shale Core from the Northern Fort Worth Basin in Cooke County, Texas (expected graduation December 2012)

*Dler Hamad, Depositional Environment of the Najmah Formation in Bardarash and Hawler Oilfields, Kurdistan, northern Iraq (expected graduation December 2012)

Britt Campbell, Geomechanical Study of the Eagle Ford Shale (expected graduation December 2012)

Jacob Deitz, Rock strengths estimates for the Barnett Shale and modern-day stress in the Fort Worth Basin (expected graduation December 2012)

Meredith Kiesel, Correlation between XRF and XRD results and prediction of mineral compositions in the Barnett Shale (expected graduation December 2012)

Amber Bibb, The Structural Geology of the Barnett Shale Adjacent to the Muenster Arch in Cooke and Montague Counties (expected graduation May 2013)

Caleb Jacobs, TBD, (expected graduation May 2014)

Brian Tapp, TBD, (will start Spring 2013)

* indicates students that were taken as advisees after John Breyer retired from TCU

c. Completed undergraduate senior theses

2010 Dadie (Ella) Angue Abaa, Geologic mapping of the northeastern part of the Sombrero Peak quadrangle, Brewster County, Texas (2009/2010 Academic year)

2008 David McCleery, Testing kinematic fold models using inverted strain estimates from magnetic susceptibility (2007/2008 Academic year)

d. Undergraduate senior theses (in progress)

2012 Daniel Woodworth, Is anisotropy detectable using a micro-indentation device? (2012/2013 Academic year)

15. Presentation of scholarly and creative activities

a. Refereed publications

Enderlin*, M.B., and **Alsleben, H.**, 2012, A method for evaluating the effects of confining stresses and rock strength on fluid flow along the surfaces of mechanical discontinuities in low permeability rocks, *in* Breyer, J.A., ed., Shale Reservoirs—Giant resources for the 21st Century: American Association of Petroleum Geologists Memoir 97, p. 151-171.

Alsleben, H., Wetmore, P.H., Gehrels, G.E., and Paterson, S.R., 2012, Detrital zircon ages in Paleozoic and Mesozoic basement assemblages of the Peninsular Ranges batholith, Baja California, Mexico: constraints for depositional ages and provenance, *International Geology Review*, vol. 54, no. 1, p. 93-110, (doi:10.1080/00206814.2010.509158).

Alsleben, H., Wetmore, P.H., Schmidt, K.L., Paterson, S.R., and Melis, E.A., 2008, Complex deformation as a result of arc-continent collision: Quantifying finite strain in the Alisitos arc, Peninsular

- Ranges, Baja California: *Journal of Structural Geology*, vol. 30, p. 220-236 (doi:10.1016/j.jsg.2007.11.001).
- Miller, R.B., Paterson, S.R., Lebit, H., **Alsleben, H.**, and Luneburg, C., 2006, Significance of Composite Lineations in the Mid- to Deep Crust: A Case Study from the North Cascades, Washington: *Journal of Structural Geology*, vol. 28, p. 302–322 (doi:10.1016/j.jsg.2005.11.003).
- Wetmore, P.H., **Alsleben, H.**, Paterson, S.R., Ducea, M.N., Gehrels, G.E., and Valencia, V.A., 2005, Field trip to the northern Alisitos arc segment: Ancestral Agua Blanca fault region: Ensenada, Baja California, MX, *in* Ledesma-Vazquez, ed., *Field Conference Guide Book for the VII International Meeting on the Geology of the Baja California Peninsula*: Ensenada, Baja California, MX, 39 p.
- Paterson, S.R., Miller, R.B., **Alsleben, H.**, Whitney, D.L., Valley, P.M., and Hurlow, H., 2004, Driving Mechanisms For > 40 Km of Exhumation During Late Cretaceous Contraction and Paleogene Arc-Oblique Extension, Cascades Core, Washington: *Tectonics*, v. 23, TC3005 (doi:10.1029/2002TC001440)
- Wetmore, P.H., Herzig, C., **Alsleben, H.**, Sutherland, M., Schmidt, K.L., Schultz, P.W., and Paterson, S.R., 2003, Mesozoic tectonic evolution of the Peninsular Ranges of southern and Baja California, *in* Johnson, S.E., Paterson, S.R., Fletcher, J.M., Girty, G.H., Kimbrough, D.L., and Martin-Barajas, A., eds., *Tectonic Evolution of Northwestern Mexico and the Southwestern United States*: Geological Society of America - Special Paper 374, p. 93-116.
- Valley, P.M., Whitney, D.L., Paterson, S.R., Miller, R.B., and **Alsleben, H.**, 2003, Metamorphism of the deepest exposed arc rocks in the Cretaceous to Paleogene Cascades belt, Washington: evidence for large-scale vertical motion in a continental arc: *Journal of Metamorphic Geology*, v. 21, no. 2, p. 203-220.

