

ELIZABETH JACQUELINE CATLOS

University of Texas at Austin, Jackson School of Geosciences, Dept. Geological Sciences
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PROFESSIONAL EXPERIENCE:

2008- Associate Professor, UT Austin
2001- 2008 Oklahoma State University (Assistant-Associate Professor)
Jan. 2001-Aug. 2001 University of California, Los Angeles, Dept. Earth and Space Sciences/Smithsonian Museum of Natural History, Dept. Mineral Sciences (Postdoctoral research)

Visiting Appointments

Fall 2017 Max Kade Distinguished Visiting Professor, Univ. of Heidelberg, Germany
Summer 2015 Visiting Researcher, Dept. of Earth and Space Sciences UCLA
2008-2009 Senior Lecturer, Fulbright Program, Middle East Technical University (METU), Ankara, Turkey
2007- 2008 Visiting Faculty, UT Austin (Donald D. Harrington Fellow)

EDUCATION:

Ph.D.	2000	University of California Los Angeles	Geochemistry
Phil. Cand.	1999	University of California Los Angeles	Geochemistry
B.Sc.	1994	University of California, San Diego	Chemistry w/ Spec. Earth Science

RESEARCH INTERESTS:

Developing and applying petrochemical and geochemical techniques to the study of lithosphere dynamics; models for heat, mass, and fluid flow along tectonic structures; applying mineral equilibria to estimate environmental conditions during dynamic recrystallization; accessory mineral geochronology and developing techniques for isotopic microanalysis.

FELLOWSHIPS AND AWARDS:

Research

- 2017: Max Kade Distinguished Visiting Professorship, Univ. of Heidelberg, Germany
- 2013: Notable Paper American Mineralogist Catlos, E.J. (2013) Generalizations about monazite: Implications for geochronologic studies. American Mineralogist, 98, 819–832.
- 2008-2009: Fulbright Lecturing Award, Middle East Technical University, Turkey
- 2007: Fellow of the Geological Society of America
- 2007: Young Innovator, Smithsonian Magazine
- 2007-2008: UT Austin Donald D. Harrington Fellowship
- 2006: Geological Society of America's Young Scientist Award (Donath Medal)
- 2000: UCLA Fellow of the Institute of Geophysics and Planetary Physics
- 1997: Predoctoral Fellowship, Smithsonian Institution
- 1994: Undergraduate Summer Research Fellowship, NASA

Teaching

- 2015: Carolyn G. and G. Moses Knebel Teaching Award for Introductory Course (GEO401)
- 2011: Texas Exes Teaching Award

Service

- 2013-2017: Elected Councilor for the Geological Society of America
- 2017: Jackson School Outstanding Service Award: Department of Geological Sciences Female Faculty as a team for their work towards improving JSG workplace environment
- 2015: Outstanding Reviewer for Earth and Planetary Science Letters, Elsevier

- 2006: Oklahoma State University College of Arts and Sciences Junior Faculty Award
- 2006: Outstanding Reviewer for Geological Society of America Bulletin

RESEARCH PROJECTS:

Funded External

- 06/1/15, 36 months, National Science Foundation, International. *IREES: Closing Oceans: Assessing the Dynamics of Turkish suture zones*, PI Catlos with Co-PIs Elliott, Kyle. Amount \$249,991.
- 0/1/15, 36 months, TUBITAK (Turkish Research Council) *Link Between Mineralization in Magmatic-Hydrothermal Systems associated with Granitoid Intrusions in NE of Yenice (Çanakkale, Biga Peninsula)* PI Tolga Oyman with co-PIs Catlos and Melanie Kaliwoda. Amount 300,008YTL.
- 01/01/08-12/31/12: NSF, International. *International: Research Opportunities in Extensional Dynamics for US Undergraduate and Graduate Geosciences Students in Western Turkey* PI Catlos with collaborators Cemen, Atekwana, Amount \$150,000.
- 02/01/05-01/31/08: NSF, Tectonics. *Collaborative Research: Extensional Unroofing of the Central Menderes Metamorphic Complex, Southwestern Turkey.* PI Catlos with Co-PIs Cemen, Kohn, Amount: \$216,917.
- 8/1/02-8/31/05: NSF, International, *International: Investigation of activity along the Himalayan Main Central Thrust: Present Geomorphology and past Slip, Garhwal, NW India* PI Catlos with Co-PIs Marston, Dubey. Amount: \$36,000.
- 6/1/02-5/31/05, NSF, Astronomy. *Subcontract from New Frontiers-Research Experience for Undergraduates in the Space and Planetary Sciences* PI: Marston with Co-PI Catlos, Subcontract from Award 0138942. Amount: \$70,770.

