Physical Research Laboratory

Tuesday Seminar

Study of Paleo Marine Nitrogen cycle using Nitrogen isotopes

Abstract

Dinitrogen (N_2) gas is the most abundant form of Nitrogen in the Oceans. Still, most of the organisms cannot utilize it in this form. It first has to be converted to a reactive form by N-fixing bacteria. The fixed N inventory is primarily controlled by principal source (N_2 fixation) and sink (denitrification), both of these processes are mediated by marine organisms. So, the oceanic nitrogen budget provides a critical test case in the broader effort to understand the stabilizing environmental feedbacks on the Earth's surface. However, it is difficult to quantify, based on temporally and spatially limited modern observations. Fortunately, geological archives have recorded past events those approximate large-scale experiments in which the oceanic N budget responds to naturally imposed forcing. In this talk, I will discuss how nitrogen isotopes are used for studying the palaeo marine nitrogen cycle.

Speaker: Mr. Deepak Kumar Rai
JRF, GSDN

Date	Time	Venue
04-February-2020	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

Tea at 15:30 Hrs

A .K. Sudheer, Geosciences Division