b. Non-refereed publications

Published Abstracts of Presentations at Professional Meetings

(Asterisks indicates coauthor is or was a graduate student under my supervision)

- Alsleben, H.**, Busbey, A.B., Flowers, R., Harris, S., Martin, N., James, C., Simanek, E., 2012, Dance of the Continents – Teaching Plate Tectonics through Dance, in Geological Society of America Annual Meeting, Charlotte, NC, Abstracts with Programs, Vol. 44, No. 7, p. 98.
- Alsleben, H.**, Busbey, A.B., Hanson, R.E., Harris, S., James, C., Simanek, E., 2012, The Pangea Mat and Cutter – a new, in-class teaching tool to discover plate tectonics, in Geological Society of America Annual Meeting, Charlotte, NC, Abstracts with Programs, Vol. 44, No. 7, p. 102.
- Hair*, T.J., **Alsleben, H.**, Enderlin, M.B., Donovan, R.N., 2012, Constructing a Geomechanical Model of the Woodford Shale, Cherokee Platform, Oklahoma; Effects of Confining Stress and Rock Strength of Fluid Flow, AAPG-SWS Meeting, Abstracts with Programs, Fort Worth, TX, p. 56.
- Kiesel*, M., **Alsleben, H.**, and Enderlin, 2012, Elemental Analysis of the Barnett Shale Using X-Ray Fluorescence Spectrometry, Ft. Worth Basin, Johnson County, Texas, AAPG-SWS Meeting, Abstracts with Programs, Fort Worth, TX, p. 51.
- Osterlund*, C., **Alsleben, H.**, Breyer, J.A., Donovan, R.N., Pollack, S., and Dexter, H., 2012, A Case of Mistaken Identity - The Atoka Shale / Barnett Shale in the Central Midland Basin, AAPG-SWS Meeting, Abstracts with Programs, Fort Worth, TX, p. 52.
- Wetmore, P.H., Malservisi, R., Wilson, J., Ferwerda, B., and **Alsleben, H.**, Kinematics of Displacement on the Central and Western Agua Blanca and Santo Tomas Faults, Baja California, Mexico, in Seismological Society of America Annual Meeting, San Diego, CA, Abstracts with Programs, Vol. 83:2, p. 373.
- Elasmar*, M.M., and **Alsleben, H.**, 2012, Geologic mapping and fracture analysis of the northeastern Rosillos Mountains, Brewster County, Texas, GSA South-Central Section Annual Meeting, Alpine, TX, Abstracts with Programs: Vol. 44, No. 1, p. 6.
- Breyer, J.A., **Alsleben, H.**, and Enderlin*, M.B., 2011, Best of Hedberg: Predicting Fracability In Shale Reservoirs: AAPG Annual Convention & Exhibition, Houston, TX, April 10-13, 2011.

