NEW MINERAL NAMES

Girnarite

K. K. MATHIER AND A. G. JHINGRAN: A New Member of the Hastingsite Group of Amphiboles from Mount Girnár. *Quart. Jour. Geol. Min. Metal. Soc. India*, **3**, No. 3, 93–101, 1931.

NAME: From the locality Mount Girnár, Kathiawar, India.

CHEMICAL PROPERTIES: Analysis: SiO_2 34.67, 34.71; Al_2O_3 13.30, 13.21; Fe_2O_3 10.06, 10.23; FeO 14.77, 14.57; MgO 6.21, 6.22; CaO 10.58, 10.60; Na_2O 5.78, 5.89; K_2O 1.08, 1.05; MnO 0.27, 0.13; TiO_2 2.88, 2.90; P_2O_5 1.08, 1.08; ign. 0.03, 0.03; Sums 100.71, 100.62.

CRYSTALLOGRAPHICAL PROPERTIES: Monoclinic. Cleavage good at 123°; frequently twinned parallel to (100).

PHYSICAL AND OPTICAL PROPERTIES: Color brown, strongly pleochroic. X = deep brown, Y = straw yellow, Z = yellow. Biaxial, $2V = 76°$, $\alpha = 1.680$, $\beta = 1.694$, $\gamma = 1.704$. $Z \wedge c = 9°$ in the obtuse angle. Sp. Gr. = 3.42.

OCCURRENCE: Found in nepheline syenite at Mount Girnár.

W. F. F.

Minyulite

E. S. SIMPSON AND C. R. LEMESURIER: Minyulite, a new phosphate mineral from Dandaragan, W. A. *Jour. Roy. Soc. Western Australia*, **19**, 13–16, 1932–33.

NAME: From the locality Minyulo Well, near where the mineral was discovered.

CHEMICAL PROPERTIES: A hydrous basic phosphate of potassium and aluminum, $2K(OH, F) \cdot 2Al_2O_3 \cdot 2P_2O_5 \cdot 7H_2O$. Analysis: K_2O 12.30, Na_2O 0.45, Al_2O_3 29.98, Fe_2O_3 tr., CaO, MgO nil, P_2O_5 35.58, F tr., H_2O ($-200°$) 17.84 ($+200°$) 2.79. Sum 98.94. Readily soluble in warm dilute NaOH and in hot concentrated HCl and slowly soluble in warm dilute HNO_3. Soluble in hot concentrated H_2SO_4 slightly etching a glass surface in contact with it.

On heating in a closed tube it decrepitates and yields much acid water which etches the glass, finally melting into an opaque white globule.

CRYSTALLOGRAPHICAL PROPERTIES: Orthorhombic.

PHYSICAL AND OPTICAL PROPERTIES: Color white, luster silky. Fragile. Hd. = 3.5. Sp. Gr. 2.45. Biaxial. $\alpha = 1.531$, $\beta = 1.534$, $\gamma = 1.538$. Extinction parallel, elongation negative.

OCCURRENCE: Found in radiating groups filling minute veins or cavities in a highly phosphatic ironstone bed made up of limonite, quartz grains, dufrenite, nodular apatite and glauconite grains.

W. F. F.