

GENEALOGY DATABASE ENTRY

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Fixman, Marshall

1930 -

DEGREE: PhD

DATE: 1954

PLACE: MIT

TEACHER/RESEARCH ADVISOR: Stockmayer

studied macromolecules using statistical mechanics, and developed a mean-field theory of polymer solution thermodynamics and chain dimensions spanning the entire concentration range; carried out the first calculation of the distribution function for the radius of gyration of a polymer chain; investigated the dynamics of the local segmental motions of polymer chains, and the dynamics of concentrated solutions and undiluted polymers; established that the anomalously high viscosity of binary fluid mixtures in the critical region is due to non-linear concentration fluctuations.

1. Personal communication (28Jul93).
2. *J. Phys. Chem.* **1992**, *96(10)*, 391-392.