Na_2O–PbO–SiO_2 (concl.)

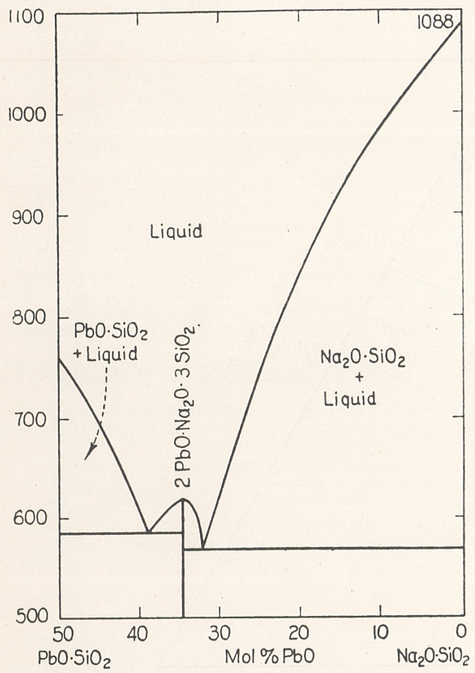


FIG. 496.—System $Na_2O \cdot SiO_2$–$PbO \cdot SiO_2$.

K. A. Krakau, *Ann. secteur anal. phys.-chim., Inst. chim. gén.* (*U.S.S.R.*), **8**, 331–50 (1936).

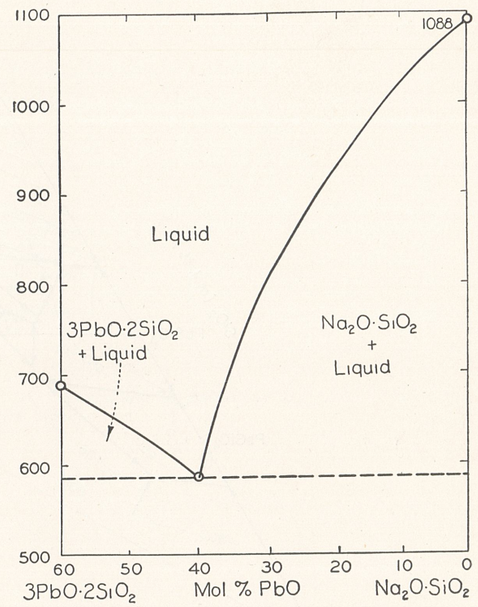


FIG. 499.—System $Na_2O \cdot SiO_2$–$3PbO \cdot 2SiO_2$.

K. A. Krakau, *Ann. secteur anal. phys.-chim., Inst. chim. gén.* (*U.S.S.R.*), **8**, 331–50 (1936).

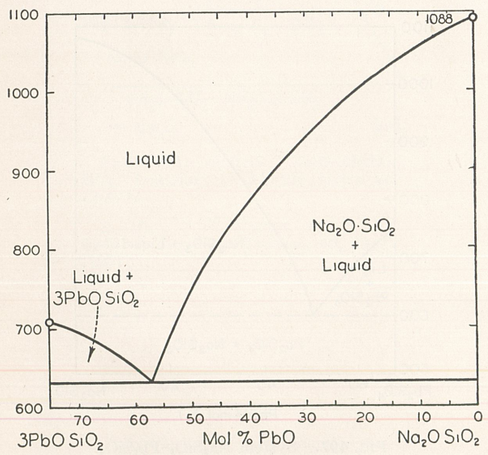


FIG. 498.—System $Na_2O \cdot SiO_2$–$3PbO \cdot SiO_2$.