- Alsleben, H.**, Kretzer*, C.S., Cage*, W.R., Madsen*, S.R., and Wetmore, P.H., 2010, Evidence for transtensional deformation and transfer of normal slip along the western segment of the Agua Blanca fault, Baja California, Mexico, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 42, No. 5, p. 371.
- Breyer, J.A., **Alsleben, H.**, and Enderlin*, M.B., 2010, Predicting Fracability In Shale Reservoirs, in AAPG/SPE/SEG/SPWLA Hedberg Research Conference “Critical Assessment of Shale Resource Plays”, Austin, TX, December 5-10, 2010.
- Enderlin*, M.B., and **Alsleben, H.**, 2010, One Method for Evaluating the Effects of Stresses and Rock Strength on Fluid Flow along the Surfaces of Mechanical Discontinuities in Low Permeability Rocks, West Texas Geological Society Fall Symposium, Midland, TX, September 15-17, 2010.
- Enderlin*, M.B., and **Alsleben, H.**, 2010, One Method for Evaluating the Effects of Confining Stresses and Rock Strength on Fluid Flow Along the Surfaces of Mechanical Discontinuities in Low Permeability Rocks, AAPG Annual Convention & Exhibition in New Orleans, Louisiana, April 13, 2010.
- Kretzer*, C.S., **Alsleben, H.**, and Wetmore, P.H., 2010, Geologic mapping and ground-penetrating radar surveys of the Valle Santo Tomás segment of the Agua Blanca fault, Baja California, Mexico, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 42, No. 5, p. 594.
- Wetmore, P.H., Wilson, J., Malservisi, R., Fletcher, J., and **Alsleben, H.**, 2010, Transtension along the Agua Blanca fault: Implications for block motions and regional kinematic variations within the Big Bend domain of the Pacific-North American plate boundary, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 42, No. 5, p. 269.
- Alsleben, H.**, Wetmore, P.H., and Paterson, S.R., 2009, Mid-Cretaceous suturing of the Alisitos arc to North America – Structural evidence from the Sierra Calamajue, Peninsular Ranges batholith, Baja California, Mexico, in Geological Society of America Annual Meeting, Portland, OR, Abstracts with Programs, Vol. 41, No. 7, p. 138.
- Wetmore, P.H., Fletcher, J., **Alsleben, H.**, Springer, A., and Callihan, S., 2009, Kinematics of the western Agua Blanca Fault and the westward drift of the Baja Micro-plate, in Geological Society of America Annual Meeting, Portland, OR, Abstracts with Programs, Vol. 41, No. 7, p. 139.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., and Paterson, S.R., 2009, Enigmatic Jurassic forearc magmatism in the Peninsular Ranges batholith, Baja California and its relationship to the Nazas arc, in Geological Society of America South-Central Section Annual Meeting, Dallas, TX, Abstracts with Programs, Vol. 41, No. 2, p. 35.
- Enderlin*, M.B., and **Alsleben, H.**, 2009, Effects of confining stresses on fluid flow along the surfaces of mechanical discontinuities in low permeability rocks, in Geological Society of America South-Central Section Annual Meeting, Dallas, TX, Abstracts with Programs, Vol. 41, No. 2, p. 8.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., and Paterson, S.R., 2008, Estimates of Strain Rates and Strain-Related Crustal Thickening from the Alisitos Arc-Continent Collision Zone, Peninsular Ranges, Baja California, Mexico, in Geological Society of America Annual Meeting, Houston, TX, Abstracts with Programs, Vol. 40, No. 6, p. 513.
- Alsleben, H.**, Wetmore, P.H., Ducea, M.N., Gehrels, G.E., Tutak, F., Pignotta, G., and Paterson, S.R., 2007, Early Cretaceous suturing of the Alisitos volcanic arc to North America and the role of the Ancestral Agua Blanca Fault in the Western Peninsular Ranges of Baja California, Mexico, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 39, No. 6, p. 235.
- Springer, A., Tutak, F., Callihan, S., Wetmore, P.H., **Alsleben, H.**, Pignotta, G., and Ducea, M.N., 2007, The upper crustal emplacement of the Balbuena pluton by multiple material transfer processes, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 39, No. 6, p. 224.
- Alsleben, H.**, and Wetmore, P.H., 2006, New structural constraints on the collision of the Alisitos arc with North America from the Colonet area, Peninsular Ranges batholith, Baja California, MX, in

