BOOK REVIEWS

Chemical Metallization of Plastics, 2nd ed., M. Šalkauskas and A. Vaškyalis, Khimiya, Leningrad, 1977, 169 pp. Rub. 0.55 (Russian).

This slim paperback (a bargain!) consists of an introduction, describing the main processes and the main advantages of metal plating on plastics, and seven chapters. The first chapter compares several properties of plated polymers with those of metals and of uncoated plastics. Chapter II describes preparation of polymer surfaces for plating; chapter III: activation of these surfaces (e.g., by depositing tin on them); chapter IV: plating by chemical reduction of metal salt solutions. Then follow more special reviews on deposition of copper (the longest chapter), of nickel, cobalt, iron, and their alloys; and of noble metals.

There is very little pure science in the text but results of practical tests and prescriptions for plating abound. Polymer chemists and engineers who are confronted with metallization problems will find in this booklet a wealth of useful information with over 400 references, more than a third of which appears to be to publications in the Russian language. Many results originated in the authors' Institute.

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Introduction to the Spectroscopy of Biological Polymers, D. W. Jones, Ed., Academic, New York, 1976, 328 pp.

It is evident, reading between the lines, that the editor of this book had a great deal of difficulty in getting the authors to complete and submit their chapters on time (references in some chapters are up to 1971, others to 1975). Nevertheless, the product and its uniformity of style make this a very worthwhile book.

The initial chapters on infrared and Raman spectroscopy by Keighley and Koenig are well integrated and the elementary introduction of symmetry and its uses will be appreciated by most readers. Unfortunately, these appear to have been among the earlier chapters submitted because much of the important data on group interactions, conformational estimation, and resonance Raman spectroscopy are predated.

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