Geosciences Division
Physical Research Laboratory

Tuesday Seminar

Decoding Crustal Evolution

Abstract

The Earth is thought to have been formed about 4.6 billion years ago from solar nebula. By the early igneous differentiation processes two types of crust have been generated, namely oceanic and continental. These crusts and upper mantle, which is known as lithosphere was broken up into number of tectonic plates. Oceanic crust reconcile the ages only up to 200 million year from today, in contrast continental crust are the oldest rocks on Earth formed during 3.7 to 4.6 billion years ago and provide the details of earth's differentiation processes. New continental crust is mostly linked to the intense orogenic cycles of super continent formation such as, Rodinia, Pangea and Gondwana by the amalgamation of old micro-continents, their destruction and recycling. This talk will give a glimpse of the two orogenic cycles and how the continental crust formed using whole rock geochemistry, U-Pb isotope geochronometre and Lu-Hf Isotopic tracer in the mineral zircon.

Speaker: Dr. Shrema Bhattacharya
PDF, GSDN

Date	Time	Venue
16-June-2015	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

Tea at 15:30 hrs

Neeraj Rastogi, Seminar Secretary, Geosciences Division