

Research interests

Many questions encountered in Earth sciences can be answered with radiometric ages and using radiogenic isotopes as tracers. I use these tools in my research. My research projects include large-scale regional syntheses to single mineral analyses, with the aim of evaluating the evolution of the Earth's crust and mantle in the broadest sense.

My specific interests include the origin and geochemical evolution of igneous rocks and in particular granitoids. For this purpose I use geochemical tracers and geochronological techniques to obtain time scales for geological processes and events.

For determination of magmatic and cooling ages I apply U-Pb isotope dilution methods on zircon, titanite, and monazite. I have also used SHRIMP zircon-dating and Sm-Nd isochron methods on garnet and igneous minerals in order to infer age information.

Other interests encompass the application of isotopic data to archeometric and environmental research and seawater evolution.