

5. Traub, P. and Nomura, M., *Proc. Natl. Acad. Sci. USA*, 1968, **59**, 777.
6. Nierhaus, K. H. and Dohme, F., *Proc. Natl. Acad. Sci. USA*, 1974, **71**, 4713.
7. Dohme, F. and Nierhaus, K. H., *J. Mol. Biol.*, **107**, 585.
8. Vasiliev, V. D., Selivanova, O. M. and Koteli-ansky, V. E., *FEBS Lett.*, 1978, **95**, 273.
9. Vasiliev, V. D. and Zalite, O. M., *FEBS Lett.*, 1980, **121**, 101.
10. Tewari, D. S. and Burma, D. P., *Biochem. Biophys. Res. Commun.*, 1983, **114**, 348.
11. Chapman, N. M. and Noller, H. F., *J. Mol. Biol.*, 1977, **109**, 131.
12. Herr, W. and Noller, H. F., *Biochemistry*, 1978, **17**, 307.
13. Herr, W. and Noller, H. F., *J. Mol. Biol.*, 1979, **130**, 421.
14. Herr, W., Chapman, N. M. and Noller, H. F., *J. Mol. Biol.*, 1979, **130**, 433.
15. Kaemfer, R., *J. Mol. Biol.*, 1972, **71**, 583.
16. Subramanian, A. and Davis, B. D., *Nature (London)* 1970, **228**, 1273.
17. Sabol, S. and Ochoa, S., *Nature New Biol.*, 1971, **234**, 333.
18. Schiff, N., Miller, M. J. and Wahba, A. J., *J. Biol. Chem.*, 1974, **249**, 3792.
19. van Duin, J., Kurland, C. G., Dondon, J., Grunberg-Manago, M. Brantlant, C. and Ebel, J. P., *FEBS Lett.*, 1976, **62**, 111.
20. Goss, D. J., Parkhurst, L. J. and Wahba, A. J., *J. Biol. Chem.*, 1982, **257**, 5681.
21. Chaires, J. B., Hawley, D. A. and Wahba, A. J., *Nucleic Acids Res.*, 1982, **10**, 5681.
22. Heimark, R. L., Kahan, L., Johnston, K., Hershey, J. W. B. and Traut, R. R., *J. Mol. Biol.*, 1976, **105**, 219.
23. Mackeen, L. A., Kahan, L., Wahba, A. J. and Schwartz, I., *J. Biol. Chem.*, 1980, **225**, 10526.

OCCURRENCE OF CANCRINITE TINGUAITE AND K-RICH TRACHYTE FROM NONGCHARAM—DARUGIRI AREA OF EAST GARO HILLS DISTRICT, MEGHALAYA, INDIA

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RARE rocks of alkaline affinity, namely cancrinite-tinguaite and K-rich trachyte have recently been

recorded for the first time in the Nongcharam (25° 35' N. Lat.: 90° 49' E. Long) and Darugiri (25° 37' N. Lat.: 90° 46' E. Long.) area of the East Garo Hills district, Meghalaya. This preliminary communication deals with some aspects of their geological setting and petrological characteristics.

Geological Setting: Precambrian gneisses and migmatites constitute the country rocks in which tinguaitite occurs as a dike—like body over an area of approximately 250 m × 75 m with N-S trend at Nongcharam and as blocks (without clearcut field relations due to thick soil cover) at Ailawe (25° 38' N. Lat.: 90° 46' E. Long.), whereas trachyte occurs as smaller bodies (40 × 0.75 m) with an ESE-WNW trend near Darugiri. **Petrology:** Cancrinite-tinguaite is dark green and holocrystalline-porphyrific, defined by phenocrysts of turbid sanidine and anorthoclase, cancrinite, nepheline, aegirine augite, diopside, biotite and occasional barkevikite set in a groundmass comprising needles of aegirine and aegirine augite, orthoclase, albite, nepheline, cancrinite and sodalite. Chemically, it is more silica undersaturated (SiO₂: 48.3%) and alkali-enriched (Na₂O: 11.5%, K₂O: 4.1%) finding expression in high normative nepheline (37) and acmite (11), as compared to the average tinguaitite (SiO₂: 54.1%; Na₂O: 8.1%; K₂O: 5.5%; ne: 21.2 and ac: 2.9) of Le Maitre¹.

K-rich trachyte is pink coloured, and consists of phenocrysts of dominant K-feldspar (1–2 mm long) and a little quartz set in a groundmass of K-feldspar; K-feldspar is both orthoclase and microcline, with the former being minor and transforming to the latter. Chemically, it is characterised by relatively higher contents of SiO₂ (62.7%) and K₂O (13.3%) and lower Na₂O (0.45%) compared to the rare similar one (SiO₂: 60.1%; K₂O: 12.6% and Na₂O: 1.2%) from the Keiserstuhel carbonatite complex of West Germany².

The occurrence of these alkaline rocks along with the reported occurrences of the alkali-carbonatite complex from the near by Wah Sung Valley of Jaintia Hills³ and alkali basalt from the Sylhet trap of Khasi Hills⁴ points to a distinct alkaline phase(s) of igneous activity in this part of India.

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1. Le Maitre, R. W., *J. Petrol.*, 1976, **17**, 589.
2. Sutherland, D. S., *Miner. Mag.*, 1967, **36**, 334.
3. Yusuf, S. and Saraswat, A. C., *Curr. Sci.*, 1977, **46**, 703.
4. Talukdar, S. C., *Curr. Sci.*, 1967, **36**, 238.