

References

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Book review

"Polymer Syntheses", Vol. II, by S.R. Sandler and W. Karo, Academic Press, New York/San Francisco/London, 1977, \$39.50, £28.05.

This volume complements very nicely the first volume by the same authors which was concerned primarily with linear polymers from both condensation and addition polymerization reactions. This book provides an equally well-detailed and extensive treatment of the cross-linked or thermoset polymers.

As in the first volume, the organization in each chapter includes an introductory description of the polymerization reactions involved, including valuable tabular information on reaction conditions and product descriptions, followed by detailed discussions of preparative methods. The authors claim that the "procedures are chosen on the basis of safety considerations and of being carried out with standard laboratory equipment," and a survey of the procedures included certainly seems to justify this claim.

All chapters are referenced through 1974 with at least 100, and generally more, literature citations per chapter. The specific types of polymerization reactions included are the following: amino resins (urea and melamine-formaldehyde resins and others); phenol-aldehyde resins; epoxides; silicones; alkyds; polyacetals and poly(vinyl acetals); poly(vinyl ethers); poly(*N*-vinylpyrrolidone); acrylic acid and related monomers; and poly(vinyl chloride). The last two chapters are particularly valuable additions to the first volume on the polymerization of important vinyl monomers, but the greatest value of this book is in its extensive coverage of thermoset resins, a subject which is minimized in other books on laboratory procedures in polymer chemistry.

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