

PETROLOGY OF GARNET - ORTHOPYROXENE ASSEMBLAGES FROM  
THE ALBANY FRASER PROVINCE (WESTERN AUSTRALIA)

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Garnet-orthopyroxene-quartz-plagioclase-magnetite assemblage has been found in the western part of the Albany Fraser province (Western Australia). Garnet-quartz-orthopyroxene-magnetite constitute the primary granulitic assemblage. Orthopyroxene-plagioclase symplectites replacing garnet are related to a retrogressive event at  $P=5-7$  Kb and  $T=700$  C. The basic paragenesis show centimeter to meter scale interlayering both with garnet-biotite-sillimanite metapelites and quartz-magnetite assemblage. At a regional scale, the occurrence of garnet-bearing metabasites contrasts with a widely exposed southern granulitic domain, characterised by two pyroxenes - plagioclase assemblages. The emplacement of garnet bearing metabasites is related to curve reverse fault involving a combination of dextral transcurrent shearing and northwards thrusting during middle Proterozoic times (1.3-1.1 Ga).