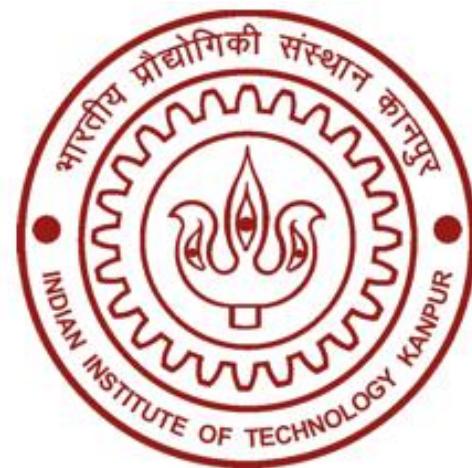


Institute Lecture

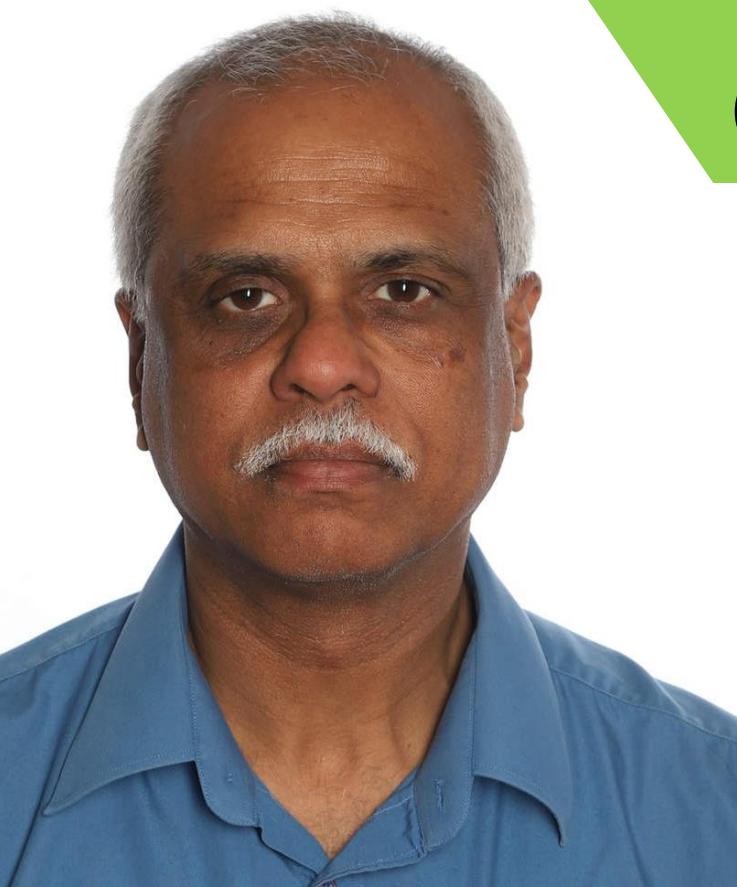


Prof. Sumit Chakraborty

Ruhr Universität Bochum, Germany

Time will tell: Tales of crustal evolution from the global to the atomic scale

**Monday, September 9, 2019,
@ 6.15 pm | Venue: L17, LHC**



About the talk

*How do processes occurring on a variety of hierarchically nested time scales link with each other, to produce a dynamic system [like Earth] that is stable? is one of the most fundamental questions in Earth science. Quantifying the rates and durations of processes toward the shorter end of the spectrum, has remained a challenge. A tool that is promising to change that situation is **diffusion chronometry**.*

The kinetics of diffusion is particularly suitable as a clock. A few examples that cover a range of timescales from volcanic eruptions (Mt. Etna, Sicily) to the evolution of the continental crust (e.g. the Himalaya) or the evolution of early continental crust (e.g. the Coorg block, S. India) will be illustrated.

About the speaker

Prof. Sumit Chakraborty is a renowned geochemist. He did his Ph.D from University of Arizona. He has been significantly instrumental in the development of diffusion chronometry. He and his group experimentally measured diffusion coefficients in all the key minerals that are currently used for diffusion chronometry. Prof. Chakraborty developed theoretical and modelling tools and protocols for practical application of diffusion chronometry and demonstrated the power of the method through field applications. Apart from a number of review articles, he is the Fellow of the Mineralogical Society of America, European Association of Geochemistry and the Geochemical Society and recipient of the award of the Dana Medal of the Mineralogical Society of America. He has been a Distinguished lecturer of the Mineralogical Society of America. Prof. Sumit Chakraborty is currently Professor of physico-chemical Mineralogy at Ruhr Universität Bochum, Germany.

All are invited to attend

Dean of Research and Development