- Geological Society of America Annual Meeting, Philadelphia, PA, Abstracts with Programs, Vol. 38, No. 7, p. 414.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., Gehrels, G.E., and Paterson, S.R., 2006, The Peninsular Ranges batholith: A link between the western and southern margin of North America, in Geological Society of America South-Central Section Annual Meeting, Norman, OK, Abstracts with Programs, Vol. 38, No. 1, p. 8.
- Alsleben, H.**, Wetmore, P.H., Gehrels, G.E., and Paterson, S.R., 2005, Using detrital zircon geochronology to track island arc collision, in Geological Society of America Annual Meeting, Salt Lake City, UT, Abstracts with Programs, Vol. 37, No. 7, p. 551.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., and Paterson, S.R., 2005, Factors controlling along-strike variations in a fold-thrust belt formed during collision of the Alisitos arc, Peninsular Ranges, Baja California, MX, in Gonzalez Yajimovich, O., ed., VII International Meeting on the Geology of the Baja California Peninsula: Ensenada, Baja California, MX, Vol. 7, p. 33.
- Wetmore, P.H., **Alsleben, H.**, Ducea, M.N., Gehrels, G.E., Paterson, S.R., and Valencia, V.A., 2005, Geochemical constraints on crustal thickness variations of the Alisitos arc segment of Baja California, Mexico in Gonzalez Yajimovich, O., ed., VII International Meeting on the Geology of the Baja California Peninsula: Ensenada, Baja California, MX, vol. 7, p. 10.
- Alsleben, H.**, Wetmore, P.H., and Paterson, S.R., 2004, An intra-arc strain gradient as a result of arc-continent collision – quantifying finite strain in the Alisitos arc, Peninsular Ranges, Baja California, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 36, No. 5, p. 180.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., Gehrels, G.E., and Paterson, S. R., 2003, Temporal and spatial constraints on suturing of the Cretaceous Alisitos island arc to North America, Peninsular Ranges batholith, Baja California, in Geological Society of America Annual Meeting in Seattle, WA, Abstract with Programs, Vol. 35, No. 6, p. 115.
- Alsleben, H.**, and Paterson, S.R., 2003, Unraveling displacement fields in arcs: An example from the Peninsular Ranges batholith, in Geological Society of America Cordilleran Section Meeting, Puerto Vallarta, MX, Abstract with Programs, Vol. 35, No. 4, p. 73.
- Alsleben, H.**, Gehrels, G.E., and Paterson, S.R., 2002, Characterization of the Cretaceous collision zone between the western and eastern Peninsular Ranges batholith in the Sierra Calamajue, Baja California Norte, Mexico, in Geological Society of America Annual Meeting, Denver, CO, Abstracts with Programs, Vol. 34, No. 6, p. 43.
- Alsleben, H.**, and Paterson, S.R., 2002, Deep-water sediments in the Sierra La Josephina – Insights into lithologic and structural complexities and possible correlation, in VI Reunión Internacional sobre Geología de la Península de Baja California, La Paz, Baja California Sur, Abstracts with Programs, Vol. 6, p. 49.
- Paterson, S.R., Miller, R.B., **Alsleben, H.**, Whitney, D.L., Valley, P.M., and Vance, J.A., 2000, 30-40 km of Eocene exhumation during orogen-parallel extension in the Cascades Core, Washington, in Geological Society of America Cordilleran Section Meeting, Vancouver, Canada, Abstracts with Programs, Vol. 32, No. 6, p. 61.
- Alsleben, H.**, Miller, R.B., and Paterson, S.R., 1999, Kinematic significance of mineral lineations and strain partitioning in Mid- to Deep-crustal Rocks, Swakane Terrane, North Cascades, WA, in Geological Society of America Cordilleran Section Meeting, Berkeley, CA, Abstracts with Programs, Vol. 31, No. 6, p. 34.
- Alsleben, H.**, Miller, R.B., and Paterson, S.R., 1998, Kinematic and folding history of the mid- to deep crustal levels of an arc: Swakane terrane, North Cascades, Washington, in Geological Association of Canada NUNA Conference, Canadian Tectonic Studies Group, 18th Annual Meeting, Abstract with Programs.
- Miller, R.B., Paterson, S.R., **Alsleben, H.**, Lebit, H., and Luneburg, C., 1998, Rheology of the mid- to deep crustal section of an arc, North Cascades, Washington, in Geological Association of Canada NUNA Conference, Canadian Tectonic Studies Group, 18th Annual Meeting, Abstract with Programs.

Paterson, S.R., Miller, R.B., Lebit, H., **Alsleben, H.**, and Luneburg, C., 1998, Variable mechanical controls on meso-scale kinematics in the mid-crust, Cascades core, Washington, in Geological Association of Canada NUNA Conference, Canadian Tectonic Studies Group, 18th Annual Meeting, Abstract with Programs.

Other

Alsleben, H., 2005, Changing characteristics of deformation, sedimentation, and magmatism as a result of island arc-continent collision, Unpublished Ph.D. dissertation, University of Southern California, 360p.

Alsleben, H., 2000, Structural analysis of the Swakane terrane, North Cascades core, Washington, Unpublished M.S. Thesis, San Jose State University, 168p.

Alsleben, H., 2000, Atlas of Minerals in Thin Section, Unpublished manual for San Jose State University Mineralogy class, 117p.

c. Materials accepted or scheduled but not yet printed, released, or presented

Refereed publications

Alsleben, H., Wetmore, P.H., and Paterson, S.R., 2012, Structural evidence for mid-Cretaceous suturing of the Alisitos arc to North America from the Sierra Calamajue, Baja California, Mexico, *in* Morton, D.M., ed., Petrogenesis of the Peninsular Ranges batholith, southern and Baja California: Geological Society of America – Memoir (*in press*).

Schmidt, K.L., **Alsleben, H.**, Paterson, S.R., Wetmore, P.H., 2012, Mesozoic tectonic evolution of the southern Peninsular Ranges batholith, Baja California, Mexico: long-lived history of a collisional segment in the Mesozoic Cordilleran arc, *in* Morton, D.M., ed., Petrogenesis of the Peninsular Ranges batholith, southern and Baja California: Geological Society of America – Memoir (*in press*).

