

Publication

A comparative study of jadeite, omphacite and kosmochlor jades from Myanmar, and suggestions for a practical nomenclature

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 3749819

Author(s) Franz, Leander; Thye Sun, Tay; Hänni, Henry A.; De Capitani, Christian; Thanasuthipitak, Theerapongs; Atichat, Wilawan

Author(s) at UniBasel [Franz, Leander](#) ;

Year 2014

Title A comparative study of jadeite, omphacite and kosmochlor jades from Myanmar, and suggestions for a practical nomenclature

Journal The Journal of Gemmology

Volume 34

Number 3

Pages / Article-Number 210-229

Jadeitite boulders from north-central Myanmar show a wide variability in texture and mineral content. This study gives an overview of the petrography of these rocks, and classifies them into five different types: (1) jadeitites with kosmochlor and clinoamphibole, (2) jadeitites with clinoamphibole, (3) albite-bearing jadeitites, (4) almost pure jadeitites and (5) omphacitites. Their textures indicate that some of the assemblages formed syn-tectonically while those samples with decussate textures show no indication of a tectonic overprint. Backscattered electron images and electron microprobe analyses highlight the variable mineral chemistry of the samples. Their extensive chemical and textural inhomogeneity renders a classification by common gemmological methods rather difficult. Although a definitive classification of such rocks is only possible using thin-section analysis, we demonstrate that a fast and non-destructive identification as jadeite jade, kosmochlor jade or omphacite jade is possible using Raman and infrared spectroscopy, which gave results that were in accord with the microprobe analyses. Furthermore, current classification schemes for jadeitites are reviewed.

edoc-URL <https://edoc.unibas.ch/81564/>

Full Text on edoc No;

Digital Object Identifier DOI 10.15506/JoG.2014.34.3.210