CURRICULUM VITAE

EVA ENKELMANN

PERSONAL DETAILS

Name:	Eva Enkelmann
Languages:	German (native), English (fluent)
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.org

EDUCATION

2012	**Habilitation, Geology** , 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 12/2021	Adjunct Professor, Department of Earth Sciences, Memorial University of Newfoundland
Since 7/2020	Associate Professor (tenured) Department of Geoscience, University of Calgary, Canada
9/2017–6/2020	Assistant Professor (tenure track) Department of Geoscience, University of Calgary, Canada
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, $^{40}Ar/^{39}Ar$ dating, zircon U-Pb dating)
- Methodological studies on fission track analysis and helium diffusion with respect to radiation damage
- Basin analysis and detrital geo- and thermochronology of ancient and present deposits

GRANTS AND HONORS

- Fellow of the Geological Society of America (inducted 2022)
- Contribution agreement with NWT Geologic Survey, Liard Basin thermal history CAN$26,450 (2022-2023)
- NSERC Alliance, „Porphyry fertility and vectoring at the belt to deposit scale in British Columbia" lead PI Shaun Barker (UBC): total $2.7M, co-PI Enkelmann $103,800 (2022–2027)
- NRCan GeoNorth, "Faults, fluids and landscape evolution in the Northern Cordillera" collaboration with D. Kellett. Enkelmann share CAN $94,000 (2022–2025)
- International Research Partnership Workshop Grant, CAN$ 10,000 (2022–2024)
- Eyes High Postdoctoral fellowship matching funds. University of Calgary CAN$ 50,000 (2022–2024)
- Contract with NRCan for thermochronology studies Yukon faults CAN$ 20,080 (2021-2022)
- Contract with NRCan for thermochronology studies of the Liard Basin CAN$ 14,350 (2021-2022)
- Contribution agreement with NWT Geologic Survey, Liard Basin thermal history CAN$25,000 (2021-2022)
- Contract with Yukon Geological Survey, Exhumation in SE Yukon, CAN$23,700 (2020-2021)
- Contribution agreement with NWT Geologic Survey, Liard Basin thermal history CAN$43,975 (2020-2021)
- Exceptional Reviewer 2018 for GSA Journal *Lithosphere*
- NRCan – Geological Survey – Richardson Mountains Thermochronology analysis CAN$12,000
- NRCan – Geological Survey – Arctic Salt dome uplift Geo-and Thermochronology analysis CAN$12,000
- NRCan – Geological Survey – Richardson Mountains Expedition CAN$35,000
- NSERC - Discovery Grant 4/2018–3/2023. CAN$150,000; 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):

GLGY555: Global Tectonics

GLGY445: Structural Geology

GLGY615: Analytical Methods in Geoscience

GLGY699: Radiometric Dating Methods

GLGY707: Geology and Geophysics of Western Canada

University of Cincinnati (USA):

GEOL3004: Structural Geology/Tectonics, including field tip 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

July 2022	Fieldwork southeastern Yukon
June 2021	Fieldwork Hot Springs in southern BC
Oct 2020	Fieldwork Intermontane terrane, central BC
July 2019	Fieldwork Mackenzie Mountains with NWT Geological Survey
Aug. 2018	Fieldwork Rocky Mountain Trench in southern British Columbia
July 2018	Fieldwork Richardson Mountains NWT and Yukon with the Geological Survey of Canada (T. Hadlari)
Sept. 2017	Fieldwork Canoe Reach Region (B.C.) with Hersh Gilbert
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 $^{40}Ar/^{39}Ar$ 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 $^{40}Ar/^{39}Ar$ 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

Aug 2022	Keynote Lecture: "New developments and challenges in low-temperature detrital thermochronology" at the International Conference of Geoanalysis, 7–12 August, 2022, Germany.
April 2022	Seminar talk for Tectonophysics Group, "Cenozoic Deformation in the Southeastern Canadian Cordillera" TU Bergakademie Freiberg, Germany, 13. April 2022.
Feb 2022	Canadian Society of Petroleum Geoscientist– Structural Division seminar: "New insights in the late Cenozoic exhumation history of the southeastern Canadian Cordillera" virtual, 3. February 2022
Nov 2021	Seminar talk for Adjunct Professor application: "Low-Temperature Thermochronology: Methods and Applications" at Memorial University, virtual, 4. Nov. 2021
April 2021	Departmental Seminar "STEEP project synthesis presentation" with T. Pavlis, G. Pavlis, K. Ridgway & E. Enkelmann, at University of Wisconsin, virtual 30. April 2021
April 2021	Alaska EarthScope and Beyond Seminar "STEEP project synthesis presentation" with T. Pavlis, G. Pavlis, K. Ridgway & E. Enkelmann, virtual, 26. April 2021
Oct 2020	Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the Yakutat – North American collision zone" at Trinity University, Dublin, Ireland (online) 30. October 2020

