Curriculum Vitae, Peter Zeitler
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Degrees

1983-1987	Postdoctoral training, Isotope Geochemistry Group, Research School of Earth Sciences, Australian National University, Canberra (advisor: Ian McDougall)
1983	Ph.D., Dartmouth College, Hanover, New Hampshire, U.S.A. Thesis: "Uplift and Cooling History of the NW Himalaya, Northern Pakistan–Evidence from Fission-Track and $^{40}Ar/^{39}Ar$ Cooling Ages"
1980	M.A., Dartmouth College. Thesis: "Tectonic Interpretation of Fission-Track Ages from the Himalayan Ranges of Pakistan"
1978	B.A. Cum Laude, Dartmouth College. Thesis: "Tectonic Control and Style of Late-Pliocene Molasse Sedimentation in the Jhelum Area, Pakistan"

Employment History

2007-now	Lehigh University, Bethlehem, Pennsylvania. Professor, Department of Earth & Environmental Sciences Chair 1997-2002 and 2004-2007.
2007-2009	Lehigh University, Bethlehem, Pennsylvania. Director, South Mountain College program
1988-1991	Lehigh University, Bethlehem, Pennsylvania Associate Professor, Department of Earth & Environmental Sciences
1988-1991	Lehigh University, Bethlehem, Pennsylvania Assistant Professor, Department of Geological Sciences
1984-1987	Research School of Earth Sciences, Australian National University, Canberra, Australia Research Fellow in Isotope Geochemistry Group. Research involved $^{40}Ar/^{39}Ar$ and K/Ar dating, and U/Pb dating by ion microprobe
1983-1984	Research School of Earth Sciences, Australian National University. Postdoctoral Fellow in Isotope Geochemistry Group. Research involved $^{40}Ar/^{39}Ar$ dating.
1978-1982	Dartmouth College, Hanover, New Hampshire, USA. Co-instructor of field mapping course; various teaching and research assistantships.
1979-1981	United States Geological Survey, Denver, Colorado. Assistant in fission-track laboratory. Duties involved all aspects of fission-track dating. Duration of employment totaled one year.
1977	Houston Oil and Minerals Corporation, Denver, Colorado. Summer field assistant, precious metal exploration, Nevada.

Honors and Awards

2019	Lehigh University Libsch Research Award
2016	Dodson Prize in thermochronology
2006-2016	Iacocca Professorship
2013-	Fellow, American Geophysical Union

2013 Elsevier "Editorial Excellence Recognition Award" for service to the journal Earth and Planetary Science Letters

Refereed Publications (87 total)

McDannell, K.T., Schneider, D.A., Zeitler, P.K., O'Sullivan, P.B. and Issler, D.R., 2019. Reconstructing deep-time histories from integrated thermochronology: An example from southern Baffin Island, Canada. Terra Nova 31, DOI: 10.1111/ter.12386.

McDannell, K.T., Zeitler, P.K., and Idleman, B.D., 2018. Relict topography within the Hangay Mountains in central Mongolia: Quantifying long-term exhumation and relief change in an old landscape**.** Tectonics, 37(8), 2531-2558, DOI: 10.1029/2017TC004682.

McDannell, K.T., Zeitler, P.K., and Schneider, D.A., 2018. Instability of the southern Canadian Shield during the late Proterozoic. Earth and Planetary Science Letters. 490, 100-109, DOI: 10.1016/j.epsl.2018.03.012.

Ancuta, L.D., Zeitler, P.K., Idleman, B.D., and Jordan, B.T., 2018. Whole-rock $^{40}Ar/^{39}Ar$ geochronology, geochemistry, and stratigraphy of intraplate Cenozoic volcanic rocks, Central Mongolia. Geological Society of America Bulletin, 130 (7-8), 1397-1408, 10.1130/B31788.1

McDannell, K.T., Zeitler, P.K., Janes, D.G., Idleman, B.D., and Fayon, A.K., 2018 (available online 5 December, 2017). Screening apatites for (U-Th)/He thermochronometry via continuous ramped heating: He age components and implications for age dispersion. Geochimica et Cosmochimica Acta, 223, 90-106, 10.1016/j.gca.2017.11.031.

