Physical Research Laboratory
Geosciences Division

Tuesday Seminar

Understanding the Geochemical Evolution of the Earth's Mantle: Story from Carbonatites

Abstract

The Earth's surface processes are expressions of its dynamic mantle. It has been established that despite billions of years of mantle convection, Earth's mantle remains chemically heterogeneous. Therefore, understanding of the chemical evolution of the mantle and its implications for various processes in Earth through time requires study of various mantle derived products at different times in the Earth's geologic past. Basalts are the obvious choice of such studies; however, to known the nature of fluids that are responsible for mobility of elements within the mantle one needs to study carbonatites. Carbonatites are magmatic rocks, rich in fluids and a whole host of trace elements, that carry and preserve the chemical information of the source regions more efficiently. In this seminar, I will introduce the audience to these peculiar magmatic rocks and discuss their usefulness in tracing the mantle evolution through time.

Speaker: Mr. Milan Kumar Mahala
JRF, GSDN

Date	Time	Venue
29-January-2019	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

Tea at 15:30 Hrs

(Near Ground Floor Lecture Hall Foyer)

A .K. Sudheer, Geosciences Division