

From the close of the nineteenth century to the early part of the twentieth century, G. Tammann⁵ and T. W. Richards⁶ investigated the effects of pressure on solutions, organic liquids, and some elements. Their efforts were noteworthy because of their extensive and systematic experimentation on so many materials. Tammann attained pressures of about 3 kbar (1 kbar = 10^9 dynes/cm² or 986.9 atmospheres) and Richards, 500 bar.

P. W. Bridgman⁷⁻¹³ at Harvard University, starting about 1910 and continuing for nearly 50 years, contributed enormously to the static high pressure field. He developed new apparatus and techniques to study a large number of substances including liquids in this investigation. Bridgman obtained compression data, fusion curves, latent heats of fusion, entropy changes upon freezing, and other thermodynamic quantities. The pressure range covered in these liquids was from one atmosphere to about 10 kbar.

The first dynamic pressure data on organic liquids and water was published by J. M. Walsh and M. H. Rice^{14, 15} from experiments performed at the Los Alamos Scientific Laboratory. Using optical techniques, they determined the pressure and associated volume change and observed opacity changes in some of the liquids under shock conditions. They made a very thorough study of water to pressures of 450 kbar but their coverage of the organic liquids was very limited. The pressure range covered in this study is from about 20 to 600 kbar.

More extensive data on these liquids and others were gathered by M. A. Cook and L. A. Rogers¹⁶ at the University of Utah using optical methods. They covered a pressure range of 4-130 kbar