Funded Internal

- 2018-2019 *Global Classrooms Curriculum Integration Grant*: UT Austin, International Office, with Axel Schmitt, Heidelberg University. Amount \$6,500
- 2014: Jackson School Seed Grant: *Ion microprobe stable isotope analyses of fracture-filling cement—implications for basin structural and pore fluid evolution in unconventional oil and gas reservoirs.* PI Catlos with Eichhubl. Amount \$20,173.
- 2014: Jackson School of Geosciences Equipment Matching Program: *Funds for the Repair of the Dept. of Geological Sciences Bench-Top Cathodoluminescence System.* PI Catlos, Kyle, Milliken, Martindale, Kerans, Breecker, Quinn. Amount, \$11,387.
- 2012: Jackson School of Geosciences Equipment Matching Program: *Funds for the Repair of the Dept. of Geological Sciences Bench-Top Cathodoluminescence System.* PI Catlos with Kyle and Milliken. Amount, \$6,718.

Student Funding

- Geological Society of America South Central Section Undergraduate Research Grants (\$1,300 total): Kimberly Aguilera (\$500); Stephanie Suarez (\$500), Daniel Lizzardo-McPherson (\$300)
- UT Austin Undergraduate Research Fellowships with match from the Jackson School (\$2000 each, 7 total, Total Amount: \$15,000): 2016: Emily Pease; 2015: Colin Sturrock; 2014, Bridget Pettit, Colin Sturrock, Abby Kenigsberg; 2012: Lindsey German, Pamela Speciale, 2010: Tim Shin
- UT Austin International Office, Global Research Fellowship: Thomas Etzel (\$5000)

PUBLICATIONS:

