

CURRICULUM VITAE

EVA ENKELMANN

PERSONAL DETAILS

Name: Eva Enkelmann
Languages: German (native), English (fluent), Spanish (basic knowledge)
Office Address: Department of Geoscience
University of Calgary
2500 University Drive NW
Calgary, AB T2N 1N4
Canada
Phone: +1 403 220 5852
E-mail: eva.enkelmann@ucalgary.ca
Web: <http://enkelmann.weebly.com/>

EDUCATION

- 2012 **Habilitation, Geologie**, Eberhard Karls Universität Tübingen,
Thesis: „Using geo- and thermochronometric methods to investigate tectonic and surface processes“.
- 2005 **Ph.D., Geology**, Technische Universität Bergakademie Freiberg,
Thesis: “Fission-track dating: Calibration of the method and its application in the tectonics of eastern Tibet”. (magna cum laude)
- 2001 **Diploma, Geology**, Technische Universität Bergakademie Freiberg, and Max-Planck-Institut für Kernphysik, Forschungsstelle Archäometrie, Heidelberg, Germany,
Thesis: “The Tan-Lu Fault Zone at the eastern edge of the Dabie Shan (eastern China): A view from fission-track thermochronology”. (magna cum laude)

EMPLOYMENT

- Since 9/2017 Assistant Professor (tenure track) Department of Geoscience, University of Calgary, Canada
- 8/2017 – 8/2018 Research Professor (adjunct) Department of Geology, University of Cincinnati, USA
- 8/2016 – 8/2017 Associate Professor (tenured) Department of Geology, University of Cincinnati, USA
- 1/2013 – 7/2016 Assistant Professor (tenure track) Department of Geology, University of Cincinnati, USA
- 10/2009 – 10/2012 Research Scientist and Lecturer (non tenure track) University of Tübingen, Germany
- 10/2005 – 9/2009 Research Scientist at the Geochronology Lab at Lehigh University, Bethlehem, PA, USA. Supervisor: Peter Zeitler

- 2/2002 – 6/2005 German National Science Foundation and DAAD Research Associate, Institut für Geologie, Technische Universität Bergakademie Freiberg, Freiberg, Germany. Supervisor: Lothar Ratschbacher
- 8/2001 – 12/2001 Research Associate at the Max-Planck-Institut für Kernphysik, Forschungsstelle Archäometrie, Heidelberg, Germany. Supervisor: Günter Wagner.

RESEARCH INTERESTS

- Active and ancient tectonic processes; interaction of climate, erosion, and tectonics by combining thermochronology, structural geology and field observations.
- Geochronology, in particular low-temperature thermochronology (fission-track analysis, (U-Th)/He, ⁴⁰Ar/³⁹Ar dating, zircon U-Pb dating)
- Methodological studies on fission track analysis and helium diffusion with respect to radiation damage
- sedimentology and detrital geochronology of ancient and present deposits

GRANTS AND HONORS

- NSERC - Discovery Grant 4/2018–3/2023. CAN\$125.000; PI Enkelmann
- NSERC - Northern Region Supplement Grant 4/2018–3/2023. CAN\$80.000; PI Enkelmann
- College of Arts & Sciences, University of Cincinnati, Rising Star Award 2017 (US\$1000)
- FDC – Individual Proposal: GAC-MAC Conference participation and field trip. PI Enkelmann, 2,500 US\$, 2016
- ACS-PRF – New Direction: Triggering a tectonic-climate feedback: The sedimentary record of tectonic-surface processes interactions in the St. Elias Range, Alaska. Sole PI Enkelmann, 110,000 US\$, 24 month, 2015–2017.
- NSF – Ocean Drilling: Collaborative Research: Expedition 341 Oriented Research - Linking Sediment Provenance and Strata Formation to Tectonic-Climate Interactions along the southern Alaska Margin. PI Enkelmann (lead): 100,057 US\$, 24 month. 2014–2016 (total Project 400k \$ and 6 PI's)
- NSF – Tectonics: Collaborative Research: Investigating the sedimentary record of differing modes of flat-slab subduction. PI Enkelmann, 189,999 US\$, 36 month. 2014–2017 (total project 500k \$, 2 PI's)
- National Geographic Society – Explorer Fund: Mackenzie Mountains Expedition. Sole PI Enkelmann, 20,000 US\$, 12 month, 2014
- FDC – Individual Proposal: Participation on the 5th International Conference of IGCP 588 and fieldtrip in Alaska. PI Enkelmann, 3,650 US\$, 2014
- FDC – Individual Proposal: Development of a student field course and new research projects in the southern Appalachian. PI Enkelmann, 2,258 US\$, 2013
- Deutsche Forschungsgesellschaft (DFG), 2013-2014. “Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and numerical modeling“, 67,600 €, 2013–2014
- Deutsche Forschungsgesellschaft (DFG), 2011-2013. “Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and numerical modeling“, 196,142 € plus 1 PhD student position. 2011–2013
- The Petroleum Research Fund, American Chemical Society, “Impact of Fission Track Damage on Helium Diffusion Kinetics in Apatite and Zircon”, 89,995.-\$, 2007-2009, PI: Peter Zeitler.
- DAAD and PHD program at TU Freiberg, Travel grant for Myanmar field work, 1251 €, 2005
- GAS AG travel grant for Ar/Ar laboratory visit at NGU Norway, 3,400 €, 2005
- DAAD and PHD program at TU Freiberg, Travel grant for AGU Annual Meeting, 890 €, 2004
- DAAD and PHD program at TU Freiberg, Travel grant for Ar/Ar laboratory visit at NGU Norway, 566 €, 2004

- DAAD and PHD program at TU Freiberg, Travel grant for Int. Conference of Fission Track Dating, Netherlands, 275 €, 2004
- DAAD and PHD program at TU Freiberg, Travel grant for Ar/Ar laboratory visit at NGU Norway, 460 €, 2003
- DAAD and PHD program at TU Freiberg, Travel grant for Int. Conference of Nuclear Tracks in Solids, India, 400 €, 2002
- DAAD and PHD program at TU Freiberg, Travel grant for China field work, 463 €, 2002
- TU Bergakademie Freiberg, Bernhard-von-Cotta Prize for the Best Diploma Thesis, 500 €, 2001

TEACHING EXPERIENCES

University of Calgary (Canada):

GLGY445: Structural Geology

GLGY 699: Analytical Methods in Geoscience

GLGY707: Geology and Geophysics Western Canada

University of Cincinnati (USA):

GEOL3004: Structural Geology/Tectonics, including field trip to the southern Appalachian

GEOL6034: Thermochronometric Methods, including field trip and laboratory work

GEOL6042: Tectonics and Regional Geology

GEOL1099: Foundations of Geology, including day field trips

GEOL1022: Geology in your shopping cart

University of Tübingen (Germany):

Block course: Low-temperature thermochronology (graduate level)

Geodynamics II: Regional Geology (undergraduates, majors)

Geodynamics of Endogen & Exogen Processes (graduate level)

Field Camp and mapping in Elba (undergraduate and graduate level)

Maps & Profile (undergraduates, majors)

Lehigh University (USA):

EES027: Natural Disasters

Lehigh Field camp instructor, metamorphic core complex, Idaho

Mineral separation and (U-Th)/He analysis lab instructor

TU Freiberg (Germany):