Idleman, B.D., Zeitler, P.K., and McDannell, K.T., 2018 (available online 17 November, 2017). Characterization of helium release from apatite by continuous ramped heating. Chemical Geology, 476, 223-232, 10.1016/j.chemgeo.2017.11.019.

Garcia, V.H., Reiners, P.W., Shuster, D.L., Idleman, B.D., and Zeitler, P.K., 2017 (available online August 15, 2017). Thermochronology of sandstone-hosted secondary Fe- and Mn-oxides near Moab, Utah: Record of paleo−fluid flow along a fault. GSA Bulletin, 130(1-2), 93-113, DOI: 10.1130/B31627.1.

Zeitler, P.K., Enkelmann, E., Thomas, J., Watson, B., and Ancuta, L.D., 2017. Solubility and trapping of helium in apatite. Geochimica et Cosmochimica Acta, 209, 1-8, DOI: 10.1016/j.gca.2017.03.041.

Sahagian, D., Proussevitch, A., Ancuta, L.D., Idleman, B.D., and Zeitler, P.K., 2016. Uplift of central Mongolia recorded in vesicular basalts. Journal of Geology, 124, 435-445, DOI: https://doi.org/10.1086/686272.

Tremblay, M. M., Fox, M., Schmidt, J.L., Tripathy-Lang, A., Wielicki, M.M., Harrison, T.M., Zeitler, P.K., and Shuster, D.L., 2015. Erosion in southern Tibet shut down a ~10 Ma due to enhanced rock uplift within the Himalaya, Proceedings of the National Academy of Sciences, 112(39), 12030-12035, DOI: 10.1073/pnas.1515652112.

Schmidt, J. L., Zeitler, P. K., Pazzaglia, F. J., Tremblay, M. M., Shuster, D. L., and Fox, M., 2015. Knickpoint evolution on the Yarlung river: Evidence for late Cenozoic uplift of the southeastern Tibetan plateau margin. Earth and Planetary Science Letters, 430, 448-457, DOI: 10.1016/j.epsl.2015.08.041.

Zeitler, P.K., Koons, P.O., Hallet, B., and Meltzer, A.S., 2015. Comment on "Tectonic control of Yarlung Tsangpo gorge revealed by a buried canyon in southern Tibet". Science, 349(6250), 799, DOI: 10.1126/science.aaa9380.

Zeitler, P.K., 2014. U-Th:He Dating. In Rink, W.J. and Thompson, J. eds., Encyclopedia of Dating Methods, Springer, 1-14. DOI: 10.1007/978-94-007-6326-5_131-1.

Zeitler, P.K., Meltzer, A.S., Brown, L., Kidd, W.S.F., Lim, C., and Enkelmann, E., 2014. Tectonics and topographic evolution of Namche Barwa and the easternmost Lhasa Block, in Nie, J., Hoke, G.D., and Horton, B., eds., Towards an improved understanding of uplift mechanisms and the elevation history of the Tibetan Plateau. Geological Society of America Special Paper, 507, 23-58, DOI: https://doi.org/10.1130/2014.2507(02).

McKeon, R.E., Zeitler, P.K., Pazzaglia, F.J., Idleman, B.D., Enkelmann, E., 2014. Decay of an old orogen: Inferences about Appalachian landscape evolution from low-temperature thermochronology. Geological Society of America Bulletin, 126, 31-46, DOI: 10.1130/B30808.1.

Koons, P.O., Zeitler, P.K., Hallet, B., 2013. 5.14 Tectonic aneurysms and mountain building. In: Shroder, J. (Editor in Chief), Treatise on Geomorphology. Academic Press, San Diego, CA, vol. 5, pp. 318-349, doi: 10.1016/B978-0-12-374739-6.00094-4.

