

Information on the structures of these polymorphs is necessary before an explanation of the differences in the phase behavior among the various halogen-substituted acetic acids is possible.

#### ACKNOWLEDGMENT

The authors express their deep appreciation to Doctors Edward Wichers and Charles Proffer Saylor of the U.S. National Bureau of Standards for making this collaborative research possible. Jacques Naveau of Bureau des Étalons rendered invaluable assistance throughout this research.

#### REFERENCES

- [1] A. R. GLASGOW and J. TIMMERMANS, *ce Bull.* (in press).
- [2] J. TIMMERMANS, *Les Constantes Physiques des Composés Organiques Cristallisés*, (Masson et Cie., Paris, 1953).
- [3] P. W. BRIDGMAN, *Phys. Rev.*, **3**, 126 (1914); in E. Washburn, ed., *International Critical Tables IV*, 14 (McGraw-Hill Book Company, Inc., New York, 1928).
- [4] J. TIMMERMANS, *Bull. soc. chim. Belg.*, **20**, 810 (1911).
- [5] L. DEFFET, *Bull. soc. chim. Belg.*, **44**, 41 (1935).
- [6] L. DEFFET, *Bull. soc. chim. Belg.*, **45**, 213 (1936).
- [7] L. DEFFET, *Bull. soc. chim. Belg.*, **47**, 1 (1938).
- [8] L. DEFFET, *Bull. soc. chim. Belg.*, **49**, 223 (1940).
- [9] L. DEFFET and G. VLERICK, *Bull. soc. chim. Belg.*, **51**, 237 (1942).
- [10] N. TRAPPENIERS, *Acad. roy. Belg. Classe sci., Mem., Collection 8<sup>o</sup>*, **27**, no. 10 (whole no. 1636) (1952).
- [11] A. R. GLASGOW, Thesis, Université Libre de Bruxelles (1957).
- [12] A. R. GLASGOW, A. J. STREIFF and F. D. ROSSINI, *J. Research Natl. Bur. Standards (U.S.)*, **35**, 355 (1945) RP 1676.
- [13] A. R. GLASGOW, G. S. ROSS, A. T. HORTON, D. ENAGONIO, H. D. DIXON, C. P. SAYLOR, G. T. FURUKAWA, M. L. REILLY, and J. M. HENNING, *Anal. Chim. Acta*, **17**, 54 (1957).
- [14] E. W. WASHBURN, *J. Am. Chem. Soc.*, **32**, 653 (1910).
- [15] G. N. LEWIS and M. RANDALL, *Thermodynamics and the Free Energy of Chemical Substances* (McGraw-Hill Book Co., Inc., New York, 1923).
- [16] W. J. TAYLOR and F. D. ROSSINI, *J. Research Natl. Bur. Standards (U.S.)*, **32**, 197 (1944) RP 1584.
- [17] C. P. SAYLOR, *Anal. Chim. Acta*, **17**, 36 (1957).
- [18] F. D. ROSSINI, D. D. WAGMAN, W. H. EVANS, S. LEVINE, and I. JAFFE, Selected Values of Chemical Thermodynamic Properties, Natl. Bur.