	All	Since 2013
Citations	2584	952

h-index	20	18
i10-index	26	21

Peer-reviewed publications

^u author is an undergraduate student under my direct supervision

^g author is a graduate student under my direct supervision

1. **Catlos, E.J.**, Lovera, O.M., Kelly, E.D., Ashley, K.T., Harrison, T.M., Etzel, T. (in review, Tectonics) Modeling High-resolution Pressure-Temperature Paths across the Himalayan Main Central Thrust (central Nepal): Implications for the Dynamics of Collision.
2. **Catlos, E.J.** and Miller, N.R. (2017) Speculations Linking Monazite Compositions to Origin: Llallagua Tin Ore Deposit (Bolivia). For Special Issue “Criticality of the Rare Earth Elements: Current and Future Sources and Recycling.” Resources, 6(3), 36; doi:10.3390/resources6030036.
3. Suarez, S.^u, Brookfield, M., **Catlos, E.J.**, Stockli, D. (2017). A U-Pb zircon age constraint on the oldest-recorded air-breathing land animal. PLoS One 12 (6), e0179262.
4. Sturrock, C.P.^u, **Catlos, E.J.**, Miller, N.R., Akgun, A., Fall, A., Gabtov, R., Yilmaz, I.O, Larson, T. Black, K. (2017) Fluids along the North Anatolian Fault, Niksar Basin, north central Turkey: Insight from stable isotopic and geochemical analysis of calcite veins. Journal of Structural Geology, 101, 58-79.
5. **Catlos, E.J.**, Miller, N.M. (2016) Ion microprobe ²⁰⁸Th-²⁰⁸Pb ages from the high common Pb Amelia pegmatite monazite, Virginia: Implications for Alleghanian tectonics. American Journal of Science, 316, 470-503.
6. **Catlos, E.J.**, Reyes, E.^u, Brookfield, M., Stockli, D.F. (2016) Age and Emplacement of the Permian-Jurassic Menghai Batholith, Western Yunnan, China. International Geology Review, p. 1-27. dx.doi.org/10.1080/00206814.2016.1237312
7. **Catlos, E.J.**, Friedrich, A.M., Lay, T., Elliott, J., Carena, S., Upreti, B.N., DeCelles, P., Tucker, B., Bendick, R. (2016) Nepal at Risk: Interdisciplinary Lessons Learned from the April 2015 Nepal (Gorkha) Earthquake and Future Concerns. GSA Today.
8. Azizi, H., Najari, M., Asahara, Y., **Catlos, E.J.**, Shimizu, M., Yamamoto, K. (2015) U-Pb zircon ages and geochemistry of Kangareh and Taghiabad mafic bodies in northern Sanandaj-Sirjan Zone, Iran: Evidence for intra-oceanic arc and back-arc tectonic regime in Late Jurassic. Tectonics. DOI:10.1016/j.tecto.2015.08.008
9. Speciale, P.^u, **Catlos, E.J.**, Yildiz, G.O., Shin, T.A., Black, K.N. (2014) Zircon Ages of the Bey pazari Granitoid Pluton (North Central Turkey): Tectonic Implications. Geodinamica Acta. DOI: 10.1080/09853111.2013.858955 [INVITED]
10. **Catlos, E.J.**, Huber, K.^g, Shin, T.A.^u (2013) Geochemistry and geochronology of meta-igneous rocks from the Tokat Massif, north-central Turkey: implications for Tethyan reconstructions. International Journal of Earth Sciences (Impact Factor: 2.26). DOI: 10.1007/s00531-013-0918-0
11. Shin, T.A.^u, **Catlos, E.J.**, Jacob, L.^g, Black, K.^g (2013) Relationships between very high pressure subduction complex assemblages and intrusive granitoids in the Tavşanlı Zone, Sivrihisar Massif, central Anatolia. Tectonophysics, 595-596:183-197. DOI: 10.1016/j.tecto.2012.07.012. [INVITED]
12. Black, K.N.^g, **Catlos, E.J.**, Oyman, T. (2013) Timing Aegean extension: Evidence from in situ U–Pb geochronology and cathodoluminescence imaging of granitoids from NW Turkey (Special Issue: Geodynamics and Magmatism). Lithos. DOI: 10.1016/j.lithos.2013.09.001
13. **Catlos, E.J.** (2013) Generalizations about monazite: Implications for geochronologic studies. American Mineralogist (Impact Factor: 2.2). 01/2013; 98:819-832. DOI: 10.2138/am.2013.4336. [INVITED, also Notable Paper Award from the journal]
14. **Catlos, E.J.**, Jacob, L.^g, Oyman, T., Sorensen S.S. (2012) Long-term exhumation of an Aegean metamorphic core complex granitoids in the northern Menderes Massif, western Turkey. American Journal of Science, 312, 534-571.
15. **Catlos, E.J.**, Baker, C.^g, Sorensen, S.S., Jacob, L., Cemen, I. (2011) Linking microcracks and mineral zoning of detachment-exhumed granites to their tectonomagmatic history: Evidence from the Salihli

