

### ADMINISTRATIVE ORDER

Subject: Rare Earth Metal abundance in certain Pan-African granitoids of Karbi Hills, Assam: their prospect examination

Sanction of the President of India is hereby conveyed under rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the project entitled "Rare Earth Metal abundance in certain Pan-African granitoids of Karbi Hills, Assam: their prospect examination" to be implemented by Dibrugarh University, Dibrugarh, Assam at an estimated cost of Rs. 44,17,264/- (Rupees forty four lakhs seventeen thousand two hundred sixty four only) and 1<sup>st</sup> year grant of Rs 24,70,088/- (Rupees twenty four lakhs seventy thousand and eighty eight only) during 2014-15.

#### 2.0 Objectives :

- Establishing stratigraphic succession of the polyphase granitic plutons occurring in Panbar-Geleki and Kathalguri area of extended Dizo valley.
- Determination of chronologic sequence of the intrusives: age determination through radioactive method/ methods of most enriched plutons.
- Assessment of tectono-magmatic events, geological evolution of the craton using geological tools like petrography, mineralogy, mineral chemistry and bulk geochemistry.
- Identifying the status of crystallization differentiation of concerned plutons possessing anomalous REE concentration.
- Assaying and resource assessment.
- Preparation of anomaly maps at 1:10,000 scale based on anomaly status.
- Examination of exploration possibility etc.

#### 2.1 Programme & Implementation Plan :

The present proposal would be an exploratory program purposely undertaken to study on the randomness of REE distribution in certain moderately to highly evolved polyphase granitoids of the craton. Present proposal would examine the issue of rare earth metal distribution in certain granitoids of the craton as a part of mineralogical/metallogenic appraisal. Comprehensive published geological notes on intrusive granites and carbonatites of Karbi Hills in recent times provide marginal insight information about the status of magma evolution and REE enrichment in some of these lithounits. The proposed study will generate new data necessary for addressing the evolutionary status of magmatic rocks concerning their origin as a breakaway segment of *Pan-African* continent or a member of the earlier super continental setup.

It is expected that after completion of the work, it would create data base, the one that is lacking or ill managed till date; produce anomaly maps and would be able to demarcate/distinguish enriched from barren granitoids, mostly occurring in the peripheral region of the Karbi Hills craton. Granitoids of interior Karbi Hills even if enriched, are difficult to reach because of logistic and local problems.

#### 2.2 Implementing Organization:

Dibrugarh University, Dibrugarh, Assam would be implementing this project.

*K. Daniel*  
14/11/2014