Co-teaching Thermochronology

Fission Track lab instructor Oct. 02 –Aug. 2005

Teaching Assistance in Structural Geology

PRACTICE, INTERNS AND EMPLOYMENT RELATED FIELD WORK

June/July 2016	Fieldwork Yakutat Bay SE Alaska (with J. Garver and C. Davidson)
July 2015, 2016	Fieldwork Cook Inlet Basin/Matanuska Valley, Alaska (with E. Finzel)
Aug. 2014	Fieldwork Yakutat, Alaska.
July 2014	Fieldwork Mackenzie Mountains, Canada
Sep 2013	Fieldwork Tobago, Trinidad-Tobago with Lewis Owen (University of Cincinnati)
July 2012	Fieldwork Kluane NP, Yukon, Canada
Aug. 2011	Fieldwork St. Elias Range, Alaska
July 2011	Fieldwork in Washington and Montana with P. Chamberlain and A. Mulch
June 2010	Fieldwork in the Bohemian massif, Czech Republic.
Feb. 2010	Field course and mapping camp at Elba, Italy.
Sep. 2009	Fieldwork in the Sierra Pampleanas, NW Argentina with K. Ridgway (Purdue University)
May 2009	Zircon fission track dating at the laboratory at Union College in collaboration with J. Garver
Feb 2009	3D numerical modelling with Peter Koons, University of Maine
June 2008	Lehigh Field Camp, Metamorphic Core Complex, Pioneer Mts., Idaho.
April – May 2008	Zircon fission track dating at the laboratory at Union College in collaboration with J. Garver
Mar. – April 2008	Field work in NE-India along the Brahmaputra River with members of the Quaternary Research Centre of the University of Washington (B. Hallet and D. Montgommery).
July – August 2007	Field work within the STEEP project in the St. Elias mountain range, Alaska.
May 2007	Zircon fission track dating at the laboratory at Union College in collaboration with J. Garver
July 2006	Field work within the STEEP project in the St. Elias mountain range, Alaska.
May – June 2006	Field work with W. Kidd (Albany) and Dr. Tang (Chengdu) in Tibet (China), Namche Barwa area.
Mar. – Apr. 2005	Laboratory work at the $^{40}\text{Ar}/^{39}\text{Ar}$ lab using CO_2 -laser at the Geological Survey of Norway, Trondheim, supervised by Dr. E. Eide.
Feb. – Mar. 2005	Field work with L. Ratschbacher (Freiberg) and Myo Min (Myanmar) in central Myanmar (Burma).
Feb. 2005	Short course “3D modelling with GOCAD” by Dr. M. Apel at the Technische Universität Bergakademie Freiberg.
Oct. – Nov. 2004	Laboratory work at the $^{40}\text{Ar}/^{39}\text{Ar}$ lab using UV-laser at the Geological Survey of Norway, Trondheim, supervised by Dr. E. Eide.
Oct. 2003	Short course “SIMS - secondary ion mass spectroscopy” by Dr. M. Wiedenbeck at the Geoforschungszentrum Potsdam.
Aug. – Sep. 2002	Field work with L. Ratschbacher (Freiberg) in collaboration with B. Hacker (Santa Barbara) and Y.O. Zhang (Beijing) in the Qinling orogen, China.
Jul. – Aug. 2002	Field work in collaboration with S. Graham and colleagues (Stanford) in eastern Tibet (Songpan-Garzê belt, Longmen Shan, Sichuan Basin), China.
Feb. –Jul. 2002	Set up and calibration of the new fission track laboratory at TU Bergakademie Freiberg.
Jul. – Aug. 1999	Intern at Engineering Office Umweltbüro Vogtland, Weischlitz, Germany. Structural geological mapping in the area of the mineral spring of the Bad Brambach spa (Germany).
Nov. – Dec. 1997	Internship at Cooperaciones Metallurgicas, Oruro, Bolivia. Surveying and mapping in the Bolivian Andes in preparation of tin mining.

INVITED PRESENTATIONS

- Dec 2017 Cenozoic deformation from the Yakutat–North American collision to the eastern margin of the Northern Canadian Cordillera. American Geophysical Union, Annual Fall Meeting, New Orleans
- Nov 2017 McConnell Club talk (NRCan Geological Survey Canada) “Building Canada’s highest Mountains: Yakutat – North American collision” on 8. November 2017.
- Oct 2017 SpeedDating!: Advice on Sampling and Applications for fission-track dating. Invited presentation to the Pardee Keynote Symposium P4. Speed Dating!: Advice on Sampling and Applications Through the Lens of the Geochronologist. Annual GSA Meeting in Seattle.
- Aug 2017 Research talk “Spatial pattern of Cenozoic exhumation at the western margin of the Northern Canadian Cordillera”, CCArray workshop, Victoria, B.C.
- July 2017 Seminar talk for Tectonophysics Group, “Source to sink record of exhumation in the St. Elias orogen” TU Bergakademie Freiberg, Germany
- April 2017 Research talk, “Tectonic – Climate Interaction at the Yakutat–North American Collision zone“ Martin Luther Universitaet Halle, Germany
- Feb. 2017 Research talk, “Building Canada's highest Mountains: Yakutat - North American collision” University of Calgary
- Nov. 2016 Colloquium talk, “ Exhumation processes at the Yakutat – North American collision zone (southeast Alaska)”. Syracuse University
- July. 2016 Seminar talk for Tectonophysics Group, “Exhumation in the St. Elias Mountains” TU Bergakademie Freiberg, Germany
- Feb. 2016 Research talk, “Investigating the interplay between Tectonics and Atmospheric Processes” University of Frankfurt, Germany
- Feb. 2016 “Building the Earth’s highest coastal mountain range – the St. Elias Mountains in Southeast Alaska”, Faculty Club of the University of Cincinnati
- Nov. 2015 Colloquium talk, “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska” University of Wisconsin, Milwaukee
- Nov. 2015 Colloquium talk, “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska” Miami University
- Oct. 2015 Colloquium talk, “Tectonics and Surface Process Interaction in Southeast Alaska“, Appalachian State University
- Sep 2015 Workshop (1 day) “Thermochronology Methods and Applications” at Purdue University
- Aug 2015 Workshop (1 day) “Detrital Applications of Geochronology and Thermochronology” on 31. August, 2015 at the University of Alaska, Anchorage.
- July 2015 Colloquium talk “Detrital Thermochronology in Glaciated Regions” University of Manchester, UK
- Feb 2015 Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner” at the University of Iowa
- May 2014 Field guide “The Geology and surface processes in the St. Elias Mountains “ at the IGCP-588 conference and fieldtrip in Alaska
- Nov. 2013 Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska“ at University of Indiana
- Nov. 2013 Colloquium talk “Mountain Building and Erosion in the St. Elias Mountains (southeast Alaska)” at West Virginia University
- Oct 2013 Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner” at Ball State University, Indiana

Sep 2013 Plenary Lecture, “Spatial and temporal variation in rock exhumation in the St. Elias Mountains: Insights from multiple thermochronometer techniques“ GV-DMG annual meeting, Tuebingen, Germany

Dec. 2012 “Spatial Variations in Deformation and Exhumation at the Yakutat Plate corner” AGU Fall meeting, San Francisco

Mar. 2012 Interview Assistant Professor in Quaternary Geochronology “Using thermochronology to study rock exhumation processes in the St. Elias Range, Alaska” at the University of Cincinnati

Feb. 2011 Chapman Lecture Series, “Tectonic and surface process interaction at the Yakutat – North American collision zone in southeast Alaska” University of Alaska, Fairbanks

Feb 2011 Chapman Lecture Series, “Using thermochronology to study temporal and spatial variations of rock exhumation” University of Alaska, Fairbanks

Feb. 2011 Geology Department Seminar, “Tectonics and surface process interaction in the St. Elias Range” University of Alaska, Fairbanks

Oct. 2009 GSA annual meeting, Portland, USA

Feb. 2009 Seminar talk, University of Maine

Jan. 2009 Earth and Space Science Dept. Seminar, University of Washington, Seattle

Jan. 2009 Earth Science Dept. Seminar, Purdue University

Dec. 2008 AGU Fall meeting, San Francisco

Nov. 2008 Interview talk W3 Professorship in Geology and Tectonic, University of Tübingen

Sep. 2007 International workshop on “Low-temperature thermochronology and its application: world-wide transfer of knowledge and inter-laboratory calibration”, Pisa, Italy.

