

VISCOELASTIC PROPERTIES OF POLYMERS

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THIRD EDITION

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fit in accordance with the recommendations of the Society of Rheology. Second, the exposition is I hope straightforward enough so that new investigators, of whom there are many in industrial laboratories encountering the phenomena of polymer viscoelasticity without any previous experience, can use it to familiarize themselves with the subject. Third, certain needs for further theoretical and experimental advances are pointed out. Finally, a few examples of practical applications are given in the hope that these will stimulate a much wider use of approximate interconversions of viscoelastic functions, and reduced variables describing effects of temperature, pressure, and concentration, to predict viscoelastic behavior and correlate it with other properties under a wide variety of conditions.

I owe a profound debt to my former students and associates who, over the years, have participated in studies of the viscoelastic properties of polymers at the University of Wisconsin, and whose collective experience has contributed greatly to writing this book. The work cited from our own laboratory was supported by the Research Committee of the Graduate School of the University of Wisconsin; the Ordnance Corps, Department of the Army; National Science Foundation; Office of Naval Research; Allegany Ballistics Laboratory; and Union Carbide Chemicals Company.

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JOHN D. FERRY

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