June 2020	US & Canada collaboration on Northern Cordillera Research: "Overview of exhumation studies in the Northern Cordillera" Online workshop 2.-3. June 2020
Feb 2020	Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the Yakutat – North American collision zone" at Texas A&M University, 14. Feb 2020.
Aug 2019	Invited talk „Tectonics and Surface Process Interaction at the Yakutat-North American collision zone" GSA Penrose Conference, CLAST2019, Climatic Controls on Continental Erosion and Sediment Transport: Juneau, Alaska 4–10 August,
Nov 2018	Invited presentation on "Career paths" to the Association of Women Geoscientists (AWG) chapter at Dalhousie
Nov 2018	Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the St. Elias Mountains" Dalhousie University.
Sep 2018	"Revealing rock exhumation pattern and temporal changes in glaciated mountains" 16th International Conference on Thermochronology. Quedlinburg, Germany, 16–21 September.
April 2018	Seminar talk for Tectonophysics Group, "Upper plate response to varying subduction styles recorded in the forearc Cook Inlet Basin, south central Alaska" TU Bergakademie Freiberg, Germany
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!: Advise 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 n 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) 2015–2017
- 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 jounals: Tectonics, Geology, Tectonophysics, Basin Research, EPSL, GSA Bulletin, Int. J. Earth Sciences., Lithosphere, Geomorphology, Geosphere, Chemical Geology, G-cube,

Journal Quaternary Science Reviews, Terra Nova, Science, Nature Geoscience, Economic Geology

- Member of: Geological Society of America (GSA), American Geophysical Union (AGU)/European Geophysical Union (EGU), Geological Association of Canada (GAC), International Association of Geoanalysts (IAG)

- Conferences:
    - GAC-MAC Annual Meeting 2021 (London, ON): 1-day short course: *Rates and Dates: Dating methods and applications* by Eva Enkelmann and William Matthews
    - GAC-MAC Annual Meeting 2021 (London, ON): 1-day short course: *Quantifying sediment provenance and basin thermal histories* by Eva Enkelmann and William Matthews
    - Member of the Scientific Committee for the 17th International Conference on Thermochronology, Santa Fe, USA, 13–19. Sep 2020
    - GeoConvention Annual Meeting 2020 (Calgary) session convener: *Lithospheric deformation: from terrane accretion to continental collision.* By Eva Enkelmann, Hersh Gilbert, William Matthews, Lydia DiCaprio.
    - GeoConvention Annual Meeting 2020 (Calgary): 1-day short course: *Rates and Dates: Dating methods and applications* by Eva Enkelmann and William Matthews
    - GeoConvention Annual Meeting 2020 (Calgary): 1-day short course: *Quantifying sediment provenance and basin thermal histories* by Eva Enkelmann and William Matthews
    - GAC-MAC Annual Meeting 2019 (Quebec City) session convener: *Quantifying Timing and Rates of Geologic Processes* by Eva Enkelmann and William Matthews.
    - GAC-MAC Annual Meeting 2019 (Quebec City) Short Course Title: *Rates and Dates: Geo- and Thermochronology methods and applications* by Eva Enkelmann and William Matthews.
    - GSA- Cordilleran Section Annual Meeting 2015 (Anchorage) session convener: *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) session convener: *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) session convener: *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 Tranfer Module – Natural Science Subcommittee (2016–2017)

- Outreach activities (2013–2017):
    - 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

STUDENTS

Undergraduate students (n=20):

