

# MORPHOLOGY OF ZIRCONS FROM VIJAYAN COMPLEX ROCKS OF EASTERN SRI LANKA

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Vijayan Complex rocks of Eastern Sri Lanka consist dominantly of microcline granites/gneiss, hornblende biotite gneiss, augen gneiss, migmatite with isolated calc gneiss and quartzite bands. Representative samples of these rocks were collected from an area covered by 1 inch topographic sheets of Vakaneri and Rukam. Zircon grains were separated from crushed rock samples using the ro-tap and the isodynamic magnetic separator. The - 80 + 120 sieve fractions containing zircon grains were mounted on slides and studied under the polarizing microscope.

The study reveals that zircon grains in microcline granite/gneiss samples were elongated and euhedral whereas in hornblende biotite gneiss, augen gneiss and migmatites, such grains were present in association with rounded ones. However in calc gneiss and quartzite the zircon grains were noted to be more or less exclusively rounded in shape.

Our observations suggest metasedimentary origins for calc gneiss and quartzite which perhaps initially existed as impure limestones and sandstones respectively in a Precambrian sedimentary environment. Hornblende biotite gneiss, augen gneisses and migmatites could also represent earlier metasediments which had been probably affected by igneous activity concurrent or subsequent to the formation of microcline granites/gneisses.

## References

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