Wetmore, P.H., Hughes, S., Stremtan, C., Ducea, M., and **Alsleben, H.**, 2012, The Tectonic Implications of Post-Contractional Magmatism of the Alisitos Arc Segment of the Peninsular Ranges, Baja California, Mexico, *in* Morton, D.M., ed., Petrogenesis of the Peninsular Ranges batholith, southern and Baja California: Geological Society of America – Memoir (*in press*).

Abstracts of Presentations at Professional Meetings

N/A

d. Materials under active review

N/A

e. Papers presented at scholarly meetings (including date, place, and sponsor of meeting)

Alsleben, H., Busbey, A.B., Flowers, R., Harris, S., Martin, N., James, C., Simanek, E., 2012, Dance of the Continents – Teaching Plate Tectonics through Dance, Geological Society of America Annual Meeting in Charlotte, NC, Sunday, November 4, 2012.

Alsleben, H., Busbey, A.B., Hanson, R.E., Harris, S., James, C., Simanek, E., 2012, The Pangea Mat and Cutter – a new, in-class teaching tool to discover plate tectonics, Geological Society of America Annual Meeting in Charlotte, NC, Sunday, November 4, 2012.

Alsleben, H., Kretzer*, C.S., Cage*, W.R., Madsen*, S.R., and Wetmore, P.H., 2010, Evidence for transtensional deformation and transfer of normal slip along the western segment of the Agua Blanca fault, Baja California, Mexico, Geological Society of America Annual Meeting in Denver, CO, Monday, 1 November 2010.

Alsleben, H., Wetmore, P.H., and Paterson, S.R., 2009, Mid-Cretaceous suturing of the Alisitos arc to North America – Structural evidence from the Sierra Calamajue, Peninsular Ranges batholith, Baja California, Mexico, Geological Society of America Annual Meeting in Portland, OR, Sunday, 18 October 2009.

Alsleben, H., Wetmore, P.H., Schmidt, K.L., and Paterson, S.R., 2009, Enigmatic Jurassic forearc magmatism in the Peninsular Ranges batholith, Baja California and its relationship to the Nazas arc,

- Geological Society of America South-Central Section Annual Meeting in Dallas, TX, Tuesday, 17 March 2009.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., and Paterson, S.R., 2008, Estimates of Strain Rates and Strain-Related Crustal Thickening from the Alisitos Arc-Continent Collision Zone, Peninsular Ranges, Baja California, Mexico, Geological Society of America Annual Meeting in Houston, TX, Wednesday, 8 October 2008.
- Alsleben, H.**, Wetmore, P.H., Ducea, M.N., Gehrels, G.E., Tutak, F., Pignotta, G., and Paterson, S.R., 2007, Early Cretaceous suturing of the Alisitos volcanic arc to North America and the role of the Ancestral Agua Blanca Fault in the Western Peninsular Ranges of Baja California, Mexico, Geological Society of America Annual Meeting in Denver, CO, Monday, 29 October 2007.
- Alsleben, H.**, and Wetmore, P.H., 2006, New structural constraints on the collision of the Alisitos arc with North America from the Colonet area, Peninsular Ranges batholith, Baja California, MX, Geological Society of America Annual Meeting in Philadelphia, PA, Tuesday, 24 October 2006.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., Gehrels, G.E., and Paterson, S.R., 2006, The Peninsular Ranges batholith: A link between the western and southern margin of North America, Geological Society of America South-Central Section Annual Meeting in Norman, OK, Monday, 6 March 2006.
- Alsleben, H.**, Wetmore, P.H., Gehrels, G.E., and Paterson, S.R., 2005, Using detrital zircon geochronology to track island arc collision, Geological Society of America Annual Meeting in Salt Lake City, UT, Wednesday, 19 October 2005.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., and Paterson, S.R., 2005, Factors controlling along-strike variations in a fold-thrust belt formed during collision of the Alisitos arc, Peninsular Ranges, Baja California, MX, VII International Meeting on the Geology of the Baja California Peninsula: Ensenada, Baja California, MX, Wednesday, 6 April 2005.
- Alsleben, H.**, Wetmore, P.H., and Paterson, S. R., 2004, An intra-arc strain gradient as a result of arc-continent collision – quantifying finite strain in the Alisitos arc, Peninsular Ranges, Baja California, Geological Society of America Annual Meeting in Denver, CO, Monday, November 8, 2004.
- Alsleben, H.**, Wetmore, P.H., Schmidt, K.L., Gehrels, G.E., and Paterson, S. R., 2003, Temporal and spatial constraints on suturing of the Cretaceous Alisitos island arc to North America, Peninsular Ranges batholith, Baja California, Geological Society of America Annual Meeting in Seattle, WA, Sunday, November 2, 2003.
- Alsleben, H.**, and Paterson, S.R., 2003, Unraveling displacement fields in arcs: An example from the Peninsular Ranges batholith, Geological Society of America, Cordilleran Section Meeting in Puerto Vallarta, MX, Thursday, April 3, 2003.
- Alsleben, H.**, Gehrels, G.E., Paterson, S.R., 2002, Characterization of the Cretaceous collision zone between the western and eastern Peninsular Ranges batholith in the Sierra Calamajue, Baja California Norte, Mexico, Geological Society of America Annual Meeting in Denver, CO, Sunday, October 27, 2002.
- Alsleben, H.**, Paterson, S.R., 2002, Deep-water sediments in the Sierra La Josephina – Insights into lithologic and structural complexities and possible correlation, VI Reunión Internacional sobre Geología de la Península de Baja California, La Paz, Baja California Sur, MX, Saturday, April 6, 2002.
- Alsleben, H.**, Miller, R.B., and Paterson, S.R., 1999, Kinematic significance of mineral lineations and strain partitioning in Mid- to Deep-crustal Rocks, Swakane Terrane, North Cascades, WA, Geological Society of America Cordilleran Section Meeting in Berkeley, CA, June 2-4, 1999.
- Alsleben, H.**, Miller, R.B., and Paterson, S.R., 1998, Kinematic and folding history of the mid- to deep crustal levels of an arc: Swakane terrane, North Cascades, Washington, Geological Association of Canada NUNA Conference, Canadian Tectonic Studies Group in Canmore, Alberta, Canada, September 26-28, 1998.