Whelan, Ashley (BSc, in progress, University of Calgary)
Tiede, Scott (BSc, thesis, in progress, University of Calgary)
MacDougall, Alyson (BSc, graduated 2022, University of Calgary)
Mackinnon, Gabby (BSc, graduated 2021, University of Calgary)
Abersold, Andreas (BSc, thesis, graduated 2021, University of Calgary)
Csak, Molly (BSc, thesis, graduated 2020, University of Calgary, PURE)
Damant, Kade (BSc, thesis, graduated 2020, University of Calgary, PURE))
Grieco, Ryan (BSc, thesis, graduated 2019, University of Calgary, NSERC USRA))
Zhang, Chujing (BSc, project, graduated 2018, University of Calgary)
Schartman, Anna (BSc, project, graduated 2018, University of Cincinnati)
McAleer, Shawn (BSc, project, graduated 2016, University of Cincinnati)
Neale, Shannon (BSc, project, graduated 2016, University of Cincinnati)
Thomas, Victoria (BSc, project, graduated 2017, University of Cincinnati)
Chigolle, Emily (BSc, project, graduated 2015, University of Cincinnati)
Taylor, Bridget (BSc, project, graduated 2015, University of Cincinnati)
Jackson, Geoffrey (BSc, project, graduated 2014, University of Cincinnati)
Loose, Matthias (BSc thesis, graduated 2014, University of Tuebingen)
Balles, Christof (BSc thesis, graduated 2012, University of Tuebingen)
Mueller, Kilian (BSc thesis, graduated 2012, University of Tuebingen)
Widmann, Philipp (BSc thesis, graduated 2011, University of Tuebingen)

Graduate students (n=18):

Baiansuluu Terbishalieva (PhD thesis, 1/2023–in progress, University of Calgary)
Johns-Buss, Emily (PhD thesis, 1/2022– in progress, Memorial University)
Padgett, Joel (PhD thesis, 9/2021–in progress, University of Calgary)
Fontes Pinto, Tais (PhD thesis, 7/2021–in progress, University of Calgary)
Damant, Kade (MSc thesis, 5/2020–7/2022, University of Calgary, NSERC MSc fellowship)
Cecilia D'Mello (PhD thesis, 9/2019–11/2020, University of Calgary)
Johns-Buss, Emily (MSc thesis, graduated 2021 Memorial University)
Fraser, Kelley (MSc thesis, 2018–2020, graduated, University of Calgary, Alberta Graduate fellowship)
McKay, Ryan (MSc thesis, 2018–2020, graduated, University of Calgary)
Choi, Minhee (MSc thesis, 2017–2019, University of Calgary, coadvised with David Eaton
Arkle, Jeannet (PhD thesis, 2019, University of Cincinnati)
Bootes, Nathaniel (MSc thesis, graduated 2018, University of Cincinnati)
Sanchez-Lohff, Sonia (MSc thesis, graduated 2018, University of Cincinnati)
Falkowski, Sarah, (PhD thesis, graduated 2016, University of Tuebingen)
Dunn, Catherine (MSc thesis, graduated 2016, University of Cincinnati)
Piestrezeniewicz, Adam (MSc thesis, graduated 2015, University of Cincinnati)
Madanipour, Saeed (PhD thesis, graduated 2015, University of Tuebingen and Iran)
Grabowski, David (MSc thesis, graduated 2012, University of Tuebingen)
Merli, Gabriel (MSc thesis, graduated 2011, University of Tuebingen)
Szameitat, Annika (MSc thesis, graduated 2010, University of Tuebingen)

Postdoctoral Fellows (n=3):

Birk Haertel (10/2022–10/2024)
Stephan, Tobias (12/2020–11/2022)
Jess, Scott (01/2019–11/2021)

Technician (n=3):

Julia Drummond (4/2022– present)
William Matthews (10/2020–4/2022)
Dlugosz, Joanna (10/2020–03/2021)

PUBLICATION LIST

Web of Science: h-index: 25
Google Scholar: h-index: 32

BOOK CHAPTERS

1. **Enkelmann, Eva**, and Jonckheere, Raymond, 2021. Fission Track Dating. In: Alderton, David; Elias, Scott A. (eds.) Encyclopedia of Geology, 2nd edition. vol. 6, pp. 116-131. United Kingdom: Academic Press. dx.doi.org/10.1016/B978-0-12-409548-9.11991-8