Sep. 2007 Lectures at the International Summer School “Isotope Geochemistry and Geochronology of Tectonic Processes” Marmaris, Turkey.

Feb. 2007 Earth and Environmental Science Dept. Seminar, Lehigh University

Feb. 2005 Geological Society of Myanmar, Rangoon, Myanmar

Feb. 2005 Graduate School of Geoscience, University of Mandalay, Myanmar

Oct. 2003 Ion-Accelerator-Facility, user committee meeting, Hahn-Meitner Institut Berlin, Germany

PROFESSIONAL SERVICES AND MEMBERSHIPS

- Associate Editor of Tectonics (AGU Journal) since 2017
- Editorial Board Member of Lithosphere (GSA Journal) since 2015
- Reviewer and panelist for funding agencies: National Science Foundation (NSF): Tectonics, Geomorphology, GeoPRISM, EarthScope Programs; ACS-Petroleum Research Fund; German Research Foundation (DFG)
- Reviewer for journals: Tectonics, Geology, Tectonophysics, Basin Research, EPSL, GSA Bulletin, Int. J. Earth Sciences., Lithosphere, Geomorphology, Geosphere, Chemical Geology, G-cube, Journal Quaternary Science Reviews
- Member of Geological Society of America, American Geophysical Union/European Geophysical Union
- Conference Sessions:
 - GSA- Cordilleran Section Annual Meeting 2015 (Anchorage) Title: Tectonic-surface process interactions during terrane accretion and mountain building along the Cordillera; by Richard Lease and Eva Enkelmann
 - GSA- NE Section Annual Meeting 2014 (Lancaster) Title: *Echoes of Exhumation: Comparing Exhumation Processes of the Ancient Appalachians to Those of Currently Active Orogens*; by Craig Dietsch and Eva Enkelmann

-AGU Fall Meeting 2013 (San Francisco) Title: *Glacier Processes on the Scales of Mountains and Orogens*; by Rachel Headley and Eva Enkelmann

- Guest Editor: 2011–2013 Special Volume Geosphere: “Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogen” edited by Terry Pavlis, Eva Enkelmann, Sean Gulick, Gary Pavlis.
- Faculty Member of the Ohio Transfer Module – Natural Science Subcommittee (since 2016)
- Outreach activities:
 - regular visits for the Imani Afterschool program at the Rothenberg School (1-6th grade) in Cincinnati.
 - lectures at the Hughes High School (Cincinnati) to educate 11th grade students on Geoscience and Concepts of Scientific research

PUBLICATION LIST

PEER-REVIEW JOURNALS

*graduate student paper

Web of Science: h-index: 16

Google Scholar: h-index: 19

1. Reid, M. R., Finzel, E. S., **Enkelmann, E.**, McClelland, W. C., 2018. Detrital zircon provenance of Mesozoic forearc basin strata on the Insular terrane, south-central Alaska. *GSA Special Publications*.
2. *Madanipour, S., Yassaghi, A., Ehlers, T.A., **Enkelmann, E.**, 2018. Tectonostratigraphy, Structural Geometry and Kinematics of the NW Iranian Plateau Margin: Insights from the Talesh Mountains, Iran. *American Journal of Science* 318, 208-245. DOI: 10.2475/02.2018.02
3. *Madanipour, S., Ehlers, T.A., Yassaghi, A., **Enkelmann, E.**, 2017. Accelerated middle Miocene exhumation of the Talesh Mountains constrained by U-Th/He thermochronometry: evidence for the Arabia–Eurasia collision in the NW-Iranian Plateau. *Tectonics* 36, 1538-1561. DOI: 10.1002/2016TC004291
4. Yang, Z., Shen, C., Ratschbacher, L., **Enkelmann, E.**, Jonckheere, R., Wauschkuhn, B., Dong, Y. 2017. Sichuan Basin and Beyond: Eastward foreland growth of the Tibetan Plateau from an integration of Late Cretaceous- Cenozoic fission-track and (U-Th)/He ages of the eastern Tibetan Plateau, Qinling, and Daba Shan. *JGR-Solid Earth* 122, 4712–4740. DOI: 10.1002/2016JB013751
5. Zeitler, P.K., **Enkelmann, E.**, Thomas, J., Watson, B., Ancuta, L.D., Idleman, B.D. 2017. Solubility and trapping of helium in apatite. *Geochemica et Cosmochemica Acta* 209, 1-8.
6. Finzel, E. & **Enkelmann, E.**, 2017. Miocene-Recent sediment flux in the south-central Alaskan forearc basin governed by flat-slab subduction. *Geochem. Geophys. Geosyst.*, 18, 1739– 1760.
7. *Dunn, C.A., **Enkelmann, E.**, Ridgway, K.D., Allen, W.K., 2017. Source to sink evaluation of sediment routing in the Gulf of Alaska and Southeast Alaska: a thermochronometric perspective. *JGR-Earth Surface*, 122, 711-734. DOI: 10.1002/2016JF004168.

