

PETROGRAPHIC CHARACTERISTICS OF CARBONACEOUS MATTER IN BRECCIATED LIMESTONE AT KANCHANKAYI AREA, YADGIR DISTRICT, KARNATAKA: GENETIC IMPLICATIONS FOR URANIUM MINERALISATION

Sikta Patnaik, Kalyan Chakrabarti, A. K. Pradhan and D. Bhattacharya
Atomic Minerals Directorate for Exploration and Research, Bangalore
E-mail : siktapatnaik.amd@gov.in

Abstract

Uranium mineralization at Gogi area, along the Kurlegere-Gogi-Gundanhalli fault in Bhima basin is well established. Its north-eastern extension at Kanchankayi area has indicated the presence of pitchblende and coffinite as the major radioactive ore minerals, which are associated with sulphide minerals, secondary calcite and carbonaceous matter. Petromineralogical studies have shown that carbonaceous matter is present in various textural forms like meshwork, stringers, as colloidal matter, globules and veins. It shows various colours, opacity and a range of reflectance. It is mainly present in association with sulphides and calcite. Some of the carbonaceous matters are radioactive, while others are devoid of any radioactive phases.

Keywords: Bhima basin, Kurlegere-Gogi-Gundanhalli fault, Carbonaceous matter, Uranium mineralisation