Enkelmann, E., Ehlers, T.A., Zeitler, P.K., Hallet, B. 2011. Denudation of the Namche Barwa Antiform, Eastern Himalaya. Earth and Planetary Science Letters, 307, 323-333, doi:10.1016/j.epsl.2011.05.004.

Enkelmann, E., Zeitler, P.K., Garver, J.I., Pavlis, T.L., and Hooks, B.P., 2010. The thermochronological record of tectonic and surface process interaction at the Yakutat–North American collision zone in southeast Alaska. American Journal of Science, 310, 231-260., doi: 10.2475/04.2010.01.

Enkelmann, E., Zeitler, P.K., Pavlis, T.L., Garver, J.I., and Ridgway, K.D., 2009. Intense localized rock uplift and erosion in the St Elias orogen of Alaska. Nature Geoscience, 2, p. 360-363. DOI: 10.1038/NGEO502.

Booth, A.L., Chamberlain, C.P., Kidd, W.S.F., Zeitler, P.K., 2009. Constraints on the metamorphic evolution of the eastern Himalayan syntaxis from geochronologic and petrologic studies of Namche Barwa. Geological Society of America Bulletin, v. 121, p. 385-407, doi: 10.1130/B26041.1.

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Finnegan, N.J., Hallet, B., Montgomery, D.R., Zeitler, P.K., Stone, J.O., Anders, A.M., and Liu, Y., 2008. Coupling of rock uplift and river incision in the Namche Barwa-Gyala Peri massif, Tibet. Geological Society of America Bulletin. 120, 142-155 (DOI: 10.1130/B26224.1).

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Harrison, T.M., Grove, M., Lovera, O.M., and Zeitler, P.K., 2005. Continuous thermal histories from inversion of closure profiles, in Low-Temperature Thermochronology: Techniques, Interpretations, and Applications, Reviews in Mineralogy & Geochemistry, v. 58, edited by P.W. Reiners and T.A. Ehlers. pp. 389-409, Mineralogical Society of America, Chantilly, VA.

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Harrison, T.M. and Zeitler, P.K., 2005. Fundamentals of noble gas thermochronometry, in Low-Temperature Thermochronology: Techniques, Interpretations, and Applications, Reviews in Mineralogy & Geochemistry, v. 58, edited by P.W. Reiners and T.A. Ehlers. pp. 123-149, Mineralogical Society of America, Chantilly, VA.

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Zeitler, P.K., Koons, P.O., Bishop, M. L., Chamberlain, C.P., Craw, D., Edwards, M.A., Hamidullah, S., Jan, M.Q., Khan, M.A., Khattak, M.U.K., Kidd, W.S.F., Mackie, R.L., Meltzer, A.S., Park, S.K., Pecher, A., Poage, M.A., Sarker, G., Schneider, D.A., Seeber, L., and Shroder, J., 2001. Crustal Reworking at Nanga Parbat, Pakistan: Evidence for erosional focusing of crustal strain. Tectonics, 20, 712-728.

Schneider, D.A., Zeitler, P.K., Kidd, W.S.F., Edwards, M.A., 2001. Geochronologic constraints on the tectonic evolution and exhumation of Nanga Parbat, western Himalaya syntaxis, revisited. The Journal of Geology, 109, 563-583.

Zeitler, P.K., Meltzer, A.S., Koons, P.O., Craw, D., Hallet, B., Chamberlain, C.P., Kidd, W.S.F., Park, S., Seeber, L., Bishop, M. L., Shroder, J., 2001. Erosion, Himalayan geodynamics, and the geology of metamorphism. GSA Today, 11, 4-8.

Warnock, A.W., Kodama, K.P., and Zeitler, P.K., 2000. Using thermochronometry and low-temperature demagnetization to accurately date Precambrian paleomagnetic poles. Journal of Geophysical Research, 105, 19,435-453.

