

FIGURE 11. The melting entropy of  $^4\text{He}$  as a function of temperature. —, This work; --●--●, Grilly & Mills (1959); ×, Dugdale & Simon (1953); o, Keesom & Keesom (1936).

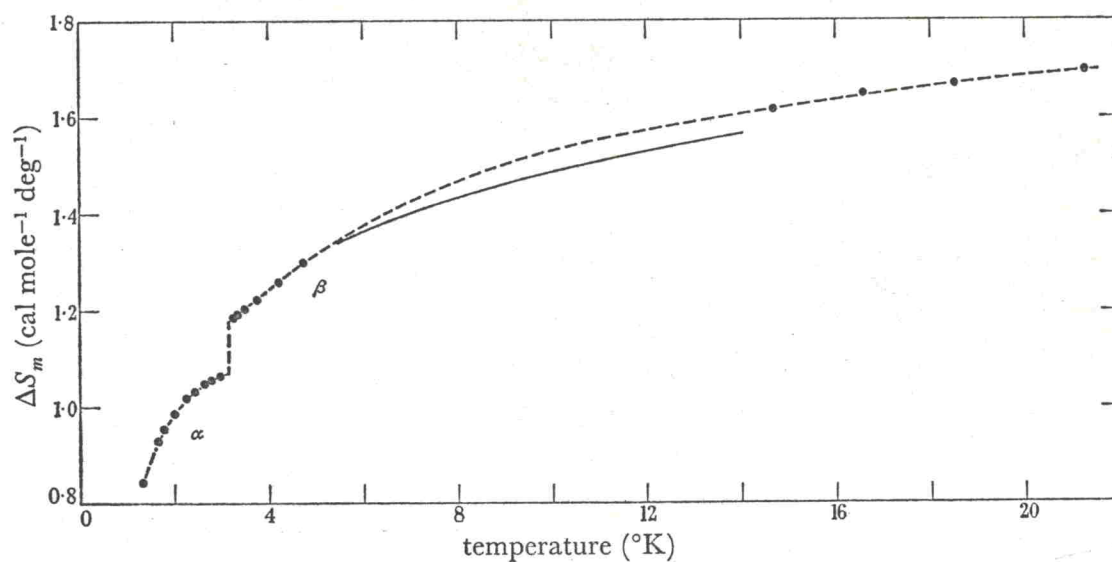


FIGURE 12. The melting entropy of  $^3\text{He}$  as a function of temperature. —, This work; --●--●, Grilly & Mills (1959).

TABLE 6. ISOCHORES FOR SOLID  $^4\text{He}$

| $V$  | $T = 0$ | 2      | 4      | 6      | 8      | 10     | 12     | 14     | 15     |
|------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | $p$     | $p$    | $p$    | $p$    | $p$    | $p$    | $p$    | $p$    | $p$    |
| 12.0 | 1134.6  | 1134.6 | 1134.8 | 1135.9 | 1139.1 | 1146.2 | 1158.4 | 1178.2 | 1191.9 |
| 12.5 | 904.7   | 904.7  | 905.0  | 906.4  | 910.5  | 919.2  | 934.3  | —      | —      |
| 13.0 | 732.5   | 732.5  | 732.9  | 734.7  | 740.0  | 751.4  | —      | —      | —      |
| 13.5 | 596.6   | 596.6  | 597.1  | 599.4  | 606.2  | 622.1  | —      | —      | —      |
| 14.0 | 487.1   | 487.1  | 487.8  | 490.8  | 499.7  | —      | —      | —      | —      |
| 14.5 | 395.9   | 396.0  | 396.8  | 400.8  | —      | —      | —      | —      | —      |
| 15.0 | 323.8   | 323.9  | 324.9  | 330.0  | —      | —      | —      | —      | —      |
| 15.5 | 266.0   | 266.1  | 267.4  | 274.0  | —      | —      | —      | —      | —      |
| 16.0 | 215.7   | 215.8  | 217.7  | —      | —      | —      | —      | —      | —      |
| 16.5 | 175.6   | 175.8  | 178.2  | —      | —      | —      | —      | —      | —      |

Units:  $T$  (°K);  $V$  (cm<sup>3</sup>/mole);  $p$  (Kg/cm<sup>2</sup>).