8. Rutte, D., Ratschbacher, L. Khan, J., Stübner, K. Hacker, B. R., Stearns, M.A., **Enkelmann, E.**, Jonckheere, R., Pfänder, J. A, Sperner, B., Tichomirowa, M. 2017. Building the Pamir-Tibet Plateau—Crustal stacking, extensional collapse, and lateral extrusion in the Central Pamir: 2. Timing and Rates. *Tectonics*, 36, 3, 385-419. doi: 10.1002/2016TC004294
9. **Enkelmann, E.**, Piestrzeniewicz, A., Falkowski, S., Stübner, K., Ehlers, T.A., 2017. Thermochronology in southeast Alaska and southwest Yukon: Implications for North American Plate Response to Terrane Accretion. *Earth and Planetary Science Letters*, 457, 348–358.
10. Käbner, A., Ratschbacher, L., Jonckheere, J., **Enkelmann, E.**, Khan, J., Sonntag, B.-L., Gloaguen, R., Gadoev, M., Oimahmadov, I., 2016. Cenozoic intra-continental deformation and exhumation at the northwestern tip of the India-Asia collision-southwestern Tian Shan, Tajikistan and Kyrgyzstan. *Tectonics* 35, 9, 2171-2194. DOI: 10.1002/2015TC003897.
11. Finzel, E., **Enkelmann, E.**, Falkowski, S., Hedeon, T., 2016. Long-term forearc basin evolution in response to changing subduction styles in southern Alaska. *Tectonics*, 35, 7, 1735-1759. doi:10.1002/2016TC00417 1.
12. Lease, R.O., Ehlers, T.A., **Enkelmann, E.**, 2016. Large along strike variations in the onset of Subandean deformation: Implications for Central Andes orogenic growth. *Earth and Planetary Science Letters*, 451, 62–76.
13. *Falkowski, S. and **Enkelmann, E.** 2016. Upper crustal cooling of the Wrangellia Composite Terrane in the northern St. Elias Mountains, western Canada. *Lithosphere*, 8, 359–378. doi: 10.1130/L508.1
14. Georgieva, V., Melnick, D., Schildgen, T.F., Ehlers, E., Lagabrielle, Y., **Enkelmann, E.**, Manfred, S.R. 2016. Tectonic control on rock uplift and topography above oceanic-1 ridge collision – Southern Patagonian Andes (47°S), Chile. *Tectonics*, 35, 1317–1341. doi:10.1002/2016TC004120.
15. *Falkowski, S., **Enkelmann, E.** Drost, K., Pfänder, J.A., Stübner, K., Ehlers, T.A. 2016. Cooling history of the St. Elias syntaxis, southeast Alaska, revealed by geo- and thermochronology of cobble-size glacial detritus. *Tectonics*, 35, 447-468. doi: [10.1002/2015TC004086](https://doi.org/10.1002/2015TC004086).
16. **Enkelmann, E.** and Garver, J.I., 2016. On the use of low-temperature thermochronology to study ancient exhumation processes. *Journal of Geodynamics* 93, 17–30. *Invited Review Article*.
17. Gulick, S.P.S., Jaeger, J.M., Mix, A.C., Asahi, H., Bahlburg, H., Belanger, C., Berbel, C.B.B., Childress, L., Cowan, E., Drab, L., Forwick, M., Fukumura, A., Ge, S., Gupta, S., Kioka, A., Konno, S., LeVay, L., März, C., Matsuzaki, K., McClymont, E., Moy, C., Müller, J., Nakamura, A., Ojima, T., Ribeiro, F.R., Ridgway, K., Romero, O., Slagle, A., Stoner, J., St-Onge, G., Suto, I., Walczak, M.D., Worthington, L., Bailey, I., **Enkelmann, E.**, Reece, R., Schwarz, J.M., 2015. Mid-Pleistocene climate transition drives net mass loss from rapidly uplifting St. Elias Mountains, Alaska. *PNAS*, 112, 49, 15042-15047. doi: 10.1073/pnas.1512549112
18. **Enkelmann, E.**, Koons, P.O., Pavlis, T.L., Hallet, B., Barker, A., Elliott, J., Garver, J.I., Gulick, S.P.S., Headley, R.M., Pavlis, G.L., Ridgway, K.D., Ruppert, N., van Avendonk, H., 2015. Cooperation of tectonic and surface processes produces Earth’s highest coastal mountains. *Geophysical Research Letters*, 42, 14, 5838-5846. doi:10.1002/2015GL064727.
19. **Enkelmann, E.**, and Ehlers, T.A., 2015. Evaluation of detrital apatite fission track thermochronology for quantification of glacial catchment denudation and sediment mixing. *Chemical Geology*, 411, 299-309. doi:10.1016/j.chemgeo.2015.07.018.
20. Ehlers, T.A., Szameitat, A., **Enkelmann, E.**, Yanites, B.J., Woodsworth, G.J. 2015. Identifying Spatial Variations in Glacial Erosion with Detrital Thermochronology, Coast Mountains British

Columbia. *Journal of Geophysical Research – Earth Surface*, 120, 1023–1039, doi:10.1002/2014JF003432.

21. **Enkelmann, E.**, Ehlers, T.A., Merli, G. Methner, K., 2015. Thermal and exhumation history of the Eocene Chumstick Basin, Washington State, USA. *Tectonics*, 34, 951–969. doi:10.1002/2014TC003767.
22. Barlow, N.L.M., and Koehler, R.D., comp. (**E. Enkelmann** chapter author), 2015, Seismic and non-seismic influences on coastal change in Alaska--Fieldtrip guide and conference abstracts, 5th International Conference of IGCP 588: Alaska Division of Geological & Geophysical Surveys Guidebook 12, 165 p. doi:10.14509/29179.
23. Deng, B., **Enkelmann, E.**, Liu, S., Li, Z., Ehlers, T.A., Jansa, L. 2015. Late Miocene accelerated exhumation of the Daliang Mountains, southeastern margin of the Tibetan Plateau. *Int. Journal of Earth Science (Geol. Rundschau)*, 104, 1061-1081. DOI 10.1007/s00531-014-1129-z.
24. **Enkelmann, E.**, Valla, P.G., Champagnac, J.-D., 2015. Low-temperature thermochronology of the Yakutat Plate corner, St. Elias Range (Alaska): bridging short-term and long-term deformation. *Quaternary Science Review*, 113, 23–38. doi.org/10.1016/j.quascirev.2014.10.019
25. Pavlis, T.L., **Enkelmann, E.**, Gulick, S.P.S., Pavlis, G.L. 2014. Introduction: Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogeny themed issue. *Geosphere* 10, no. 3., 1-4. Doi: 10.1130/GES01023.1
26. *Falkowski, S., **Enkelmann, E.**, Ehlers, T.A. 2014. Constraining the area of rapid and deep-seated exhumation at the Yakutat plate corner, southeast Alaska. *Tectonics* 33, 597–616. doi: 10.1002/2013TC003408.
27. **Enkelmann, E.**, Ridgway, K.D., Carignano, C., Linnemann, U. 2014. A thermochronometric view into an ancient landscape: tectonic setting, development, and inversion of the Paleozoic Paganzo basin, Argentina. *Lithosphere*, 6, 93–107. doi:10.1130/L309.1.
28. Zeitler, P.K., Meltzer, A.S., Brown, L., Kidd, W.S.F., Lim, C., **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, p. 23–58, doi: 10.1130/2014.2507 (02).
29. McKeon, R.E., Zeitler, P.K., Pazzaglia, F.J., Idleman, B.D., **Enkelmann, E.** 2014. Decay of an old orogen: Interferences about Appalachian Landscape evolution from low-temperature thermochronology. *GSA Bulletin*, v. 126, no. 1-2, p. 31-46 doi: 10.1130/B30808.1
30. *Madanipour, S., Ehlers, T.A., Yassaghi, A., Rezaeian, M., **Enkelmann, E.**, Bahroudi, A., 2013. Synchronous deformation on orogenic plateau margins: Insights from the Arabia–Aurasia Collision. *Tectonophysics*, 608, 440–451.
31. *Grabowski, D., **Enkelmann, E.**, Ehlers, T.A. 2013. Evaluation of the spatial extend of rapid exhumation in the St. Elias syntaxis region, SE Alaska. *JGR-Earth Surface*, 118, 1-18. doi:10.1002/jgrf.20136.
32. Eichelberger, N., McQuarrie, N., Ehlers, T.A., **Enkelmann, E.**, Barnes, J.B., Lease, R.O. 2013. New constraints on the chronology, magnitude, and distribution of deformation within the central Andean orocline. *Tectonics*, 32, 1432–1453, DOI: 10.1002/tect.20073.