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Schneider, D.A., Edwards, M.A., Kidd, W.S.F., Zeitler, P.K., and Coath, C., 1999. Early Miocene anatexis identified in the western syntaxis, Pakistan Himalaya. Earth & Planetary Science Letters. 167, 121-129.

Schneider, D.A., Edwards, M.A., Zeitler, P.K., and Coath, C., 1999. Mazeno Pass Pluton and Jutial Granite, Pakistan Himalaya: Age and implications for entrapment mechanisms of two granites in the Himalaya. Contributions to Mineralogy & Petrology. 136, 273-284.

Warnock, A.C. and Zeitler, P.K., 1998. $^{40}Ar/^{39}Ar$ thermochronometry of K-feldspar from the KTB borehole, Germany. Earth and Planetary Science Letters. 158, 67-79.

Warnock, A.C., Zeitler, P.K., Wolf, R.A., and Bergman, S.C., 1997. An evaluation of low-temperature apatite U-Th/He thermochronometry. Geochimica et Cosmochimica Acta. 61, 5371-5377.

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Gorring, M.L., Kay, S.M., Zeitler, P.K., Ramos, V.A., Rubiolo, D., Fernandez, M.I. and Panza, J.L., 1997. Neogene Patagonian plateau lavas: continental magmas associated with ridge collision at the Chile Triple Junction. Tectonics, 16, 1-17.

Craw, D., Chamberlain, C.P., and Zeitler, P.K., 1997. Geochemistry of a dry steam geothermal zone formed during rapid uplift of Nanga Parbat, northern Pakistan. Chemical Geology, 142, 11-22.

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Krol, M., Zeitler, P.K., Poupeau, G., Pecher, A., 1996. Temporal variations in the cooling and denudation history of the Hunza plutonic complex, Karakoram Batholith, revealed by $^{40}Ar/^{39}Ar$ thermochronology. Tectonics, 15, 403-415.

Krol, M.A., Zeitler, P.K., and Copeland, P., 1996. Episodic unroofing of the Kohistan Batholith, Pakistan: Implications from K-feldspar thermochronology. Journal of Geophysical Research, v. 101 (B12), p. 28,149-28164.

Chamberlain, C.P., Zeitler, P.K., and Cooper, A.F., 1996. Geochronological constraints on the uplift and metamorphism along the Alpine Fault, South Island, New Zealand. New Zealand Journal of Geology and Geophysics, 38, 515-524.

Zeitler, P.K., 1996. $^{40}Ar/^{39}Ar$ stepheating analysis of shocked feldspars from the Manson Impact Structure, in The Manson Impact Structure, Iowa: Anatomy of an Impact Crater, C. Koeberl and R. R. Anderson (eds.), Geol. Soc. America Spec. Paper 302, 383-396.

Winslow, D.M., Chamberlain, C.P., Zeitler, P.K., 1995. Metamorphism and melting of the lithosphere due to rapid denudation, Nanga Parbat massif Himalaya. Journal of geology, 103, 395-409. (29)

Vandervoort, D.S., Jordan, T.E., Zeitler, P.K., and Alonso, R.N., 1995. Chronology of internal drainage development and uplift, southern Puna plateau, Argentine central Andes. Geology, 23, 145-148.

Chamberlain, C.P., Zeitler, P.K., Barnett, D.E., Winslow, D., Poulson, S., Leahy, T., and Hammer, J.E., 1995. Active hydrothermal systems during the recent uplift of Nanga Parbat, Pakistan Himalaya. Journal of Geophysical Research, 100, 439-453.

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Winslow, D.M., Zeitler, P.K., and Chamberlain, C.P., 1994. Direct evidence for a steep geotherm under conditions of rapid advection, western Himalaya, Pakistan. Geology, 22, 1075-1078.

