FITC RA57 0062

AN APPARATUS FOR OPTICAL STUDIES

TO VERY HIGH PRESSURES

by

R. A. Fitch

T. E. Slykhouse

and

H. G. Drickaner

Abstract

An apparatus has been developed in two stages which permits optical studies to 200,000 atmospheres pressure. The use of NaCl windows permits studies in the near ultraviolet and in the infrared as well as in the visible. The design of the pressure cells and of a press suitable to fit in a spectrometer are described with essential dimensions. A calibration tested against Bridgman's data to 87,000 atmospheres is given.