33. Richardson, T., Ridgway, K. D., Gilbert, H., Martino, R., **Enkelmann, E.**, Alvarado, P. 2013. Neogene tectonics of the Eastern Sierras Pampeanas, Argentina: Active intraplate deformation inboard of flat-slab subduction. *Tectonics*, 32, 1-17. DOI: 10.1002/tect.20054.
34. Yang, Z., Ratschbacher, L., Jonckheere, R., **Enkelmann, E.**, Dong, Y., Shen, C., Wiesinger, M., Zhang, Q. 2013. Late-stage foreland growth of China's largest orogens (Qinling, Tibet): Evidence from the Hannan–Micang massifs of the northern Sichuan Basin, central China. *Lithosphere* 5, 420-437. doi:10.1130/L260.1
35. Headley, R.M., **Enkelmann, E.**, Hallet, B. 2013. An examination of the interplay between glacial processes and exhumation in the St. Elias Range, Alaska. *Geosphere* 9, 2, 229-241. doi:10.1130/GES00810.1
36. Cao, K., Bernet, M., Wang, G., van der Beek, P., Wang, A., Zhang, K., **Enkelmann, E.** 2013. Focused Pliocene–Quaternary exhumation of the Eastern Pamir domes, western China. *Earth and Planetary Science Letter* 363, 16-26.
37. **Enkelmann, E.**, Ehlers, T.A., Buck, G., Schatz, A.-K. 2012. Advantages and challenges of automated apatite fission track counting. *Chemical Geology*, 322-323, 278-289.
38. **Enkelmann, E.**, Ehlers, T.A., Zeitler, P.K., Hallet, B. 2011. Denudation of the Namche Barwa Antiform, Eastern Himalaya. *Earth and Planetary Science Letter*, 307, 323-333. doi:10.1016/j.epsl.2011.05.004.
39. Finzel, E.S., Trop, J.M., Ridgway, K.D., **Enkelmann, E.** 2011. Upper-plate proxies for initiation of flat-slab subduction in southern Alaska. *Earth and Planetary Science Letters*, 303, 348-360.
40. **Enkelmann, E.**, Zeitler, P.K., Garver, J.I., Pavlis, T.L., 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.
41. **Enkelmann, E.**, Zeitler, P.K., Pavlis, T.L., Garver, J.I., Ridgway, K.D. 2009. Intense localized rock uplift and erosion in the St Elias orogen of Alaska. *Nature Geoscience* 2, 5, 360-363.
42. McAleer, R.J., Spotila, J.A., **Enkelmann, E.**, Berger, A.L. 2009. Exhumation along the Fairweather Fault, Southeast Alaska, based on Low-Temperature Thermochronometry. *Tectonics* 28, TC1007.
43. **Enkelmann, E.**, Garver, J.I., Pavlis, T.L. 2008. Rapid exhumation of ice-covered rocks of the Chugach–St. Elias orogen, SE-Alaska. *Geology* 36, 915-918.
44. Berger, A.J., Spotila, J.A., Chapman, J., Pavlis, T.L., **Enkelmann, E.**, Ruppert, N.A., Buscher, J.T. 2008. Architecture, kinematics, and exhumation of a convergent orogenic wedge: A thermochronological investigation of tectonic-climatic interactions within the central St. Elias orogen, Alaska. *Earth and Planetary Science Letters*, 270, 13-24. doi: 10.1016/j.epsl.2008.02.034.
45. **Enkelmann, E.**, Weislogel, A., Ratschbacher, L., Eide, E., Renno, A., Wooden, J., 2007. How was the Triassic Songpan–Ganzi basin filled? A provenance study. *Tectonics* 26, TC4007, doi: 10.1029/2006TC002078.
46. Jonckheere, R., **Enkelmann, E.**, Min, M., Trautmann, C., Ratschbacher, L., 2007. Confined fission tracks in ion-irradiated and step-etched prismatic sections of Durango apatite. *Chemical Geology* 242, 202-217.
47. Min, M., **Enkelmann, E.**, Jonckheere, R., Trautmann, C., Ratschbacher, L., 2007. Measurements of fossil confined fission tracks in ion-irradiated geological samples with low track densities. *Nuclear Instruments and Methods B* 259, 943-950.
48. Ratschbacher, L., Franz, L., **Enkelmann, E.**, Jonckheere, R., Poerschke, A., Hacker, B.R., Dong S., Zhang, Y., 2006. The Sino-Korean-Yangtze suture, the Huwan detachment, and the Paleozoic-

- Tertiary exhumation of (ultra)high-pressure rocks along the Tongbai-Xinxian-Dabie Mountains Series/Source: Ultrahigh-pressure metamorphism; deep continental subduction. In Hacker, B.R., McClelland, W.C., Liou, J.G., (eds); *Special Paper - Geological Society of America* 403, 45-75.
49. **Enkelmann, E.**, Ratschbacher, L., Jonckheere, R., Nestler, R., Fleischer, M., Gloaguen, R., Hacker, B.R., Yue Qiao Zhang., Yin-Sheng Ma, 2006. Cenozoic exhumation and deformation of northeastern Tibet and the Qinling: Is Tibetan lower crustal flow diverging around the Sichuan Basin? *GSA Bulletin* 118, 651–671; doi: 10.1130/B25805.1
 50. **Enkelmann, E.**, Jonckheere, R., Wauschkuhn, B., 2005. Independent fission-track ages (ϕ -ages) of accepted and proposed apatite age standards and a comparison of ϕ -, Z-, ζ - and ζ_0 -ages: implications for method calibration. *Chemical Geology* 222, 232-248.
 51. Jonckheere, R., **Enkelmann, E.**, Stübner, K., 2005. Observations on the geometries of etched fission and alpha-recoil tracks with reference to models of track revelation in minerals. *Radiation Measurements* 39, 577-583.
 52. Enkelmann, E., Jonckheere, R., Ratschbacher, L., 2005. Absolute measurement of uranium concentration on thick samples using fission-track detectors. *Nuclear Instruments and Methods B.* 229, 489-498.
 53. Enkelmann, E., Jonckheere, R., Ratschbacher, L., 2005. The effects of radiation damage accumulation and annealing for fission-track dating of titanite. *Nuclear Instruments and Methods B.* 227, 581-590.
 54. **Enkelmann, E.**, Jonckheere, R., 2003. Correction factors for systematic errors related to the track counts in fission-track dating with the external detector method. *Radiation Measurements* 36, 351-356.
 55. Grimmer J.C., Jonckheere, R., **Enkelmann, E.**, Ratschbacher, L., Hacker, B.R., Blythe, A., Wagner, G.A., Liu, S., Dong, S., 2002. Cretaceous–Tertiary history of the southern Tan-Lu fault zone: Apatite fission-track and structural constraints from the Dabie Shan. *Tectonophysics* 359, 225-253.

ABSTRACTS

2018

- Enkelmann, E.** 2018. Revealing rock exhumation pattern and temporal changes in glaciated mountains. 16th International Conference on Thermochronology. Quedlinburg, Germany, 16–21 September. *Invited Talk*
- Matthews, W., **Enkelmann, E.**, Pickering, J. 2018 Laser ablation U-Th-Sm/He dating of apatite. 16th International Conference on Thermochronology. Quedlinburg, Germany, 16–21 September.
- Enkelmann, E.** & Finzel, E.S., 2018. Detrital zircon double-dating of forearc basin strata reveals upper plate response to changing subduction modes. Resources for Future Generations (RFG), GAC-MAC Annual Meeting, Vancouver, BC, June 16–21.
- Enkelmann, E.** 2018. Cenozoic deformation and rock exhumation at the Yakutat-North American collision zone. Cordilleran Tectonics Workshop, Whitehorse, Yukon, March 2-4.

