

ADHESION

INTRODUCTION

BY F. W. REINHART¹

The papers in this volume were presented at the June 1963 meeting of ASTM and were given at two symposia, one, sponsored by the Division of Materials Sciences, on the science of adhesion and the other, sponsored by Committee D-14 on Adhesives, on the technology of adhesives. The purposes of these symposia were: (1) to present new information, (2) to reveal the latest accomplishments to those interested, (3) to give some indication of the state of knowledge, and (4) to increase interest so that more research would be initiated in the science of adhesion and the technology of adhesives.

The papers on the science of adhesion indicate clearly the interdisciplinary nature of this phase of scientific study, as well as the high quality of work being conducted. Those on the technological aspects include some of the recent outstanding developments of a practical nature.

These authors give an indication of

the amount and type of current research activities in the fields of adhesion science and adhesives technology. In fields of such technological importance and interdisciplinary scientific interest, more technological research by industry and more scientific studies by additional scholars seem warranted.

On first casual examination these interrelated fields appear simple to understand. This may explain some of the lack of interest on the part of industrial, university, and governmental laboratories. However, on further detailed investigation, it becomes evident that the problems are highly complicated, and that the paucity of detailed information makes the statement of more than a few general principles nearly impossible. If the papers presented herein and other current publications—notably those of Drs. Sharpe and Schornhorn—serve to fire the interest of additional competent scientific workers in this area, this symposium will have attained one of its goals.

¹ Consultant, Silver Spring, Md.

Recent Developments in Adhesion Science

A symposium sponsored by the ASTM Division of
Materials Science

as

ASTM Materials Science Series—6

ASTM MATERIALS SCIENCE SERIES

1. Properties of Crystalline Solids
1960 STP 283 148 pp. \$4.00
2. Major Effects of Minor Constituents on the Properties of
Materials
1961 STP 304 95 pp. \$3.75
3. Stress-Strain-Time-Temperature Relationships in Materials
1962 STP 325 134 pp. \$5.25
4. Properties of Surfaces
1963 STP 340 155 pp. \$7.50
5. Dynamic Behavior of Materials
1963 STP 336 316 pp. \$13.00
6. Recent Developments in Adhesion Science (Included in Ad-
hesion)
1964 STP 360 212 pp. \$7.50

Materials Science Series publications are sponsored by the Society's Division of Materials Sciences. In this series the interdisciplinary nature of materials is emphasized as a subject for study and understanding. The publications comprise papers presented at Division-sponsored symposia at National Meetings of the Society.