PEER-REVIEW JOURNALS

*student paper

1. Jess, S.A., **Enkelmann, E.,** Matthews, W. 2023. The effect of sediment transport in glaciated catchments on multimineral detrital geochronology: deciphering contrasting zircon and apatite U-Pb dates. *JGR-Earth Surface in press.*
2. *Johns-Buss, E.G., Beranek, L.P., **Enkelmann, E.,** Jess, S., Matthews, W., 2023. Exhumation history and Early Cretaceous paleogeography of the Newfoundland margin revealed by detrital zircon U-Pb and fission-track studies of syn-rift Hibernia Formation strata. *Marine and Petroleum Geology 148, 106055.* https://doi.org/10.1016/j.marpetgeo.2022.106055.
3. *Jess, S.A., **Enkelmann, E.,** Matthews, W. 2022. Why are the Appalachians high? New insights from detrital apatite laser ablation (U-Th)/He dating. *Earth and Planetary Science Letters, 597, 117794.* https://doi.org/10.1016/j.epsl.2022.117794
4. Min, M., Ratschbacher, L., Franz, L., Hacker, B. R., **Enkelmann, E.,** Eko Yoan Toreno, Jonckheere, R., Härtel, B., Schurr, B., Tichomirowa, M., Pfänder, J.A., 2022. The evolution of the Eastern Himalayan syntaxis revealed by India (Tethyan Himalaya Series) in central Myanmar. *Geophyscial Research Letters* 49, e2022GL099140. https://doi.org/10.1029/2022GL099140
5. Flowers, R., Ketcham, R., **Enkelmann, E**., Gautheron, C., Reiners, P., Metcalf, J., Danisik, M., Stockli, D., and Brown, R., 2022. (U-Th)/He chronology: Part 2. Considerations for evaluating, integrating and interpreting conventional individual aliquot data. *GSA Bulletin.* https://doi.org/10.1130/B36268.1
6. Flowers, R., Zeitler, P.K., Danisik, M., Reiners, P., Gautheron, C., Ketcham, R., Metcalf, J., Stockli, D., **Enkelmann, E**., and Brown, R., 2022. (U-Th)/He chronology: Part 1. Data, uncertainty, and reporting. *GSA Bulletin* https://doi.org/10.1130/B36266.1
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REPORTS

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ABSTRACTS

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Jess, S., Koehn, D., Fox, M., **Enkelmann, E.,** Sachau, T., Aanyu, K., 2020. Thermal history modelling in extensional settings: the Rwenzori Mountains of the East African Rift. AGU Fall Meeting, San Francisco, USA, December. *Invited*

Enkelmann, E. 2020. Rock exhumation in the northern North American Cordillera. AGU Fall Meeting, San Francisco, USA, December. *Invited*

*Damant, K., **Enkelmann, E.,** Matthews, W., Fraser, K.I., 2020. Timing of Bedrock Exhumation Across the Columbia River Fault near Revelstoke, BC. AGU Fall Meeting, San Francisco, USA, December.

*Johns-Buss, E., Beranek, L.P., **Enkelmann, E.,** Jess, S., Matthews, W., 2020. Detrital zircon U-Pb and fission-track double-dating studies of Lower Cretaceous Hibernia Formation strata in the Jeanne d'Arc basin, offshore Newfoundland. GSA Annual Meeting, Montreal.

*Johns-Buss, E., Beranek, L.P., **Enkelmann, E.** 2020. Detrital zircon U-Pb and fission-track double-dating of Jurassic to Cretaceous reservoir sandstone units in the Jeanne d'Arc basin, offshore Newfoundland. Annual GeoConvention 11–13 May 2020.

Jess, S., **Enkelmann, E.,** Matthews, W. 2020. Multi-method dating of individual apatite and zircon grains: faster and cheaper analysis for detrital studies. Annual GeoConvention 11–13 May 2020.

*McKay, R., **Enkelmann, E.,** Mattews, W., Hadlari, T. 2020. Cenozoic exhumation history of the northern Richardson Mountains, Canada: Results from (U-Th-Sm)/He analysis. Annual GeoConvention 11–13 May 2020.

*Fraser, K.I., **Enkelmann, E.,** Matthews, W., Grieco, R., Damant, K. 2020. Exhumational history of the central Rocky Mountain Trench using low-temperature thermochronology. Annual GeoConvention 11–13 May 2020.

*Damant, K., **Enkelmann, E.,** Matthews, W., Fraser, K.I., 2020. Bedrock Exhumation Across the Columbia River Fault near Revelstoke, BC. Annual GeoConvention 11–13 May 2020.

