

Microstructural analysis of metacherts in the Wadi Tayin area, Sultanete of Oman.

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(1) Foliation is well developed in metacherts. Lineation is not well developed on the foliation surface. We performed a statistical analysis of the lineation with the von Mises distribution. We determined the orientation of the mineral lineation and the concentration parameters of the metacherts.

(2) Mica fish occur in metacherts cut parallel to the lineation and perpendicular to the foliation. Asymmetrical shape of mica fish indicates that the ophiolite moved toward SW.

(3) C-axis preferred orientation pattern of quartz were measured for 10 samples in order to know the shear sense. Three samples show no distinct obliquity to the foliation and lineation, 5 samples show top to SW sense movement, and 1 sample shows top to NE sense movement.

(4) Intensity parameter of the lineation is stronger in the middle, metachert rich horizons, and it decreases toward top and bottom.