ABSTRACT

Single wire measurements of the pressure dependence of the thermoelectric power were made hydrostatically to 8 Kb for chromel, alumel, copper and constantan and in a piston cylinder apparatus to 40 Kb for chromel, alumel, platinum, and platinum 10 percent rhodium. The temperature interval covered for the hydrostatic measurements was -195°C to 290°C and for the piston cylinder measurements it was 30°C to 380°C. A detailed discussion is given of the pressure-temperature distribution within the piston cylinder cell. Pressure emf values are presented with an uncertainty of ± 7 percent.