

---

# Nacritic Clay Associated with the Jiangshan-Shaoxing Deep Fault in Zhejiang Province, China

Z. Y. Shen<sup>1</sup>, M. J. Wilson<sup>2</sup>, A. R. Fraser<sup>2</sup> and M. J. Pearson<sup>3</sup>

<sup>1</sup> Department of Earth Sciences, Zhejiang University Hangzhou, China

<sup>2</sup> Division of Soils, Macaulay Land Use Research Institute Aberdeen, UK

<sup>3</sup> Department of Geology and Petroleum Geology, University of Aberdeen Aberdeen, UK

**Abstract:** A kaolin clay occurring in Carboniferous mudstone near the Jiangshan-Shaoxing deep fault in Zhejiang Province, eastern China was characterized by XRD and IR. Although the dominant mineral appeared to be kaolinite, IR also suggested the possible occurrence of nacrite. This was confirmed by forming intercalation complexes with potassium acetate and with hydrazine hydrate, both water complexes having the same characteristic spacing at 8.35 Å. Different particle size fractions of the kaolin clay were studied and the results indicated that nacrite content increased with increasing particle size. This occurrence of nacrite is consistent with previous findings of the polytype in high temperature and pressure environments.

**Key Words:** Jiangshan-Shaoxing fault • Kaolin • Nacritic clay

*Clays and Clay Minerals*; October 1994 v. 42; no. 5; p. 576-581; DOI: [10.1346/CCMN.1994.0420510](https://doi.org/10.1346/CCMN.1994.0420510)

© 1994, The Clay Minerals Society

Clay Minerals Society ([www.clays.org](http://www.clays.org))

---