

Possibility of natural resources investigation : ESR measuring of manganese in quartz vein

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I will talk about the possibility of the investigation of natural resources with ESR. I measured the following samples by ESR. (a) quartz in quartz vein from Kushikino Kagoshima, (b) quartz in quartz vein from Kiyokoshi Shizuoka, (c) quartz in quartz schist from Nagaoka Kochi.

For (a) and (b), I found different manganese spectrums, for (a) $A=9.33\pm0.03$, for (b) $A=6.81\pm0.03$. This is because of difference of existance form in samples. For existance form in quartz, I wonder that manganese exists in fluid inclusion, but it is not clear now. I will also show you the results of ESR measuring of samples from other area.