- and Turgutlu plutons in western Turkey (Menderes Massif), *Journal of Structural Geology*, 33, 951-969.
16. **Catlos, E.J.**, Sayit, K., Sivasubramanian, P., Dubey, C.S. (2011) Geochemical and geochronological data from charnockites and anorthosites from India's Kodaikanal-Palani Massif, Southern Granulite Terrain, India. In: *Topics in Igneous Petrology: a tribute to Prof. Mihir K. Bose, Ray, J., Sen, G., Ghosh, B. (Eds.)*, Springer, p. 383-417.
 17. **Catlos, E.J.**, Baker, C.[§], Sorensen, S.S., Cemen, I., Hancer, M. (2010) Geochemistry, geochronology, and cathodoluminescence imagery of the Salihli and Turgutlu granites (central Menderes Massif, western Turkey): Implications for Aegean tectonics. *Tectonophysics*, 488, 110-130.
 18. Belley, F., Ferre, E.C., Martin-Hernandez, F., Jackson, M.J., Dyar, M.D., **Catlos, E.J.** (2009) The magnetic properties of natural and synthetic (Fex, Mg_{1-x})₂SiO₄ olivines. *Earth and Planetary Science Letters*, 284, 516-526.
 19. **Catlos, E.J.**, Baker, C.B.[§], Cemen, I., Ozerdem, C.[§] (2008) Whole rock major element influences on monazite growth: examples from igneous and metamorphic rocks in the Menderes Massif, western Turkey. *Mineralogia*, 38, 5-18. [INVITED PAPER for 1st issue of the journal]
 20. **Catlos, E.J.**, Dubey, C.S., Sivasubramanian, P. (2008) Monazite ages from carbonatites and high-grade assemblages along the Kambam Fault Southern Granulite Terrain, South India). *American Mineralogist*, 93, 1230-1244.
 21. **Catlos, E.J.**, Dubey, C.S., Marston, R.A., Harrison, T.M. (2007) Deformation within the Main Central Thrust Shear Zone, Bhagirathi River (NW India): Implications for Himalayan Tectonics. In: *Convergent Margin Terranes and Associated Regions: A tribute to W. G. Ernst. Geological of America Special Paper*, (Eds.) M. Cloos, W. D. Carlson, M. C. Gilbert, J. G. Liou, and S. S. Sorensen. Vol. 419, pp. 135-151. [INVITED]
 22. **Catlos, E.J.**, Cemen, I. (2006) Reply to Whitney and Regnier's comments regarding "Monazite Ages and the Evolution of the Menderes Massif, western Turkey" (*Int J Earth Sci* 94:204-217). *International Journal of Earth Sciences*, 95, 352-354.
 23. Cemen, I., **Catlos, E.J.**, Gogus, O., Ozerdem, C.[§] (2006) Post-Collisional Extensional Tectonics and Exhumation of the Menderes Massif in the Western Anatolia Extended Terrane, Turkey. In: *Post-collisional Tectonics and Magmatism in the Eastern Mediterranean Region. Geological Society of America's Special Paper*, (Ed.) Y. Dilek., 409, 353-379.
 24. Dubey, C.S., **Catlos, E.J.**, Sharma, B.K. (2005) Modeling P-T-t paths constrained by mineral chemistry and monazite dating of metapelites ion relationship to MCT activity in Sikkim, eastern Himalayas. In: H. Thomas (ed.) *Metamorphism and Crustal Evolution: Papers in Honor of Prof. R.S. Sharma*, Atlantic Publishers and Distributors, 250-282.
 25. **Catlos, E.J.**, Cemen, I. (2005) Monazite ages and the evolution of the Menderes Massif, western Turkey. *International Journal of Earth Sciences*, 94, 204-217.
 26. **Catlos, E.J.**, Dubey, C.S., Harrison, T.M., Edwards, M.A. (2004) Late Miocene Movement within the Himalayan Main Central Thrust Shear Zone, Sikkim, NE India. *Journal of Metamorphic Geology*, 22, 207-226.
 27. Bollinger, L., Avouac, J.P., Beyssac, O., **Catlos, E.J.**, Harrison, T.M., Grove, M., Goffe, B., Sapkota, S. (2004) Thermal structure and exhumation history of the lesser Himalaya in central Nepal. *Tectonics*, 23, Art. No. TC5015.
 28. Robinson, D.M., DeCelles, P.G., Garizone, C.N., Pearson, O.N., Harrison, T.M., **Catlos, E.J.** (2003) Kinematic model for the Main Central Thrust in Nepal. *Geology*, 31, 359-362.
 29. **Catlos, E.J.**, Sorensen, S.S. (2003) Phengite-based chronology of K- and Ba-rich fluid flow within two paleosubduction zones. *Science*, 299, 92-95.
 30. **Catlos, E.J.**, Gilley, L.D., Harrison, T.M. (2002) Interpretation of monazite ages obtained via in situ analysis. *Chemical Geology*, 188, 193-215.
 31. **Catlos, E.J.**, Harrison, T.M., Manning, C.E., Grove, M., Rai, S.M., Hubbard, M.S., Upreti, B.N. (2002) Records of the evolution of the Himalayan orogen from in situ Th-Pb ion microprobe dating of monazite: Eastern Nepal and Garhwal. *Journal of Asian Earth Sciences*, 20, 459-479.

