BOOK REVIEW

Carbanions Living Polymers and Electron Transfer Processes. M. SZWARC, Ed. John Wiley & Sons, Inc. New York, 1968.

Although ionic initiation phenomena have played an important role in early observations and studies of addition polymerization involving unsaturated organic molecules, it happened that the initiation of these processes by *free radicals* became prevalent from the point of view of basic investigations and practical application. As a consequence, the science and technique of radical initiation addition polymerization grew to be a large body of fundamental information and commercial products. The next step was the clear recognition of the initiating and propagation capacity of *organic cations* and the evolution of the growing science and technology. Articles were published, patents issued, and several commercial products became available on the basis of this development.

It was only through the dramatic events which followed the pioneering efforts of Ziegler and Natta and through the brilliant contributions of Dr. Szwarc that *anionic* initiation and propagation reached an equally important scientific and practical level in comparison with the two other mechanisms.

This volume provides the proof for this statement. It deals with all aspects of anionic initiation propagation, chain transfer, and termination and focuses appropriately the reader's attention on the spectacular phenomena of living polymers which is particularly characteristic for anionic polymerization processes.

As is fitting for the first comprehensive treatment in a new wide field of activity, the presentation is elaborate in the description of experimental procedures, in the mathematical formulation of the ideas, and in the correlation to other similar phenomena. Nevertheless, the text makes good reading and has, everywhere, a refreshing atmosphere of constructive criticism and authenticity.

A careful study of the book shows that this was a very difficult volume to write, and convinces the reader that it will be most helpful for him in his efforts to develop new ideas, experiments, and products.

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