

Metadata Details

Title

On the Amphibolites from the Indian Research Station at Antarctica.

Science Keywords

Category	Land Surface
Topic	Geomorphology
Expedition Year	1982-1983
ISO Topic	Geodesy

Summary

Abstract

In the Dakshin Gangotri landmass, dykes, pockets and lenticular outcrops of massive weathered amphibolites are noticed within the gneisses. Mineralogically three zones have been established in order of increasing grades, viz., Zone A: Amphibolite with sphene but without diopside; Zone B: Amphibolite with both sphene and diopside; Zone C: Amphibolite with diopside but no sphene.

Purpose

The amphibolites form very few exposures around the Indian Research Station at Antarctica and are scattered in parts of the area. Mostly they form weathered massive, lenticular exposures and occur as dykes, veins, small pockets, lenses of small dimension within gneisses. They are well foliated and lineated by parallel alignment of streaky prismatic grains of hornblende. The amphibolites show a northwesterly trend parallel to the strike of the foliation of the gneisses. The amphibolites show sharp or gradational contact with the gneisses. Layers of amphibolites are tectonically folded in migmatitic outcrop. Quartz veins occupy the joint planes in amphibolite. Gradation of texture (or structure) from granoblastic to gneissose and at places to schistose was seen in the same body of amphibolite.

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