Smith, H.A., Chamberlain, C.P., and Zeitler, P.K., 1994. Timing and Duration of Himalayan Metamorphism within the Indian Plate, Northwest Himalaya, Pakistan. Journal of Geology, 102, 493-508.

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Craw, D., Koons, P.O., Winslow, D.M., Chamberlain, C.P., and Zeitler, P.K., 1994. Boiling fluids in a region of rapid uplift, Nanga Parbat Massif, Pakistan, Earth and Planetary Science Letters, 128, 169-182.

Zeitler, P.K., Chamberlain, C.P., and Smith, H.A., 1993. Synchronous anatexis, metamorphism, and rapid denudation at Nanga Parbat (Pakistan Himalaya), Geology, 21, 347-350.

Shaw, R.D., Zeitler, P.K., McDougall, I., and Tingate, P. R., 1992. The Paleozoic history of an unusual intracratonic thrust belt in central Australia based on ^{40}Ar-^{39}Ar, K-Ar and fission track dating, Geological Society of London Journal, 149, 937-954.

Smith, H.A., Chamberlain, C.P., and Zeitler, P.K., 1992. Documentation of Neogene regional metamorphism in the Himalayas of Pakistan using U-Pb in monazite. Earth and Planetary Science Letters, 113, 93-105.

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Other Publications (14 total)

Zeitler, P., Harrison, M., Baldwin, S., Duncan, R., Spell, T., and Wijbrans, J., 2019. Ian McDougall (1935–2018), Eos, 100, https://doi.org/10.1029/2019EO119911. Published on 04 April 2019.

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Recent Grants and Contracts, Active in Past Five Years *(as Lehigh PI or co-PI, $7.61 million through 34 awards)*

National Science Foundation (w/ B. Idleman, Lehigh University, and A. Fayon, Univ. of Minnesota). "Collaborative Research: Impact of crystal defects on He diffusion in apatite." Lehigh budget $141,539. 2017-2020.

National Science Foundation (w/ A. Meltzer, Lehigh University, and other PIs at several institutions). "Collaborative Research: Lhasa Block top to bottom—lithospheric evolution of Asia's leading edge." Lehigh budget $1,114,554 (project budget: $3.1 million). 2011-2018.

National Science Foundation (w/ A. Meltzer, B. Idleman, D. Sahagian, Lehigh University, and other PIs at several institutions). "Collaborative Research: Intracontinental deformation and surface uplift–

Geodynamic evolution of the Hangay Dome, Mongolia, Central Asia." Lehigh budget $1,533,072 (project budget: $2.5 million). 2010-2017.

National Science Foundation (w/ Ph.D. candidate L. Ancuta, Lehigh). "Thermo-chronology and geochemistry of lower crustal xenoliths, central Mongolia: Formation and evolution of the deep crust in an intracontinental setting". $81,532, 12 months, 2014-2015.

Lehigh University Faculty Innovation Grant. "Plenty of nothing: Quantifying the decay of orogens and the birth of stable cratons." $24,777, 12 months, 2013-2014.

National Science Foundation (w/ P. Reiners, Arizona; R. Ketcham, Texas; D. Shuster, Berkeley Geochronology Center). "Collaborative Research. Little Devils Postpile revisited: Intercalibration of thermochronometer kinetics in a contact aureole." Lehigh budget $193,209 (project budget: $362,808). 2011-2015.

National Science Foundation (equipment proposal, w/ B. Idleman, Lehigh). "Upgrade of the noble-gas geochronology laboratory at Lehigh University". $29,025. 2010-2011.

Petroleum Research Fund ('AC' grant. w/ Eva Enkelmann, Lehigh University). "Impacts of fission-track damage on helium diffusion kinetics in apatite and zircon." $89,995. 2007-2009.

National Science Foundation (w/ T. Pavlis, University of New Orleans, and many other PIs at several institutions). "Collaborative research: St. Elias erosion/tectonics project (STEEP)." Lehigh budget $89,504 (project budget: $4.5 million). 2004-2009. $138,000 supplement awarded in 2007.

