is in a mixed phase condition and would not yield accurate data for either phase. As mentioned previously, the pressure region above 240 kbar for liquid nitrogen needs to be investigated further to determine conclusively if a transition occurs or is an experimental artifice. Higher pressure data for all the liquids would add to the knowledge of the Hugoniots already obtained.

Future experimentation should include a thorough investigation of electrical conductivity as a function of pressure and temperature to provide a better opportunity for determining the nature of the transitions and the transformed materials. In addition, identifying the type of electrical conductivity may aid in determining the nature of the compressed materials.

Another technique which could prove useful is the recovery of shocked samples for further analysis. Unless the experiment is properly designed, the presence of rarefaction waves, interactions, and multiple shocks may obscure the results sufficiently to render an interpretation questionable.

Some interesting liquids and solids for further study would be the condensed noble gases such as helium, neon, kypton, and others. The data from them is more adaptable to theoretical analysis because the atoms do not bond together to form a molecule in the different phases. Also, the experiments could be conducted to stay within the framework of the Law of Corresponding States providing a basis for comparison on theoretical grounds.

Other interesting liquids would be n-hexane and cyclohexane. The Hugoniot for cyclohexane, whose molecule is six CH_2 groups arranged in a benzene ring, and n-hexane, whose molecule