Current Views with Reference to the Nature of Liquid Structure

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ABSTRACTS

mental work for this paper was performed at Physics Department of the State University of Iowa.

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CURRENT VIEWS WITH REFERENCE TO THE NATURE OF LIQUID STRUCTURE

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This is a report of progress in the study of the structure of liquids, analogous to the crystal structure of solids. Prins has given a mathematical treatment wherein the crystal structure is approximated to an expressed degree of probability. Bernal has made this treatment more general. These efforts advance the subject by giving models capable of mathematical description. Experiments in Raman effect continue to show that the intermolecular forces in the liquid are much like those in the crystal solid. The study of glasses shows their crystallite structure and emphasizes the difference between glass and liquid. These results, as others, emphasize the essential correctness of the cybotactic view, which emphasizes the fluctuating character of the structure, the liquid possessing at any instant minute spots approximating crystallites.

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PHYSICAL DEVELOPMENT OF PHOTOGRAPHIC PLATES

George Higgins

Physical development of photographic plates is not as efficient as chemical development. While it produces very fine grain negatives, longer exposure than normal is required and plates must be developed an hour to produce satisfactory printing densities. pH of the developer is important.

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Published by UNI ScholarWorks, 1937