National Science Foundation (w/ A. Meltzer, Lehigh University, and many other PIs at several institutions; Zeitler is project coordinator). "Collaborative Research: Geodynamics of Indentor Corners." Lehigh budget $1,295,281 (project budget: $2.2 million). 2001-2006.

National Science Foundation. "Incision history of the middle Indus River from (U-Th)/He dating of apatite." $48,171. 2001-2004.

W. M. Keck Foundation (co-PI with lead P.I., A. Meltzer, Lehigh University). "LEO, The Lehigh Earth Observatory." $500,000.

National Science Foundation (w/ D. Anastasio, A. Meltzer, Frank Pazzaglia, Lehigh University). "U.S.-Ecuador Planning Visit: Geodynamics, Active Tectonics, and Geological Hazards in the Northern Andes, Ecuador." $7,000. 1/15/00 - 12/31/00.

National Science Foundation (w/ B. Idleman, Frank Pazzaglia, Lehigh University). "Exhumation and topographic evolution of the post-orogenic Appalachians determined by apatite U-Th/He dating." $197,153. 2000-2004.

National Science Foundation (equipment proposal). "Facility Upgrade: Development of a facility for U-Th/He dating at Lehigh University." $14,883. Funded without review as supplement to existing technician grant.

AT&T Foundation (Industrial Ecology Initiative) (w/ A. Meltzer, Lehigh University). "LEO, The Lehigh Earth Observatory: a proposal for curriculum development." $25,000. 1997-1998.

National Science Foundation (w/ A. Meltzer, Lehigh University; Doug Prose, Earth Images Corporation). "Collaborative Research: Crustal reworking during orogeny: An active-system Himalayan perspective, Nanga Parbat - Newton's Apple television segment." $49,657. 1998-2001.

National Science Foundation (w/ G. Bebout, Lehigh University; equipment proposal). "Technician support: Isotope Geochemistry at Lehigh University." $100,000. 1998-2002.

National Science Foundation (w/ A. Meltzer, Lehigh University). "Supplement: Collaborative Research: Crustal reworking during orogeny: an active-system Himalayan perspective." $128,068. 1999-2000.

National Science Foundation (w/ A. Meltzer, Lehigh University). "REU Support: 'Crustal reworking during orogeny: An active system Himalayan perspective." $10,000. 1997.

National Science Foundation (w/ K. Kodama, Lehigh University). “Simplifying multicomponent magnetizations as an aid in spatially and temporally refining ancient polar wander.” $72,056. 1996-1998.

National Science Foundation (w/ A. Meltzer, Lehigh University, and many other PIs at several institutions; Zeitler was project leader). “Collaborative Research: Crustal reworking during orogeny: an active-system Himalayan perspective.” Lehigh budget $1,067,059 (project budget is approx. $2.1 million). 1996-1998.

National Science Foundation (w/ G. Bebout, Lehigh University). “Facility upgrade: acquisition of a laser microprobe at Lehigh University.” $80,000. 1995-1998.

National Science Foundation (w/ G. Bebout, Lehigh University; equipment proposal). “Technician support: Isotope Geochemistry at Lehigh University.” $120,000. 1995-1998.

National Science Foundation (equipment proposal). “Facility upgrade: automation of $^{40}Ar/^{39}Ar$ analyses at Lehigh University.” $15,000. 1995-1997.

National Science Foundation. “Supplement: Metamorphic evolution of the Nanga Parbat Massif: Metamorphism, fluid flow, and granite genesis.” $12,000. 1994.

National Science Foundation. “$^{40}Ar/^{39}Ar$ dating of feldspars from the KTB deep drill hole: insights into post-orogenic thermal relaxation and Ar diffusion systematics during closure.” $103,349. 1993-1996.