16. Editorship, consultantships, professional and creative activities, and professional engagements.
2007-Present Reviewer for National Science Foundation (Tectonics Program)

2007-Present Reviewer for Journal of Asian Earth Sciences, Canadian Journal Earth Sciences & Geology

2012 Invited guest speaker at the Society of Independent Professional Earth Scientists (SIPES) on Wednesday, October 3, 2012. Title of the presentation: “Predicting fracability in shale reservoirs”

2012 Presentation at the Fort Worth Museum of Science and History on September 8, 2012 titled “The Ring of Fire and how Texas fits in the story”

2012 Invited presentation at The University of Texas at Arlington Earth & Environmental Sciences Department on September 6th, 2012 (Title: The Agua Blanca fault in Baja California and its role in the Pacific-North American plate boundary system).

2012 Completed ½-Day workshop on using DrillingInfo Database in Dallas, Texas on June 15th

2012 Completed 3-Day workshop “Structural Modelling and Analysis using MOVE” in Houston, Texas from April 30th to May 2nd.

2012 Participated in 1-day workshop “TCU: The Creative University” celebrating and exploring creativity held on TCU Campus on April 19, 2012.

2012 Completed 5-Day course “Applied Subsurface Geological Mapping” by SCA held in Dallas, Texas from February 20-24, 2012.

2012 Scientific advisor for “Dance of the Continents 2” project led by Eric Simanek (TCU Chemistry)

2011 Invited Seminar speaker at Tulsa University (Wednesday, November 9, 2011)

2011 Organized visit by Green Chair Dr. Mark Zoback (Stanford University) on October 24/25, 2011

2011 Invited guest speaker at the Fort Worth Geological Society (Monday, October 10, 2011)

2011 Co-author of “Predicting Fracability in Shale Reservoirs” by Breyer, Alsleben, and Enderlin presented at AAPG Geosciences Technology Workshop - U.S. Shale Plays in Ft. Worth, TX (August 2-4, 2011).

2011 Participated in SWS-AAPG short course “Paleogeographic and Paleotectonic Maps – Use, Construction, Interpretation and Example” by Dr. Ron Blakey held at TCU on January 11, 2011

2010 Outside peer-reviewer of research activity for tenure and promotion applicant

2010 Conducted four weeks of field work in Big Bend region of West Texas.

2009 Consulting job for Matador Resources in collaboration with Dr. John Breyer

2009 Co-Convener of Technical Session “The Mesozoic and Cenozoic Tectonic Evolution of Northwestern Mexico and the Southwestern United States” at the Geological Society of America Annual Meeting in Portland, OR in 2009.