*Choi, M., Eaton, D., **Enkelmann, E.** 2020. Is the eastern Denali Fault still active?: Tectonic implications of the 2017 earthquake doublet, northwestern Canada. Annual GeoConvention 11–13 May 2020.

Jess, S., **Enkelmann, E.,** Matthews, W. 2020. A new and innovative double-dating technique suitable for porphyritic systems. AME Roundup Annual Meeting, Vancouver 20–23 January, 2020.

2019

*Fraser, K., **Enkelmann, E.,** Matthews, W., Grieco, R., Damant, K. 2019. Low-temperature thermochronology of the central Rocky Mountain Trench. Tom Oliver Symposium 19. November 2019, University of Calgary.

*Damant, K., **Enkelmann, E.,** Matthews, W., Fraser, K., 2019. Rock exhumation across the Columbia River Fault near Revelstoke, BC. Tom Oliver Symposium 19. November 2019, University of Calgary.

*McKay, R., **Enkelmann, E.,** Matthews, W., Hadlari, T. 2019. Cenozoic exhumation history of the northern Richardson Mountains, Canada: Results from (U-Th-Sm)/He analysis. Tom Oliver Symposium 19. November 2019, University of Calgary.

Enkelmann, E., Bootes, N., Lease, Richard, Dunn, C.A., Ridgway, K., 2019. Sediment Source to Sink Record of a Glaciated Convergent Plate Margin: an Example from Southeast Alaska. AGU Fall Meeting, San Francisco, USA, 9-13 December.

Enkelmann, E. 2019. Deformation along the eastern margin of the Northern Canadian Cordillera. 47th Annual Yellowknife Geoscience Forum, 19–21 November, Yellowknife.

*Khodaparast, S., Madanipour, S., **Enkelmann, E.,** Nozaem, R., Hessami, K., Matthews, W. 2019. Low-temperature thermochronology constraints on Cenozoic fault kinematic inversion in Northern Iranian Plateau margin, case of the Kushk-e-Nosrat Fault, central Iran. The 3rd TRIGGER international conference, 8-10 October 2019, Zanjan, Iran

Enkelmann, E., 2019. Tectonics and Surface Process Interaction at the Yakutat-North American collision zone. GSA Penrose Conference, Climatic Controls on Continental Erosion and Sediment Transport: CLAST2019, Juneau, Alaska 4–10 August, *Invited.*

Choi, M., Eaton, D., **Enkelmann, E.** 2019. The May 1, 2017 St. Elias earthquake sequence: Tectonic implications and structural setting near the southern terminus of the eastern Denali Fault, northwestern Canada. 27th IUGG meeting, Montreal, July 8-18.

Enkelmann, E., 2019. Detrital zircon U-Pb and fission track double dating: investigating sediment provenance and the thermal history of source rock regions. GAC-MAC Quebec City, May 12-15.

Enkelmann, E., Finzel, F.S., Sanchez Lohff, S.K., 2019. Detrital zircon double-dating of forearc Cook Inlet basin strata reveals the thermal history of sediment source regions. GAC-MAC Quebec City, May 12-15.

Matthews, W., **Enkelmann, E.,** Pickering, J., 2019. Laser ablation U-Th-Sm/He dating of apatite. GAC-MAC Quebec City, May 12-15.

Enkelmann, E., Dunn, C.A., Bootes, N., 2019. Source to sink record of the Late Cenozoic Yakutat – North American collision. Cordilleran Tectonics Workshop, Vancouver, BC, February 22-24.

2018

Matthews, W., **Enkelmann, E.,** Pickering, J., 2018. Laser ablation U-Th-Sm/He dating of apatite and possible application to detrital studies. Annual Tom Oliver Poster Session – Geoscience Department, University of Calgary 29. November.

Enkelmann, E., Sanchez Lohff, S.K. Finzel, E.S., 2018. Detrital zircon double-dating of forearc basin strata reveals upper plate response to changing subduction modes. Annual Tom Oliver Poster Session – Geoscience Department, University of Calgary 29. November.

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!: Advise 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.

Hedeen, 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-toSink 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 Cordilleren 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 Cordilleren 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 Cordilleren 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., Jonkheere, 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., **Enklemann,** 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

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 Thermochronoloy. 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 Montario, 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, ^{4}He 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.