2017

- Enkelmann, E.** 2017. Cenozoic deformation from the Yakutat–North American collision to the eastern margin of the Northern Canadian Cordillera. AGU Annual Fall Meeting, New Orleans, December, 2017. *Invited talk*

- Finzel, E.S., **Enkelmann, E.**, Falkowski, S., Reid, M.R., McClelland, W.C. 2017. Forearc basin detrital record of Mesozoic-Cenozoic tectonics in the northern Cordillera, south-central Alaska. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.
- Enkelmann, E.**, Garver, J.I. 2017. SpeedDating!: Advice on Sampling and Applications for fission-track dating. Invited presentation to the Pardee Keynote Symposium P4. Speed Dating!: Advice on Sampling and Applications Through the Lens of the Geochronologist. Annual GSA Meeting in Seattle Oct. 22-25, 2017. *Invited*
- Enkelmann, E.**, Dunn, C., Bootes, N., Lease, R., Ridgway, K.D. 2017. Source-to-sink record of erosion along a glaciated convergent margin. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.
- *Carsyn, A., Finzel, E.S., **Enkelmann, E.**, Thomson, S.N. 2017. Insights for provenance analysis from U/Pb geochronology applied to modern watersheds – Talkeetna Mountains, southcentral Alaska. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.
- *Schartman, A., **Enkelmann, E.**, Garver, J.I., Davidson, C. 2017. Temporal and spatial pattern of deformation at the northern end of the Fairweather transform boundary, Southeast Alaska. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.

2016

- *Sanchez-Lohff, S., **Enkelmann, E.**, Finzel, F., Reid, M., 2016. Upper Plate Response to Varying Subduction Styles in the Forearc Cook Inlet Basin in South Central Alaska. AGU Annual Fall Meeting, San Francisco, December 2016.
- *Bootes, N., **Enkelmann, E.**, Lease, R., 2016. Offshore Sedimentary Record of Exhumation in Southeast Alaska Using Detrital Zircon Fission Track Analysis. AGU Annual Fall Meeting, San Francisco, December 2016.
- Enkelmann, E.**, Dunn, C., Ridgway, K.D., Allen, W., 2016. Modern and Past Rock Exhumation in the St. Elias Mountains Revealed by Onshore and Offshore Detrital Thermochronology. AGU Annual Fall Meeting, San Francisco, December 2016.
- Enkelmann, E.**, Falkowski, S., 2016. Cenozoic evolution of rock exhumation pattern at the Yakutat-North American collision zone. Geological Assoc. Canada – Mineralogical Assoc. Canada Annual Meeting, 1-3 June 2016, Whitehorse, Yukon, Canada.
- Finzel, E.S., **Enkelmann, E.**, Falkowski, S., 2016. Long-term forearc basin evolution in response to changing subduction styles in southern Alaska, GSA Abstracts with Programs Vol. 48, No. 7. Abstract No: 279455. GSA Annual Meeting, 25 – 28 September, Denver, Colorado.
- Gosney, L.C., Finzel, E.S., **Enkelmann, E.**, 2016. Investigating the correlation between watershed surface geology and detrital zircon age patterns in modern rivers. GSA Abstracts with Programs Vol. 48, No. 7. Abstract No: 279831. GSA Annual Meeting, 25 – 28 September, Denver, Colorado.
- *Falkowski, S., **Enkelmann, E.**, Ehlers, T.A. 2016. Multi-method geo- and thermochronology of glacially transported cobbles reveals the tectonic and exhumation history of the St. Elias Mountains (Alaska/Yukon). European Geophysical Union, Annual Meeting, 17-22 April, 2016, Vienna, Austria.
- *Falkowski, S., **Enkelmann, E.**, Drost, K., Pfaender, J.A., Stuebner, K., Ehlers, T.A., 2016. Cenozoic evolution of the Yakutat-North American collision zone and structural accommodation of St. Elias syntaxis exhumation, Alaska/Yukon. European Geophysical Union, Annual Meeting, 17-22 April, 2016, Vienna, Austria.
- Fillon, C., Ehlers, T.A., **Enkelmann, E.**, Becker, J.K., Schnellmann, M. 2016. Thermal and exhumation histories from borehole thermochronometer samples in the Swiss Molasse Basin. European Geophysical Union, Annual Meeting, 17-22 April, 2016, Vienna, Austria.

2015

- *Dunn, C., **Enkelmann, E.**, Allen, W., Ridgway, K.D., 2015. Linking Quaternary Climate Changes to Mountain Building in Southeastern Alaska. AGU Annual Fall Meeting, San Francisco, December 2015.
- Allen, W., **Enkelmann, E.**, Dunn, C., Ridgway, K.D., 2015. Provenance of marine sediment in the Gulf of Alaska, IODP Expedition 341: Links between sediment derivation, glacial systems and exhumation of the coastal Mountain belts. AGU Annual Fall Meeting, San Francisco, December 2015.
- Ridgway, K.D., **Enkelmann, E.**, Allen, W., Dunn, C. 2015. Neogene Tectonics and climatic records in the marine sedimentary strata of the St. Elias Mountains and the Gulf of Alaska. AGU Annual Fall Meeting, San Francisco, December 2015.
- Hedeon, T., Finzel, E., **Enkelmann, E.**, 2015. Provenance response to flat-slab subduction as recorded in detrital zircon signatures from the southern Alaskan forearc basin. GSA Abstracts with Programs Vol. 47, No. 7, # 263471. GSA Annual Meeting, Baltimore, 1–4 November, 2015.
- Enkelmann, E.**, Koons, P.O., Pavlis, T., Barker, A., Hallet, B., Elliott, J., Garver, J.I., Pavlis, G., Ruppert, N., 2015. Cooperation among tectonic and surface processes in the St. Elias Range; Earth's highest coastal mountains. GSA Abstracts with Programs Vol. 47, No. 7, # 261213; GSA Annual Meeting, Baltimore, 1–4 November, 2015.
- Arkle, J.C., Owen, L., Weber, J., **Enkelmann, E.**, 2015. Late Neogene-Recent Evolution of the Northern Range, Trinidad. Caribbean Geologic Conference; Trinidad-Tobago, May 2015.
- Arkle, J.C., Moonan, X., Weber, J., **Enkelmann, E.**, Owen, L., Snoke, A., 2015. Plio-Pleistocene Sediment Source-to-Sink Thermochronology Study, North Coast Marine Area, Trinidad and Tobago. Caribbean Geologic Conference; Trinidad-Tobago, May 2015.
- *Falkowski, S., **Enkelmann, E.**, Pfänder, J.A., Drost, K., Stübner, K., Ehlers, T.A., 2015. Spatial and temporal development of exhumation at the St. Elias syntaxis in the Yakutat-North American subduction-collision zone, SE Alaska. European Geophysical Union, Annual Meeting, Vienna, Austria.
- *Piestrzeniewicz, A., **Enkelmann, E.**, Falkowski, S., 2015. Characterizing spatiotemporal variations in exhumation across the St. Elias syntaxis region using multi-method thermochronology. 111. GSA Cordillera Section Meeting, Anchorage, Alaska. May 11-13, 2015.
- Enkelmann, E.**, Koons, P.O., Pavlis, T., Barker, A., Hallet, B., Elliott, J., Falkowski, S., Garver, J.I., Ravlis, G., Ruppert, N., 2015. Tectonic and surface processes produce Earth's highest coastal mountains. 111. GSA Cordillera Section Meeting, Anchorage, Alaska. May 11-13, 2015.
- *Dunn, C., **Enkelmann, E.**, Ridgway, K., Allen, W., 2015. Does climate change affect exhumation? Identifying the link between tectonics, climate and offshore sediment deposition in southeastern Alaska. 111. GSA Cordillera Section Meeting, Anchorage, Alaska. May 11-13, 2015.