National Science Foundation (w/ M. Steckler, G. Karner, Lamont-Doherty Geophysical Observatory; G. Omaar, University of Pennsylvania). “Constraints on the thermal evolution of the Newark Basin by means of fission-track and $^{40}Ar/^{39}Ar$ thermochronology using drill core data.” $26,404. 1992-1994.

National Science Foundation. "A refined age for the Manson Impact Structure by means of detailed $^{40}Ar/^{39}Ar$ thermochronology of shocked microclines." $39,013. 1992-1993.

National Science Foundation (w/ C. P. Chamberlain, Dartmouth College). “Metamorphic evolution of the Nanga Parbat Massif: Metamorphism, fluid flow, and granite genesis.” $91,917. 1991-1993.

National Science Foundation (w/ P. Copeland, University of Houston). “Precise and detailed uplift history of an orogen: quantitative constraints from $^{40}Ar/^{39}Ar$ and fission-track thermochronometry.” $63,067. 1990-1992.

National Science Foundation (w/ C. P. Chamberlain, Dartmouth College). "Lateral variations in the timing and nature of metamorphism associated with a major terrane boundary in the NW Himalaya." $59,404. 1989-1991.

Petroleum Research Fund (type 'G' starter grant). "Calibration of isotope thermochronometers by means of detailed thermal modelling and geochronological study of a small contact aureole." $18,000. 1988-1990.

National Science Foundation (equipment proposal). "Establishment of a facility for $^{40}Ar/^{39}Ar$ and other noble-gas geochronology." $70,000. 1988-1989.

Professional Affiliations

- American Geophysical Union (elected Fellow in 2013)
- Geochemical Society
- Geological Society of America

Recent Professional Service *(current in italics)*

- Organizing Committee, THERMO2020 – 17th International Conference on Thermochronometry
- 35 proposal or journal articles reviews, past five years, in addition to EAB and ESSOAr work
- *Editorial Board, AGU Advances* (2019 – present)
- *Editorial Board, AGU Earth and Spaces Sciences Archive (ESSOAr)* (2018 – present)
- *Chair, International Standing Committee on Thermochronology,* 2014 – present (member since 2010)

- *Editorial Advisory Board, Earth and Planetary Science Letters* (2007 – present)
- Scientific Steering Committee, THERMO2018 – 16th International Conference on Thermochronometry
- Contributor, "Future Directions in Tectonics" report to NSF (2016-2017)
- Special-Session Convener, 2014, American Geophysical Union, Annual Meeting "Earth System Dynamics of High Elevation Continental Interiors: From the Asthenosphere to the Biosphere." With K. Wegmann (NC State), J. Stachnik (Lehigh), Jeremy Caves (Stanford)

University, College, and Departmental Service Highlights *(current in italics)*

- Elected to Lehigh Faculty Senate in Spring 2018 (2019 –)
- College of Arts and Sciences Policy Committee (2015 – 2018; chair AY1718)
- Established (and maintain) EES web pages, 1995-2003; 2005-2018
- EES Graduate Instruction Committee (2016-2017)
- International Faculty Grant Committee (2011 – 2016)
- EES Faculty Search Committee (2015 – 2016)
- EES Department Graduate Director (2013 – 2015)
- EES Department chair (1997-2002, 2004-2007)

Students and Postdocs

In progress: Hongcheng Guo (Ph.D.), Andrew Spatz (Ph.D.)

Completed:

