NEW MINERAL NAMES

Donbassite

E. K. LAZARENKO: Donbassites, a new group of minerals from the Donetz basin. *Compt. Rendus* (Doklady) *Acad. Sci., U.R.S.S.*, **28,** 509–521 (1940).

NAME: For the locality.

CHEMICAL PROPERTIES: Four analyses are given (1) by Samoilov (1906), called α-chloritite by him, (2) by Sturm, from Zhuravaka, (3) by Lazarenko, from Utrennyaia shaft, (4) by Serdyuchenko, from Uralskaya vein.

	1	*2*	*3*	*4*
SiO_2	35.12	34.65	33.64	34.73
Al_2O_3	48.16	46.03	45.02	48.08
Fe_2O_3	—	0.55	1.38	1.04
MgO	tr.	1.58	1.75	0.80
CaO	0.61	1.82	2.03	—
Na_2O	1.98	1.08	1.30	—
Li_2O	—	0.14	tr.	tr.
H_2O	14.01*	13.96	15.20	14.58
	99.88	99.81	100.32	99.23

* Given as 4.01.

These analyses give the formulas: for (1) and (2) $H_{14}Al_8Si_5O_{29}$ or $4(H_2Al_2SiO_6)\cdot SiO_2 \cdot 3H_2O$; for (3) $H_{18}RAl_{10}Si_6O_{37}$ or $5(H_2Al_2SiO_6)\cdot RSiO_3\cdot 4H_2O$; for (4) $H_{16}RAl_{10}Si_6O_{36}$ or $5(H_2Al_2SiO_6)\cdot RSiO_3\cdot 3H_2O$, where R = Mg, Fe″, Ca, Na_2, Li_2. The general formula is given as $P(H_2Al_2SiO_6)\cdot gA$, where P = 1, 2, 3, 4, 5; g = 1, 2, . . . ; $A = nH_2O$; $SiO_2\cdot nH_2O$; $RSiO_3\cdot nH_2O$. Before the blowpipe, infusible; whitens and splits into separate foliae. Gives water in a closed tube. Loss in weight up to 450° = 0.02%. Very slightly attacked by HCl and H_2SO_4; not attacked by HNO_3.

PHYSICAL AND OPTICAL PROPERTIES: White, flaky aggregates with pearly luster. Cleavage perfect, laminae flexible. H. = $2\frac{1}{2}$. G. = 2.63. Optically biaxial, positive. $\alpha = 1.728$, $\beta = 1.729$, $\gamma = 1.735$, 2V 52°; dispersion marked, $r > v$. $Z:c = 0°$.

OCCURRENCE: Found at a number of places in the ore veins of the Donetz basin in lode walls and in zones of crushing of rocks; also found as coatings on slickensides of coals.

DISCUSSION: The refractive indices are remarkably high for a mineral having this composition, low specific gravity, and low hardness. The mineral obviously needs further study.

MICHAEL FLEISCHER

Abkhazite

N. E. EFREMOV: The new mineral abkhazite. Trudy Instituta Geologicheskix Nauk (*Proc. Inst. Geol. Sci.*), *Acad. Sci. U.S.S.R.*, No. **11.** Mineral.-Geochem. Ser. (No. 3), 37–44 (1938) (in Russian).

NAME: Named from the region, Abkhazia (North Caucasus, U.S.S.R.).

CHEMICAL PROPERTIES: A variety of amphibole asbestos. Analysis gave: SiO_2 50.18, Al_2O_3 4.70, Fe_2O_3 8.30, FeO 1.20, CaO 16.14, MgO 14.58, MnO 0.67, K_2O (includes trace of Li_2O) 0.87, Na_2O 0.53, P_2O_5 0.76, H_2O+ 1.99, H_2O- 0.77, CO_2 none; sum 100.69. Formula given as $(OH)_2(Ca, Na, Mn, K)_3(Mg, Fe^{++}, Fe^{+++}, Al)_{4.5}(Si)_8O_{22.5}$.

PHYSICAL PROPERTIES: Color, grey, with greenish tinge. Occurs as groups of parallel fibers, resembling typical amphibole asbestos. G. = 2.30. Fibers easily separated. Under the microscope, grey with weak yellowish tint.

OPTICAL PROPERTIES: Oblique extinction, $c:n_g = 16°$. Twinned; plane of optic axis $\|(010)$. $2V = 60°$. Sign (−). Optical character of flat zone positive. $n_g = 1.641$, $n_p = 1.624$, $n_g - n_p = 0.017$. Interference colors in thin section of normal thickness yellowish-grey, first order. Pleochroism strong.

X-RAY CHARACTERISTICS: As reported, seem to be essentially those of actinolite and anthophyllite.

OCCURRENCE: In amphibole-asbestos deposits on the Adangia range, between the Bzibya and Chkhaltoi rivers, Abkhazia territory, North Caucasus, U.S.S.R.

DISCUSSION: Placed by E. among the monoclinic amphiboles, and given species rank as having (Mg, Fe):Ca = 4:3, thus differing from others of this class.

J. P. MARBLE

The ninth summer program on spectroscopy and its applications will be held at the Massachusetts Institute of Technology beginning June 1 and extending until August 1. Requests for information regarding the spectroscopy conference and its program, and on the summer courses should be addressed to Professor G. R. Harrison of the Department of physics.

Dr. Charles H. Behre for the past eleven years professor of economic geology and chairman of the department at Northwestern University from 1933 to 1937, has been appointed professor of economic geology at Columbia University.