

Geo-Thermochronology Short Course at the University of Texas at Austin, USA.

November 4-9, 2019

Arrive by November 3, leave on November 10 5 days of theoretic and practical short course with a one-day of local field trip

The course intends to provide an introductory understanding geochronology and thermochronology with in-depth theoretic and practical exposure to U-Pb and (U-Th)/He geo- and thermochronometry.

The main course objective is to introduce students to the both the methodologies, analytics, data reduction and interpretation in U-Pb geochronology and (U-Th)/. thermochronology. The course covers theoretical aspects of U-Pb and (U-Th)/He dating, practical aspects including sampling strategies, mineral separation and preparation. Student will be exposed to hands-on analytical training in the laboratory and we will take samples collected in the Arctic (Svalbard) from grain to data. Besides theoretic and practical analytical training, the students will also learn how interpret detrital zircon U-Pb data for paleogeography and tectonics restoration with emphasis on the Paleozoic and Mesozoic Artic regions. For this purpose, students will also be introduced to zircon databases and GPlates software and learn how DZ U-Pb and He data could be used for improving plate tectonic models and reconstructions.

Funding - NOR-R-AM project; https://norramarctic.wordpress.com/

Instructors and Program

- Basic U-Pb geochronology Danny Stockli
- Thermochronology Stockli
- Detrital zircons geo-thermochronometry Stockli & Margo Odlum
- Detrital zircons record of the Arctic Vika Ershova & Owen Anfinson
- GPlates and DZ signatures Mat Domeier/Grace Shephard (via video link)
- Practical lab work with Svalbard samples
- Published Detrital zircons and signatures from Svalbard and implications for the Arctic

For questions and inquiries please e-mail Danny Stockli (stockli@jsg.utexas.edu)

