

## Raman spectroscopic analysis of quartz in the Sanbagawa pelitic schists: detection of evidence for eclogite facies metamorphism

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Laser Raman microspectroscopic analysis is a simple and potential method to decode fossilized pressures retained by minerals and to clarify the metamorphic conditions. Major Raman bands of quartz inclusion in garnet systematically shift up to 471, 225 and 132  $\text{cm}^{-1}$  in quartz-eclogite facies samples, 468, 217 and 130  $\text{cm}^{-1}$  in epidote-amphibolite facies samples and 465, 208 and 128  $\text{cm}^{-1}$  in amphibolite facies samples. Quartz inclusions in garnet having high frequency shift up to 471, 225 and 132  $\text{cm}^{-1}$  are confirmed in the the Iratsu metagabbro and the surrounding pelitic schists in the Besshi area, Sanbagawa metamorphic belt. Some Sanbagawa schists in the higher metamorphic zone of the Besshi area certainly retain evidence of equilibria under eclogite facies metamorphism previous to the epidote-amphibolite facies stage.