K. A. Krakau, *Ann. secteur anal. phys.-chim. Inst. chim. gén.* (*U.S.S.R.*), **8**, 331–50 (1936).

Na_2O–PbO–WO_3

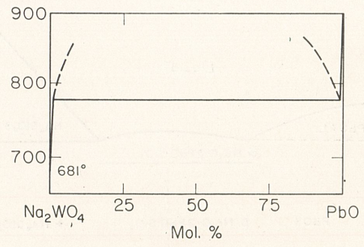
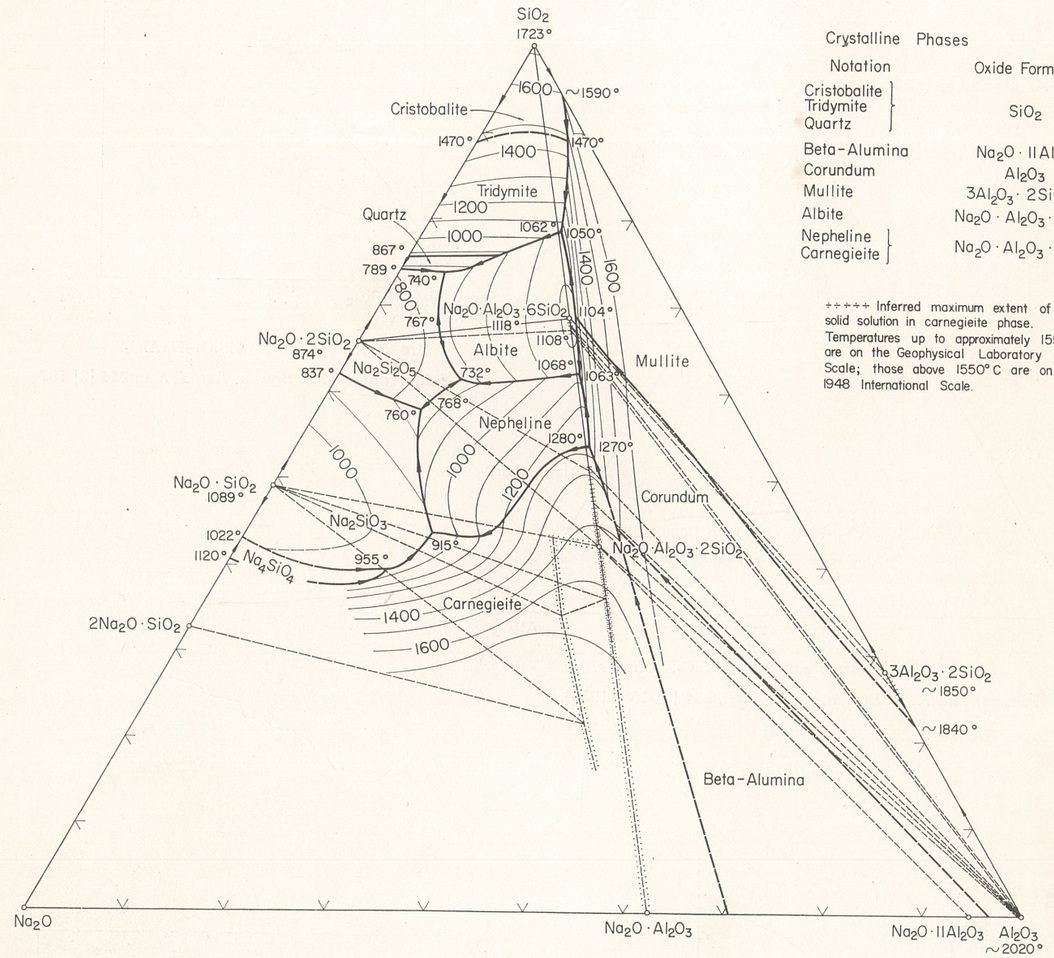


FIG. 500.—System Na_2WO_4–PbO.

I. N. Belyaev, M. L. Sholokhovich, and G. V. Barkova, *Zhur. Obshcheĭ Khim.*, **24**, 215 (1954).

Na_2O–Al_2O_3–SiO_2



Crystalline Phases	
Notation	Oxide Formula
Cristobalite, Tridymite, Quartz	SiO_2
Beta-Alumina	$Na_2O \cdot 11Al_2O_3$
Corundum	Al_2O_3
Mullite	$3Al_2O_3 \cdot 2SiO_2$
Albite	$Na_2O \cdot Al_2O_3 \cdot 6SiO_2$
Nepheline, Carnegieite	$Na_2O \cdot Al_2O_3 \cdot 2SiO_2$

+++++ Inferred maximum extent of solid solution in carnegieite phase. Temperatures up to approximately 1550°C are on the Geophysical Laboratory Scale; those above 1550°C are on the 1948 International Scale.

FIG. 501.—System Na_2O–Al_2O_3–SiO_2; composite.

E. F. Osborn and Arnulf Muan, revised and redrawn "Phase Equilibrium Diagrams of Oxide Systems," Plate 4, published by the American Ceramic Society and the Edward Orton, Jr., Ceramic Foundation, 1960.

Principal References

G. W. Morey and N. L. Bowen, *J. Phys. Chem.*, **28**, 1167–79 (1924).
F. C. Kracek, *J. Phys. Chem.*, **34**, 1583–98 (1930).
N. L. Bowen and J. W. Greig, *J. Am. Ceram. Soc.*, **7**, 238–54 (1924); corrections, ibid., 410.
N. A. Toropov and F. Ya. Galakhov, *Voprosy Petrogr. i Mineralog., Akad. Nauk S.S.S.R.*, **2**, 245–55 (1953).
Shigeo Aramaki and Rustum Roy, *Nature*, **184**, 631–32 (1959).
J. F. Schairer and N. L. Bowen, *Am. J. Sci.*, **254**, 129–95 (1956).
Liberto De Pablo-Galan and Wilfred R. Foster, *J. Am. Ceram. Soc.*, **42**, 491–98 (1959).