2014

- Enkelmann, E.**, 2014. On the use of low-temperature thermochronology to study ancient exhumation processes. GSA-Northeastern Section Meeting, Lancaster, PA. GSA Abstracts with Programs Vol. 46, No. 2.

*Falkowski, S., **Enkelmann, E.**, Drost, K. 2014. On the provenance of Seward-Malaspina Glacier cobbles and the extent of rapid, deep exhumation at the Yakutat plate corner, SE Alaska. GSA-NE Section Meeting, Lancaster, PA.

Enkelmann, E. 2014. Neogene deformation at the corner of the Yakutat microplate in southeast Alaska. 5th International Conference of IGCP 588 and Fieldtrip Seismic and Nonseismic influences on Coastal Change in Alaska. May 3-10, southern Alaska.

Fillon, C., Ehlers, T.A., **Enkelmann, E.**, Becker, J.K., Schnellmann, M. 2014. Thermal and exhumation histories from borehole thermochronometer samples in the Swiss Molasse Basin. 14th International Conference on Thermochronology, Chamonix, France, 8–12 September, 2014.

*Arkle, J.C., Weber, J.C., **Enkelmann, E.**, Owen, L.A., 2014. Exhumation in the southeast Caribbean Plate corner. 14th International Conference on Thermochronology, Chamonix, France, 8–12 September, 2014.

Enkelmann, E., Ehlers, T.A., Falkowski, S., 2014. Using detrital thermochronology to quantify glacial catchment denudation and sediment mixing. 14th International Conference on Thermochronology, Chamonix, France.

*Falkowski, S., Pfänder, J., Drost, K., **Enkelmann, E.**, 2014. Cooling history and provenance of cobbles from the Seward-Malaspina Glacier, SE Alaska. 14th International Conference on Thermochronology, Chamonix, France.

*Piestrzeniewicz, P., **Enkelmann, E.**, Falkowski, S., 2014. Spatial and temporal constraints of rapid exhumation in the St. Elias syntaxis, southeast Alaska and southwest Yukon. 14th International Conference on Thermochronology, Chamonix, France.

Sonntag, B.-L., Min, M., **Enkelmann, E.**, Kornfeld, D., Ratschbacher, L., Pfänder, J., Jonckheere, R., Dunkl, I., 2014. Crustal flow along India's eastern margin, western Yunnan, China. 14th International Conference on Thermochronology, Chamonix, France.

2013

Roeske, S.M., Benowitz, J.A., **Enkelmann, E.**, Pavlis, T.P., 2013. Deformation record of 4-d accommodation of strain in the transition from transform to oblique convergent plate margin, southern Alaska. American Geophysical Union Fall Meeting, San Francisco.

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A., 2013. Spatial distribution of exhumation at the Yakutat plate corner and the role of glacial erosion, southeast Alaska/southwest Yukon. American Geophysical Union Fall Meeting, San Francisco.

Enkelmann, E., Ehlers, T.A., 2013. Evaluation of detrital apatite fission track thermochronology for quantification of glacial catchment denudation and sediment mixing. American Geophysical Union Fall Meeting, San Francisco.

Sonntag, B.-L., Min, M., **Enkelmann, E.**, Kornfeld, D., Ratschbacher, L., Jonckheere, R., Dunkl, I. 2013. Crustal flow around the Eastern Himalayan Syntaxis in western Yunnan, China. 28th Himalaya-Karakorum-Tibet Workshop and 6th International Symposium on Tibetan Plateau Joint Conference, Tübingen, Germany.

Enkelmann, E. 2013. Spatial and temporal variation in rock exhumation in the St. Elias Mountains: Insights from multiple thermochronometer techniques. DMV-GV Annual Joint Meeting, Tübingen, Germany (Invited)

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A., 2013. Rapid and deep-seated exhumation at the Yakutat plate corner, southeast Alaska/southwest Yukon Territory. DMV-GV Annual Joint Meeting, Tübingen, Germany.

2012

Enkelmann, E. and Ehlers, T.A., 2012. Advantages and challenges in automated apatite fission track counting. Geophysical Research Abstracts Vol. 14, EGU2012-3676, European Geophysical Union, Annual Meeting, Vienna, Austria.

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A., 2012. Exhumation at the northwestern Fairweather Range, southeast Alaska. Geophysical Research Abstracts Vol. 14, EGU2012-2906, European Geophysical Union, Annual Meeting, Vienna, Austria.

*Grabowski, D., **Enkelmann, E.**, Ehlers, T.A. 2012. Investigating the Seward – Malaspina Glacier detritus to quantify the spatial extent of intense rock exhumation in the St. Elias Range (SE Alaska). Geophysical Research Abstracts Vol. 14, EGU2012-2253-3, European Geophysical Union, Annual Meeting, Vienna, Austria.

Enkelmann, E., Ehlers, T.A., Falkowski, S., Grabowski, D. 2012. Spatial Variations in Deformation and Exhumation at the Yakutat plate corner, SE Alaska. AGU Fall Meeting, San Francisco, USA.

Ehlers, T.A., **Enkelmann, E.**, Yanites, B.J. 2012. Observational and Model Constraints on Glacial Erosion. AGU Fall Meeting, San Francisco, USA.

Pavlis, T., Gulick, S., Bruhn, R., Christeson, G., **Enkelmann, E.**, Freymueller, J., Hallet, B., Horton, Koons, P.O., Pavlis, G., Ridgway, K.D., Spotila, J., van Avendonk, H., 2012. Flat-slab subduction, orogenesis, intraplate deformation, and glacial erosion in southern Alaska: A tectonic-glacial progression from STEEP. AGU Fall Meeting, San Francisco, USA.

2011 American Geophysical Union, Annual Fall Meeting

Enkelmann, E., 2011. Combining long- and short-term observations to understand the spatial and temporal evolution of mountain belts. Geophysical Research Abstracts Vol. 13, EGU2011-5819, European Geophysical Union, Annual Meeting, Vienna, Austria.

Ridgway, K.D., Witmer, J., **Enkelmann, E.** Plafker, G. Brennan, P.R.K. 2011. Neogene sediment transport, deposition and exhumation from the southern Alaska syntaxis to the eastern Aleutian subduction zone. AGU Fall Meeting, San Francisco, USA.

Ridgway, K.D., Finzel, E.S. Trop, J. M., **Enkelmann, E.** Brennan, P.R.K., Witmer, J. 2011. Evaluating the role of Cenozoic flat-slab subduction processes on the regional tectonic, sedimentary basin, and climatic framework of southern Alaska. AGU Fall Meeting, San Francisco, USA.

2010

Enkelmann, E. and Ehlers, T.A., 2010. Large Temporal and Spatial Variations in the Eastern Himalayan Syntaxis Exhumation From Detrital Thermochronology Geophysical Research Abstracts Vol. 12, EGU2010-0, 2010, European Geophysical Union, Annual Meeting, Vienna, Austria. (*invited*)

Enkelmann, E. and Ehlers, T.A., 2010. Eocene to Recent Exhumation of the Eastern Himalayan Syntaxis Revealed by detrital Thermochronology. DMV-GV Annual Joint Meeting, Darmstadt, Germany.

2009

Enkelmann, E., Zeitler, P.K., Pavlis, T.L., Garver, J.I., Hooks, B.P. 2009. Overview of the exhumation pattern in southeast Alaska. GSA Annual Meeting, Portland, USA. (*invited*).

Headley, R. and **Enkelmann, E.**, 2009. Detrital thermochronology reveals efficiency of glacial erosion in the St. Elias Range, Alaska. GSA Annual Meeting, Portland, USA.