Jennifer Schmidt (Ph.D. 2018)
Darwin Janes (M.S. 2017; Pearson Education)
Kalin McDannell (Ph.D. 2017; Geological Survey of Canada, Calgary)
Lenny Ancuta (Ph.D. 2016; Golder Environmental Services)
Janelle Thumma (M.S. 2016; Weston Solutions)
Ryan McKeon (Ph.D. 2012; Dartmouth College)
Shayna Boulton (undergrad research 2013)
Matt Groff (undergrad research 2012)
Eva Enkelmann (Postdoc 2005-2009; University of Calgary)
Michael Kutney (M.S. 2006; PA Department of Environmental Protection)
Jeremy Laucks (M.S. 2005)
Molly Malloy (M.S. 2004)
Tom Becker (M.S. 2001; Exxon Mobile)
David Schneider (Ph.D. 1999; University of Ottawa)
Alicia Stanfill (B.S. 1997)
Andrew Warnock (Ph.D. 1997; Colorado State University)
Michael Krol (Ph.D. 1996; Bridgewater State)
David Winslow (Ph.D. 1995; GZA Geoenvironmental)
Lori Warner (B.S. 1993)
Elizabeth Erickson (M.S., 1990; deceased)

Synergistic activities

1) International cooperation and integration: Zeitler has led two large NSF-funded international Continental Dynamics projects ("Nanga Parbat Continental Dynamics project" in Pakistan (1995-2001); "Geodynamics of Indentor Corners" in SE Tibet (2001-2008), and has recently been involved in two others ("Intracontinental Deformation and Surface Uplift: Geodynamic Evolution of the Hangay Dome, Mongolia, Central Asia", in Mongolia (2011-2017); "Lhasa Block Top to Bottom – Lithospheric Evolution

of Asia's Leading Edge", in Tibet (2011-2018). These involved close collaborations with foreign scientists, and coordinating work in fields such as seismology, magnetotellurics, geochronology, remote sensing, geomorphology, neotectonics, structural geology, biogeography, paleoaltimetry, petrology, geochemistry, and modeling. A film, "Nanga Parbat: Naked Mountain" was made about the Nanga Parbat project by filmmaker Doug Prose and saw worldwide distribution.

2) Curriculum, Pedagogy, and Student Training: Zeitler was founding director of the Lehigh Earth Observatory (LEO), a student-staffed program charged to monitor earth and environmental systems and their societal interactions. Zeitler also helped to develop and was inaugural director (2007-2009) of South Mountain College, an undergraduate residential learning program designed to encourage student-driven exploration of ideas, and cross-disciplinary engagement with issues and problems.

3) Research Tools: Zeitler helped develop several geochronological tools in common use today, including detrital and K-feldspar thermochronology and U-Th/He dating of apatite as a low-temperature thermochronometer. The Lehigh geochronology lab makes code available for inverting $^{40}Ar/^{39}Ar$ K-feldspar age spectra and other data (Arvert 6), and shares LabSpec, our LabView instrument-control software suite.

4) Community organization: Zeitler is chair of the International Standing Committee on Thermo-chronology (2014–present), which oversees the organization and continuity of biennial international conferences, the awarding of the Dodson, the Laslett, and the Charles and Nancy Naeser prizes, and the fostering of dialog on matters of concern to the thermochronology community.

Recent Courses Taught (**Indicates team-taught course)

Fall, 2019	*EES 004*	*Science of Environmental Issues***
	EES 026	*Energy: Origins, Impacts, and Options*
	EES 429	*Principles and Applications of Geochronology*
Spring, 2019	*EES 80*	*Introduction to the Earth System*
	EES 426	*Tectonic Processes***
Fall, 2018	*On academic leave*	
Spring, 2018	*EES 80*	*Introduction to the Earth System*
Fall, 2017	*EES 026*	*Energy: Origins, Impacts, and Options*
	EES 429	*Principles and Applications of Geochronology*
Spring, 2017	*EES 80*	*Introduction to the Earth System*
Fall, 2016	*EES 004*	*Science of Environmental Issues***
	EES 026	*Energy: Origins, Impacts, and Options*
	EES 426	*Tectonic Processes***
Spring, 2016	*EES 80*	*Introduction to the Earth System*
Fall, 2015	*EES 004*	*Science of Environmental Issues***
	EES 429	*Principles and Applications of Geochronology*
Spring, 2015	*EES 100*	*Earth Systems Science*
	SMC 10/200	*South Mountain College Seminar*