2009 Conducted four weeks of field work in Baja California, MX

2009 Participated in TCU Energy Institute organized 2-day Shale Resource Workshop held at TCU on January 14 & 15, 2009

2008 Participated in one-day workshop: “*On the Cutting Edge - Teaching Petrology and Structural Geology in the 21st Century*” during Geological Society of America Annual Meeting in Houston.

2008 Conducted four weeks of field work in Baja California, MX

2007 Participated in TCU Energy Institute organized Short Course: “Sequence Stratigraphy: History, Theory and Applications” by Dr. Janok Battacharya on December 7th, 2007.

2007 Two-weeks laboratory work in the paleomagnetism lab at the University of Southern California in collaboration with Dr. S. Lund.

2007 Conducted four weeks of field work in Baja California, MX

2006 Invited seminar talk at The University of Texas at Arlington Earth & Environmental Sciences Department on September 7th, 2006 (Title: Tectonic evolution of continental

- margins: An example from the Peninsular Ranges batholith of southern and Baja California).
- 2006 Conducted four weeks of field work in Baja California, MX
- 2006 Two-week trip to Madre de Dios, southeastern Peru in collaboration with Dr. Muttiyah and BRIT
- 2004 Workshop participant Integrated Solid Earth Science (ISES) Forum II (San Francisco, CA)

17. Academic advising activities

- 2012-present Faculty mentor for Daniel Woodworth (completing undergraduate research project)
- 2010-present Graduate Director, School of Geology, Energy, and the Environment. Out of a total of 39 graduate students in GEE, there are currently 22 M.S. graduate students enrolled in the geology graduate program, which is roughly a threefold increase since beginning as the graduate advisor in the spring of 2007.
- 2007-2010 Graduate Advisor, Department of Geology, TCU.
- 2009-2010 Faculty mentor for Ella Angue (completed SERC funded undergraduate research project)
- 2007-2008 Faculty mentor for Dave McCleery (completed SERC funded undergraduate research project)

18. Departmental service

- 2012-present Member of SGEE Research and Travel committee
- 2012-present Member of Faculty Search Committee
- 2011-2012 Member of Faculty Search Committee (position was not filled)
- 2010/2011 Member of Faculty Search Committee (hired Dr. John Holbrook)
- 2007-present Teaching assistant coordinator for geology
- 2010-present Member of Amy Eschberger's thesis committee
- 2010-present Member of Jonathon Roberts' thesis committee
- 2008-present Member of David McCleery's thesis committee
- 2007-present Member of Shane Finegan's thesis committee
- 2009-2011 Member of Josh Kuhn's thesis committee (Graduated December 2011)
- 2007-2009 Member of Rachael Monroe's thesis committee (Graduated May 2009)
- 2007-2009 Member of William Hasler's thesis committee (Graduated May 2009)
- 2006-2009 Member of Michael Steed's thesis committee (Graduated May 2009)
- 2007-2008 Member of Taylor Bartholomew's thesis committee (Graduated December 2008)
- 2005-2007 Member of Philip Bunting's thesis committee (Graduated May 2007)
- Member of Jennifer Buford's thesis committee (inactive)

19. College service

- Departmental representative on the CSE Chemical Safety Committee

20. University service

- Member of International Students Committee during 2008/2009 academic year

21. Community activities directly related to professional skills

- On-the-air interview by local TV channel (CBS-Channel 11) about North Texas Earthquakes that occurred in June 2012
- On-the-air interview by local TV channels (CW 33 and ABC-Channel 8) about North Texas Earthquakes that occurred on October 31 and November 1, 2008
- Interviewed by Skiff reporter Lauren Rausch about "Scientists for a Responsible Curriculum in Texas Public Schools" statement by the 21st-Century Science Coalition (published 11/25/08)

22. Memberships in professional organizations

Member of:

- Geological Society of America (GSA)
- American Geophysical Union (AGU)
- Association of American Petroleum Geologists (AAPG)
- Fort Worth Geological Society
- National Geographic Society

23. Professionally related Honors and Awards

- Invited abstract by Breyer, Alsleben, and Enderlin for “*Best of Hedberg*” session at the annual AAPG conference in Houston in 2011.
- Extended abstract by Breyer, Alsleben, and Enderlin presented at Hedberg Research Conference, which was a cutting-edge research conference titled: “Critical Assessment of Shale Resource Plays” arranged by multiple organizations (AAPG / SPE / SEG / SPWLA)
- College of Letters, Arts, and Sciences, Final Year Dissertation Fellowship, 2004/2005
- College of Letters, Arts, and Sciences, Outstanding Teaching Assistant, Fall 2002
- Department of Earth Sciences, Outstanding Teaching Assistant Award - Spring 2003
- Department of Earth Sciences, Outstanding Teaching Assistant Award – Fall 2002
- Department of Earth Sciences, Outstanding Teaching Assistant Award – Spring 2002
- Department of Earth Sciences, Outstanding Teaching Assistant Award – Fall 2001
- Department of Earth Sciences, Outstanding Teaching Assistant Award –Spring 2001 (Honorable mention)
- Nominated by College of Science for SJSU Outstanding Thesis Award 2000