32. Harrison, T.M., **Catlos, E.J.**, Montel, J.-M. (2002) U-Th-Pb Dating of Phosphate Minerals. In: J.M. Hughes, M. Kohn and J. Rakovan (Eds.) Phosphates: Geochemical, Geobiological and Materials Importance. Mineralogical Society of America, Washington D.C., pp. 523-558.
33. Kohn, M.J., **Catlos, E.J.**, Ryerson, F.J., Harrison, T.M. (2002) P-T-t path discontinuity in the MCT Zone, central Nepal: Reply. *Geology*, 30, 480-481.
34. **Catlos, E.J.**, Harrison, T.M., Kohn, M.J., Grove, M., Ryerson, F.J., Manning, C.E., Upreti, B.N. (2001) Geochronologic and thermobarometric constraints on the evolution of the Main Central Thrust, central Nepal Himalaya. *Journal of Geophysical Research*, 106, 16177-16204.
35. Kohn, M.J., **Catlos, E.J.**, Ryerson, F.J., Harrison, T.M. (2001) P-T-t path discontinuity in the MCT Zone, central Nepal. *Geology*, 29, 571-574.
36. **Catlos, E.J.**, Sorensen, S.S., Harrison, T.M. (2000) Th-Pb ion-microprobe dating of allanite. *American Mineralogist* 85, 633-648.
37. Harrison, T.M., Grove, M., Lovera, O.M., **Catlos, E.J.**, D'Andrea, J. (1999) The origin of Himalayan anatexis and inverted metamorphism: Models and constraints. *Journal of Asian Earth Sciences* 17, 755-772.
38. Harrison, T.M., Grove, M., Lovera, O.M., **Catlos, E.J.** (1998) A model for the origin of Himalayan anatexis and inverted metamorphism. *Journal of Geophysical Research* 103, 27017-27032.
39. Harrison, T.M., Ryerson, F.J., Le Fort, P., Yin, A., Lovera, O.M., **Catlos, E.J.** (1997) A Late Miocene-Pliocene origin for Central Himalayan inverted metamorphism. *Earth and Planetary Science Letters* 146, E1-E7.

Edited Volumes and Books

1. **Catlos, E.J.** (2016) *Physical Geology Lab Manual*. Great River Learning. ISBN: 9781680751291
2. Hunt, B.B., **Catlos, E.J.** (2013) *Late Cretaceous to Quaternary Strata and Fossils of Texas: Field Excursions Celebrating 125 Years of GSA and Texas Geology*, GSA South-Central Section Meeting, Austin, Texas, April 2013. GSA Field Guides 30, 2013. DOI: 10.1130/9780813700304.
3. **Catlos, E.J.** (2013) *GEO 416k Earth Materials Lab Guide*. Kendall Hunt Publishing, 196pp. ISBN-10: 1465219102.
4. **Catlos, E.J.** (2008) *Donald D Harrington Symposium on the Geology of the Aegean*. IOP Conference Series Earth and Environmental Sciences, 2, doi:10.1088/1755-1315/2/1/011001.

