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## **Book review**

Advances in Polymer Science 41; Speciality Polymers; Eds. H.-J. Cantow et al., Springer Verlag 1981; Berlin, Heidelberg, New York, 186 pages, DM 96.

This volume contains four articles, only one of which is concerned with organometallic chemistry. This is a review of Linear Polymers Containing Transition Metals in the Main Chain by Hagihara, Sonogashira and Takahashi, all of whom have contributed to the rather slim literature in this field, the review cites only 56 references, although a few of them are admittedly multiple in character.

Three categories of polymers with transition metals in the backbone are distinguished: (1) polymers containing metallocene units; (2) "Werner-type" compounds involving coordinate covalent bonds; and (3) polymers with  $\sigma$ -type metal-to-carbon bonds.

For the first two classes, only a few references are discussed by way of updating recent reviews of these types of compounds. Emphasis thus falls on category (3), especially reports which have appeared during the last 3 or 4 years of new metal-poly-yne polymers, the synthesis, structure and properties of which are discussed.

The other three contributions are reviews on Synthetic Nucleic Acid Analogues, Statistical Theory of Polymeric Lyotropic Liquid Crystals, and Interpolymer Complexes.

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