

PHASE EQUILIBRIUM DIAGRAMS OF OXIDE SYSTEMS

Revised and Redrawn by
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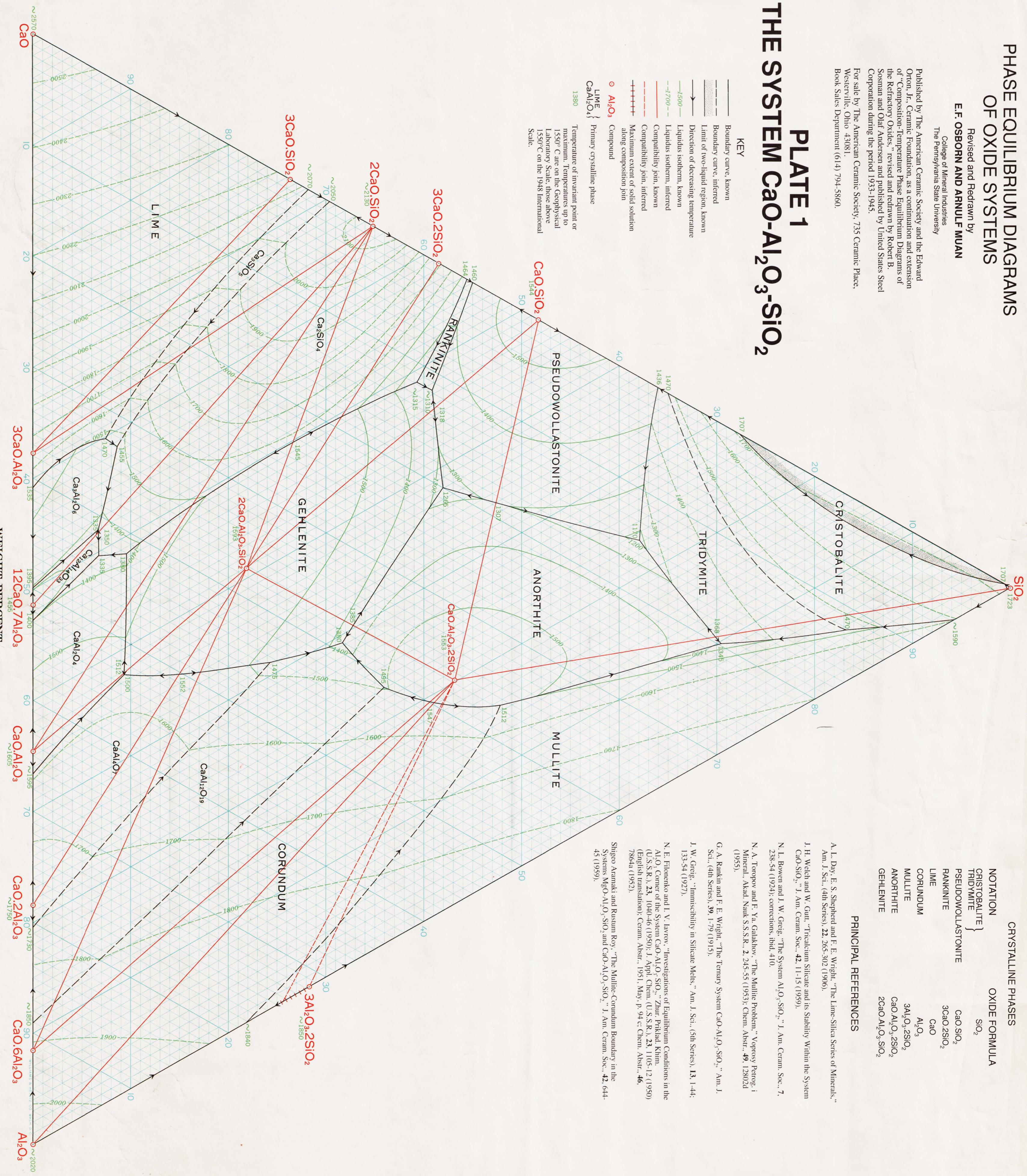
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PLATE 1 THE SYSTEM $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$



PRINCIPAL REFERENCES

- A. L. Day, E. S. Shepherd and F. E. Wright, "The Lime-Silica Series of Minerals," Am. J. Sci. (4th Series), **22**, 265-302 (1906).
- J. H. Welch and W. Gutt, "Tricalcium Silicate and its Stability Within the System $\text{CaO}-\text{SiO}_2$," J. Am. Ceram. Soc., **42**, 11-15 (1959).
- N. I. Bowen and J. W. Greig, "The System $\text{Al}_2\text{O}_3-\text{SiO}_2$," J. Am. Ceram. Soc., **7**, 238-54 (1924); corrections, ibid. 410.
- N. A. Toropov and F. Ya. Galakhov, "The Mullite Problem," Voprosy Petrog. i Mineral., Akad. Nauk S.S.R., **2**, 245-55 (1953); Chem. Abstr., **49**, 12802d (1955).
- G. A. Rankin and F. E. Wright, "The Ternary System $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$," Am. J. Sci., (4th Series), **39**, 1-79 (1915).
- J. W. Greig, "Inmiscibility in Silicate Melts," Am. J. Sci., (5th Series), **13**, 1-44; 133-54 (1927).
- N. E. Filonenko and I. V. lavrov, "Investigations of Equilibrium Conditions in the Al_2O_3 -Corner of the System $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$," Zhur. Priklad. Khim. (U.S.S.R.), **23**, 1040-46 (1950); J. Appl. Chem. (U.S.S.R.), **23**, 1105-12 (1950) (English translation); Ceram. Abstr., 1951, May, p. 94 c; Chem. Abstr., **46**, 7864-a (1952).
- Shigeo Aramaki and Rustum Roy, "The Mullite-Corundum Boundary in the Systems $\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ and $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$," J. Am. Ceram. Soc., **42**, 644-45 (1959).