Conference Abstracts:

Available upon request

INVITED PRESENTATIONS (since 2008 only)

- 2017 Heidelberg University, Institute of Earth Sciences
Ludwig Maximilian University of Munich, Dept. Earth and Environmental Sciences
American Geophysical Union, AGU Topical Session
- 2016 Geological Society of America GSA Topical Session
- 2015 Geological Society of America GSA Topical Session
- 2013 Louisiana State University, Dept. Geology and Geophysics
- 2011 UT Austin, Dept. Geological Sciences, Undergraduate Geological Society
- 2010 Pennsylvania State University, Geosciences Department (departmental talk)
Pennsylvania NASA Space Grant Consortium (general talk to broader community)
- 2008 University of Arkansas, Department of Geology
University of Texas at Austin, Texas Earth Science Revolution program

TEACHING PHILOSOPHY:

My teaching objectives are for my students to learn fundamental geoscience contents and to develop their computational, writing, and critical thinking skills. I aim to help my students function as successful geologists, or in the case of non-majors, help them understand how society is affected by geology.

Course Evaluations*UT Austin only*

Semester	Course ID	Course Title (Enrollment)	Instructor Rating (5.0 scale)	Overall Course (5.0 scale)
Introductory geoscience courses				
Spring 2010	GEO 303	Introduction To Geology (195)	3.7	3.8
Spring 2014	GEO 401	Physical Geology (211)	4.4	4.1
Spring 2015	GEO 401	Physical Geology (152)	4.6	4.2
Spring 2016	GEO401	Physical Geology (136)	4.4	4.2
Freshman "Signature" Courses				
Fall 2011	UGS 302	Rocks & Water Of The Mid East (18)	4.3	3.6
Fall 2013	UGS 302	Rocks & Water Of Middle East (18)	4.0	4.1
Earth Materials, second year geoscience majors course				
Fall 2010	GEO 416K	Earth Materials (81)	4.3	4.1
Fall 2012	GEO 416K	Earth Materials (98)	4.2	4.1
Fall 2014	GEO 416K	Earth Materials (95)	4.4	4.2
Fall 2016	GEO416K	Earth Materials (61)	4.0	4.1
Graduate-level geoscience courses				
Spring 2011	GEO 391	Geology Of The Middle East (6)	4.7	4.6
Spring 2012	GEO 391	Geology Of The Middle East (5)	4.6	4.2
Spring 2015	GEO386	Metamorphic Petrology (4)	5.0	5.0
Spring 2017	GEO386	Metamorphic Petrology (7)	4.2	4.0

Courses Elsewhere*Middle East Technical University, Dept. of Geological Engineering (2008-2009)*GEOE105: Introduction to Geological Engineering; GEOE213: Mineralogy; GEOE210: Petrography
*Oklahoma State University (2001-2007)*GEOL1014: Geology and Human Affairs; GEOL2254: Practical Mineralogy; GEOL2364: Elementary
Petrology; GEOL5263: Electron Microprobe Analysis; GEOL4990: Planetary Geology (team taught)**POST-DOCTORAL RESEARCH COLLABORATIONS:**

- 2015- Dr. Kyle Ashley (now Visiting Assistant Professor, Department of Geology and Environmental Science, University of Pittsburgh): inclusion barometry; metamorphic petrology; garnet-bearing assemblages; ongoing collaboration with manuscript in progress; focus on Turkey and Himalayan tectonics.
- 2015- Dr. Nick Dygert (now Assistant Professor, Department of Earth and Planetary Sciences, University of Tennessee Knoxville) geochronology and geochemistry; focus on Himalayan ophiolites; ongoing collaboration with manuscript in progress
- 2015- Dr. Eric Kelly: (now Senior Data Scientist, SparkCognition) Theriak-Domino P-T-t modeling; ongoing collaboration with manuscript in progress; focus on Turkey and Himalayan tectonics

STUDENT RESEARCH ADVISED:**Primary graduate advisor***UT Austin*

- 2016 Andrew Parisi, MS, current
- 2015 Thomas M Etzel, PhD candidate, current
- 2014 Kate Atakturk, MS
- 2013 co-supervised Tim Shin, MS
- 2012 Karen Black, MS
Kathryn Huber, MS
- 2011 Lauren Jacob, MS

