TABLE 1.—FREEZING POINTS

Sodium Rubidium System

mol fraction Rb	T, K	mol fraction Rb	T, K
0.0000	371.05	0.6187	313.51
0.0050	369.37	0.6786	304.3 [a]
0.0099	367.34	0.7303	293.3 [a]
0.0394	358.18	0.7345	292.0 [a]
0.0613	351.78	0.7788	280.2 [a]
0.0780	348.91	0.8137	270.7 [a]
0.1067	344.62	(0.8210) [b]	268.65 [b]
0.1774	338.57	0.8385	271.77
0.2001	337.59	0.8584	275.59
0.2634	334.94	0.8606	275.95
0.3005	333.61	0.8863	281.56
0.3454	331.91	0.9021	285.04
0.3565	331.74	0.9283	291.49
0.4246	328.86	0.9584	299.99
0.4585	327.45	0.9889	309.51
0.4956	325.07	0.9937 [c]	310.73
0.5556	320.28	1.0000	312.45

[a] less accurate values on steep portion of the curve; [b] eutectic point; [c] no eutectic observed in this sample.

melting points in this region. Apparently both Rinck and Goria were observing something other than the melting point. Both obtained a eutectic composition approximately 7 mol % lower than our value. The discrepancy is due to the large difference in the freezing point data on the sodium-rich side of the eutectic. On the rubidium-rich side of the eutectic, our data are in good agreement with the two

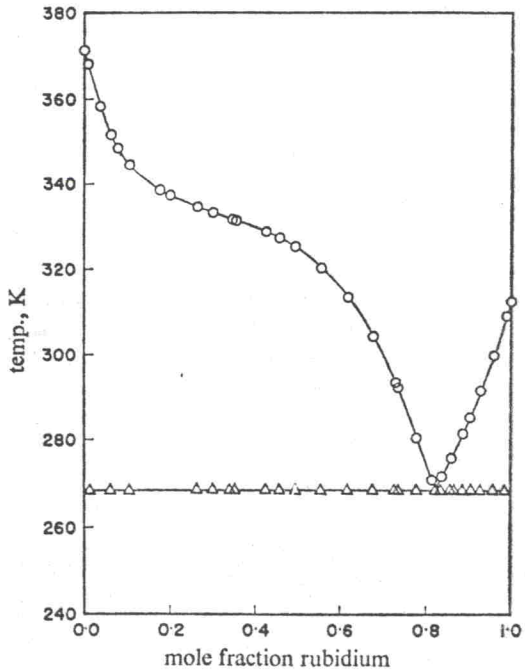

FIG. 1.—Solid-Liquid phase diagram for the sodium-rubidium system.