Hooks, B.P., **Enkelmann, E.**, Koons, P.O., Upton, P., 2009. 3D Thermomechanical modeling of the St. Elias Tectonic Aneurysm, GSA Annual Meeting, Portland, USA.

Witmer, J.W., Ridgway, K.D., **Enkelmann, E.**, Brennan, P., Valencia, V., 2009. Deposition, Provenance, and Exhumation of Neogene Strata in the Chugach – St. Elias Range, southeast Alaska. GSA Annual Meeting, Portland, USA.

Pavlis, T.L., Pavlis, G.L., **Enkelmann, E.**, Gulick, S.S.P., Koons, P., 2009. Tectonics of north America's greatest Mountain Range: Results of the St. Elias Erosion and Tectonics Project (STEEP) and its Importance to Wrangell – St. Elias, Kluane, and Glacier Bay National Parks. GSA Annual Meeting, Portland, USA.

2008

Enkelmann, E., Zeitler, P.K., Pavlis, T.L., Garver, J.I. 2008. Nascent Development of Focused Rock Uplift and Erosion in the St. Elias Orogen, Alaska. AGU Fall Meeting, San Francisco, USA.
(invited)

Enkelmann, E., Garver, J.I., and Pavlis, T.L., 2008. Detrital thermochronology in the Chugach-St. Elias Orogen, SE Alaska. In: Garver, J.I., and Montarino, M.J., (eds.) Proceedings from the 11th International Conference on thermochronometry, Anchorage Alaska, Sept. 2008, p. 68-70.

Zeitler, P.K., **Enkelmann, E.**, Idleman, B.D. 2008, ⁴He Solubility in Apatite is Low. International Conference on Thermochronology, Alaska.

Jonckheere, R.C., **Enkelmann, E.**, Stübner, K., Weise, C., Wauschkuhn, B., Ratschbacher L., 2008. The "other track" and its possible tie-ins with experiments and geological data. International Conference on Thermochronology, Alaska.

2007

Berger, A.J., Spotila, J.A., Chapman, J.B., Pavlis, T.L., **Enkelmann, E.**, Buscher, J.T. 2007. Erosional Reduction of an Orogenic Wedge: Structural Response to Neogene Climate Change within the St. Elias Orogen, Alaska. AGU Fall Meeting, San Francisco, USA.

Enkelmann, E., Garver, J.I., Pavlis, T.L., Bruhn, R.L., Chapman, J.B. 2007. Detrital zircon fission track analysis reveals the thermotectonic history of ice-covered rocks of the Chugach – St. Elias orogen, SE-Alaska. AGU Fall Meeting, San Francisco, USA.

Berger, A.J., Spotila, J.A., Chapman, J.B., Pavlis, T.L., **Enkelmann, E.**, Buscher, J.T. 2007. Architecture, Kinematics, and Exhumation of a Glaciated Orogenic Wedge: The Central St. Elias Orogen, Alaska. GSA Annual Meeting, Denver, Colorado.

Kidd, W.S.F., Lim, C., Zeitler, P.K., **Enkelmann, E.**, Booth, A.L., Chamberlain, C.P., Tang, W., Liu, Y., Craw, D., Structural and Tectonic Geology of the Namche Barwa-Gyala Peri Antiform, Southeastern Tibet. AGU Fall Meeting, San Francisco, USA.

Enkelmann, E., Weislogel, A., Ratschbacher, L., Eide, E., Renno, A., Wooden, J., 2007. The provenance record of detrital white mica and zircon grains from the Songpan–Ganzi Complex (China). GSA Annual Meeting, Philadelphia, USA.

2006

Min, M., Ratschbacher, L., **Enkelmann, E.**, Jonckheere, R., Tichomirowa, M., Bachmann, R., Nelson, B., Martens, U., McWilliams, M., Weber, B., 2006. Long-term evolution of continental transform fault zones: thermochronology along the northern Caribbean plate boundary (Guatemala-Honduras), European Conference on Thermochronology (ECTC) Bremen, Germany.

Enkelmann, E., Min, M., Jonckheere, R., Trautmann, C., Ratschbacher, L., 2006. Confined fission track measurements in ion-irradiated and step-etched prismatic apatite sections. European Conference on Thermochronology (ECTC), Bremen, Germany.

2005

Boztug, D, Jonckheere, R, **Enkelmann, E**, Ratschbacher, L., Wagner, G.A., 2005. Geodynamic implications of rapid denudation of the granitoids at about 50 and 20 Ma in the Eastern Pontides, Turkey: Apatite fission-track results. *Geochimica et Cosmochimica Acta* 69 (10), A300-A300 Suppl.

Enkelmann, E., Ratschbacher, L., Jonckheere, R., Gloaguen, R., 2005. Cenozoic denudation and deformation of eastern Tibet and the Qinling: Constraints from fission-track geochronology. Abstract GAC-MAC, Halifax, Canada.

Enkelmann, E., Ratschbacher, L., Gloaguen, R., Nestler, R., Fleischer, M., Jonckheere, R., Hacker, B. R., Zhang, Y. Q., 2005. Cenozoic denudation and deformation of eastern Tibet and the Qinling. Is Tibetan lower crustal flow diverging around the Sichuan basin? Abstract EGU General Assembly 2005, Wien, Austria.

2004

Enkelmann, E., Ratschbacher, L., Jonckheere, R., 2004. Cenozoic tectonics of the easternmost Tibetan plateau: Constraints from fission-track geochronology. AGU Fall Meeting, San Francisco, USA.

Enkelmann, E., Ratschbacher, L., Jonckheere, R., 2004. Cenozoic tectonics of the easternmost Tibetan plateau: Constraints from fission-track geochronology. Abstract 10. International Conference of Fission Track Dating and Thermochronology, Amsterdam, Netherlands.

Jonckheere, R., **Enkelmann, E.**, Ratschbacher, L., 2004. A convoluted deconvolution of zeta: does it tell us what zeta is and what zeta-ages mean? Abstract 10. International Conference of Fission Track Dating and Thermochronology, Amsterdam, Netherlands.

Enkelmann, E., Jonckheere, R., 2004. Measurements of the uranium concentration and distribution in thick samples using external fission-track detectors: comparison of an absolute and standard-based approach. Abstract 10. International Conference of Fission Track Dating and Thermochronology, Amsterdam, Netherlands.

2003

Jonckheere, R., **Enkelmann, E.**, Stübner, K., 2003. On the geometries of etched fission- and alpha-recoil tracks: Towards a model of track revelation in minerals? 2nd Latin American Symposium of Nuclear Tracks in Solid, Sao Pedro, Brasil. (*presented by Enkelmann*)

2002

Enkelmann, E., Jonckheere, R., Ratschbacher, L. 2002. Sources of systematic error in fission-track dating: theoretical and experimental determination. 21. International Conference of Nuclear Tracks in Solid, New Delhi, India.

Enkelmann, E., Jonckheere, R., Wagner, G. A., Ratschbacher, L., Schmid, J., 2001. Late-stage exhumation of the Dabie Shan orogenic belt and its foreland: apatite fission-track constraints. Abstracts ICDP/KTB Colloquium, Bochum, Germany.

Jonckheere, R., **Enkelmann, E.**, Ratschbacher, L., Schmid, J.C., Liu, S., Wu, Q., Wagner, G.A.. 2001. Fission-track analysis of the post orogenic tectonic history of the Qinling-Dabie-Sulu orogen (East-central-China). Abstracts ICDP/KTB Colloquium, Bochum, Germany.