Oklahoma State University

2009 Courtney Baker, MS

2004 Cenk Ozerdem, MS

Served, Graduate Committees

2017 Natchanan (Mint) Doungkaew, PhD., and Patrick D Boyd, M.S., UT Austin

2015 Ahmed Alnahwi, PhD, UT Austin

2014 Menal Gupta, PhD Candidate, UT Austin

2013 Migdalys Salazar, PhD., UT Austin and Corinne Wong, PhD., UT Austin

2012 Jessica Errico, M.S., UT Austin and Autumn Kaylor, M.S., UT Austin

Undergraduate Student Research Supervision*UT Austin only*^hJackson School Honor's Research Program Student

2018 Gabriel Villasenor, Thomas Quintero,

2017 Xiafei Zhao, Tyler Fu, Theresa Perez

2016 Emily Pease, Zoe Yin, Ashley Zare, Saloni Tandon

2015 Enrique Reyes, Kimberly Aguilera, Stephanie Suarez, Daniel Lizzardo-McPherson

2014 Colin Sturrock^h, Bridget Pettit, Chelsea H Jones2013 Pamela Speciale^h, Isis Garber2012 Lindsey German^h, Abby Kenigsberg^h, Tyson McKinney2011 Tim Shin^h, Heather Flynn**SERVICE/OUTREACH:****Funding Agencies***NASA*

2017 served on 2 Review Panels (PSTAR and Solar System Workings)

2013-2016 LEAD Science Reviewer, Standing Review Board for NASA Mars Organic Molecule Analyzer–Mass Spectrometer (MOMA-MS).

2011 served on NASA's panel for Mars Science Laboratory Participating Scientist Program.

2010 served on the NASA ROSES 2010 Solicitation for the Astrobiology Science and Technology for Exploring Planets (ASTEP) panel.

served on an Independent Review Team for the MOMA- LDMS

2007 served on NASA's panel for the instruments UREY and MOMA

served on NASA's PIDDP Peer Review Panel

2005 LEAD Science Reviewer for NASA's PIDDP Peer Review Panel

LEAD Science Reviewer for Mars Science Laboratory/Sample Analysis at Mars

served on NASA's Interdisciplinary Exploration Science Review Panel

2004 served on NASA's Mars Science Laboratory Panel.

2003 served on NASA's Mars Instrumentation and Development Panel

National Science Foundation

2010 INVITED participant of NSF's Office of International Science and Engineering Workshop Planning activity to highlight best practices that integrate across multiple dimensions of university internationalization, particularly in science and engineering.

2002 served on NSF's Tectonics Panel

2000-present routinely review proposals from Tectonics, Petrology and Geochemistry, International, Continental Dynamics, Sedimentary Geology and Paleobiology, and Geography and Regional Science Divisions.

Others

- 2001-present Routinely review proposals for the Austrian Science Fund and Research Grants Council of Hong Kong
 2009 reviewer, NIH Challenge Grants in Health and Science Research

Professional Organizations

Selected Geological Society of America (since 2011 only)

- 2013-2017 ELECTED Councilor
 Liaison, Mineralogy, Geochemistry, Petrology, Volcanology Division
 Liaison, Structural Geology and Tectonics Division
 Liaison, Student Advisory Council
 2015 Member, Ad hoc committee focused on interest groups and divisions
 2014-2017 Councilor/Conferee, Diversity in the Geosciences Committee
 2014-2016 Councilor, Doris M. Curtis Memorial Fund for Women in Science Committee
 2009-present Member, Management Board of the South Central Section
 2012-2015 Member-At-Large, Committee for the Donath Medal (Young Scientist Award) Selection
 2013-2016 Councilor/Chair, Arthur L. Day Medal Awards Committee
 2012-2013 Vice Chair and Chair, Management Board of the South Central Section
 2011 INVITED to participate in the GSA Council Retreat: Strategic Planning Sessions

