

IX. X-RAY DIFFRACTION STUDIES

Prof. B. E. Warren
R. L. Mozzi

RESEARCH OBJECTIVES

Studies of the anomalous surface reflection of x-rays are being used to investigate the nature and constitution of so-called smooth surfaces. A first report entitled "Interpretation of the Anomalous Surface Reflection of X-rays" by B. E. Warren and J. S. Clarke is scheduled for publication in the Journal of Applied Physics (December 1964). During the coming year studies will be made on the horizontal free surfaces of liquids.

Precise knowledge of the intensity distribution in the Compton modified scattering is necessary for the x-ray diffraction studies of the structure of glass. Attempts are now being made to devise a suitable experimental arrangement for obtaining the Compton distribution with the required precision.

B. E. Warren

