

BOOK REVIEWS

Water-Soluble Resins, R. L. DAVIDSON and M. SITTING, Eds., Reinhold, New York, 1962, vii + 209 pp. \$7.50.

The area of water-soluble resins continues to be one of intense interest. Some recent noteworthy developments include water-soluble packaging films, cationic starches with increased substantivity to cellulose, and high efficiency flocculants. However, the literature encompassing the whole field, in contrast to selected areas, has been rather sparse. There has been, therefore, a real need for an informative and authoritative survey of water-soluble resins.

This rather short book has attempted to fill the gap. Its substance was written by a number of chemists from companies active in this area, the editors contributing only a brief introduction. Resins described include modified starches, alkyl and hydroxy-alkylcellulose derivatives, sodium carboxymethylcellulose, poly(vinyl alcohol), polyvinylpyrrolidone, poly(acrylic acid), polyacrylamide, and ethylene oxide polymers. The emphasis is on properties and applications. Unfortunately, the discussion of the chemistry is altogether too brief in most cases. A further serious deficiency of this short book is that most chapters do not have a bibliography to direct the reader to sources of additional information. In this respect, the book is less useful than the free literature distributed by many companies. The book also gives evidence of lack of editorial direction. There are variations in subject matter, presentation, and nomenclature. The proofreading leaves a good deal to be desired; for example, the alleged structure of starch given on page 4 is grossly erroneous. It is to the credit of several of the contributors that they have nevertheless produced worthwhile chapters. This is particularly the case for the authors of the chapters on modified starches by and on poly(acrylic acid). This book will appeal mainly to those seeking the most rudimentary knowledge of the subject.

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