Conference organization

- 2013 Chair, GSA South Central Section Meeting in Austin TX
 2008 Chair “The Donald D. Harrington Symposium on the Geology of the Aegean”

Conference Session co-Chair

- 2017 Co-Chair, GSA South Central Section Meeting “Advances in Understanding Precambrian to Cenozoic Magmatic and Metamorphic Processes and their Bearing on Lithospheric Evolution of Southern Laurentia” with Michael DeAngelis and Richard Hansen
 2016 Co-Chair, GSA Annual Meeting “Rates in Metamorphism and Tectonism: From Mineral Growth to Orogenesis” with Thomas M. Etzel, Eric D. Kelly, and Kyle T. Ashley
 2015 Co-Chair, GSA Annual Meeting “Special Nepal (Gorkha) Earthquake Session” with Anke Friedrich
 2012 Co-Chair, “Advances in Mineralogy and Petrology.” GSA Annual Meeting

UT Austin Service (selected responsibilities)

University

- 2010-present UT Austin Fulbright Student Review Committee
 2013 Review of the Faculty Activities Report (FAR) electronic system
 2013 Served, Selection Committee for UT Austin Faculty-Led Programs for Summer Abroad

School

- 2018-present Diversity Committee
 2015-present Organize Dept. Master’s Saturday
 2014-2017 Member, Jackson School Equipment Committee
 2015 Jackson School Ad Hoc Committee on Strategic Planning for MS and MA Degrees

Department

- 2015-present Organize Dept. DeFord Seminar Series (GEO193T)
 2017 Search committee for Dept. Geological Sciences Office Manager
 2016-present Member, Dept. Geological Sciences Awards Committee
 2015-present Faculty Supervisor of the Dept. of Geological Sciences Electron Microbeam Facility
 2012-2013 Undergraduate Advisor for the Dept. of Geological Sciences Undergraduate Committee, Undergraduate Curriculum Review Committee, Undergraduate Academic Affairs

Committee, Undergraduate Advisor for Environmental Science Institute Environmental Science program, Dept. Representative for the ESI-EVS admissions committee
 2010 Member, Faculty Search Committee for a position in Tectonics and Geochronology
 2010 Member, Faculty Search Committee for a position in Structural Geology and Tectonics
 2010 Supervised the Dept. Petrography Contest

Mentoring Organizations

2013 Workshop for Early Career Geoscience Faculty, On the Cutting Edge
 2013 Presenter for GirlTalk, to promote STEM education/careers for girls
 2009-present UT Austin Campus Representative for the Fulbright Program
 2010-present ELECTED Vice President, Austin Chapter of the Fulbright Alumni Association
 2010-2014 Lead Instructor for GeoFORCE, Jackson School Outreach Program

Textbook Reviews

2011, 2014 INVITED by Pearson Education to a focus group for MasteringGeology™
 2009 Reviewed art for each chapter of “*Living with Earth*,” AGI, Prentice Hall Publishers.
 2009 Developed testbank questions for each chapter of “*Living with Earth*”
 Reviewed critical thinking questions for Prentice Hall Publishers.
 INVITED by Prentice Hall to a focus group on media and assessment in the classroom
 Reviewed of Prentice Hall’s basic skills website application

Manuscript Reviews

2017-2018 (only): Top Reviewer for University of Texas at Austin (2nd overall in Earth and Planetary Sciences) by publons. Reviewed for: *Geology* (2), *Plos One*, *Journal of Geology*, *Earth and Planetary Science Letters* (3), *GSA Today*, *Journal of Geoscience Education*, *Lithosphere*, *Tectonics*, *Journal of Geophysical Research: Solid Earth*

Other service

2017- Editorial Board Member for journal *Episodes*
 2015- Editorial Board Member for *Geodinamica Acta*
 2010 Expert Witness, deposed, 93rd Judicial District, Hidalgo Country, Texas

MEMBERSHIPS IN PROFESSIONAL SOCIETIES:

- Geological Society of America
- Mineralogical Society of America
- European Geosciences Union
- American Geophysical Union