24. Other professionally related activities not included in any of above categories

- Regular participant and attendee at Fort Worth Geological Society Meetings.
- GSA Campus representative (2011 to present)
- Attended/participated in NSF workshop (Fund your science) and Town Hall meeting for Early Career Researchers (met NSF Program Directors) at Geological Society of America Annual Meeting in 2005, Salt Lake City, UT
- Attendee at American Geophysical Union Annual Fall Meeting 2004
- Attendee at Geological Society of America Cordilleran Section meeting 2000
- Attendee at American Geophysical Union Annual Fall Meeting 1997

25. Other activities

Academic year 2005/2006

- Participated in Faculty/Student meet ‘n’ greet (Tuesday 11/1/05)
- Participated in annual departmental field trip to Big Bend National Park (January 2006)
- Participated in “House Calls” program (Tuesday 2/21/06)
- Participated in Graduation ceremony (Saturday, May 13, 2006)

Academic year 2006/2007

- Participated in “Common Reading” program (Friday, 8/18/06)
- Participated in Major/Minor Fair (Monday, October 30, 2006)
- Participated in “House Calls” program (Wednesday, November, 1, 2006)
- Participated in 28th Annual Late Night Breakfast (Tuesday, December 12, 2006)
- Participated in Graduation ceremony (Saturday, December 16, 2006)
- Participated in Graduation ceremony (Saturday, May 12, 2007)
- Frog Camp – Challenge B (August 11 through August 13, 2007)

Academic year 2007/2008

- Graduation ceremony (Saturday, December 15, 2007)
- Graduation ceremony (Saturday, May 10, 2008)

Academic Year 2008/2009

- Department Field trip to Texas Hill Country (September 26-28)
- Graduation ceremony (Saturday, December 20, 2008)
- Graduation ceremony (Saturday, May 9, 2009)

Academic Year 2009/2010

- Co-led (with Dr. J. Breyer) Department Field trip to Ouachita Mountains, AR and Beaver Bend State Park, OK (October 11-13, 2009)
- Graduation ceremony (Saturday, December 19, 2009)
- Participated in Department Field trip to Big Bend National Park (January 4-8, 2010)
- Graduation ceremony (Saturday, May 8, 2010)

Academic Year 2010/2011

- Participated in Department Field trip to Guadalupe Mountains and Carlsbad Cavern National Parks in TX and NM (August 15-20, 2010)
- Attended CSE Advisor Workshop by Drs. Rinewalt and Rittby on October 29, 2010
- Graduation ceremony December 18, 2010
- Participated in SGEE Field trip to Big Bend National Park (January 3-7, 2011)

Academic Year 2011/2012

- TCU representative at Chesapeake University Partner's Day (July 19-20, 2011)
- RCAF-funded fieldwork in Northern Sierra Nevada (July 30 – August 13)
- Organized (but could not attend) Field Trip to Guadalupe Mountains in New Mexico and West Texas (August 15-19)
- Guest lecture in John Fanchi's ENGR 40223 Petroleum Reservoir Management course (Thursday, Sept 1)
- Helped Dr. Eric Simanek (Chemistry) with content on his educational outreach programs on Plate Tectonics
- Faculty Marshall at Graduation ceremony December 17, 2011
- Co-leader Big Bend Field Trip, January 9-13, 2012
- Participated in trip to New York City (January 21-23) led by Eric Simanek (Chemistry) for students involved in the Dance of the Continents project.
- Faculty Marshall at Graduation ceremony May 12, 2012
- Interviewed by local TV channel (CBS-Channel 11) on June 26, 2012 about North Texas Earthquakes that occurred in Johnson County

Academic Year 2012/2013

- Attended "The Outlook for Energy: A View to 2040" on Thursday August 30th with Todd Onderdonk, presented by the Tandy Center for Executive Education.
- Participated in "Teaching and Learning Conversation" with Nowell Donovan on October 11, 2012
- Attended TCU Energy Networking Night in the Kelley Center on October 2, 2012
- Attended on campus BP Presentation on October 19, 2012
- Attended Koehler Center Event: "Using Clickers to Enhance Student Learning" by Tim Stelzer on November 9, 2012