

## Preface to Symposium on Adhesives for Structural Applications

Held at Picatinny Arsenal, Dover, New Jersey, September 27-28, 1961

During the past decade adhesive bonding has become an accepted method of joining materials of construction in many applications. Much of the credit for the development of effective bonding techniques belongs to the aircraft and adhesives industries and to the Government agencies who have stimulated and guided research in this field.

This Symposium was held to disseminate information on the latest developments in structural adhesives bonding. Its goal was to provide authoritative and up-to-date advice on modern adhesives technology, primarily for the use of design engineers in the Ordnance Corps and among Ordnance contractors.

The unique feature of this Symposium was that the primary requisites for reliable structural adhesive bonds were covered under major session topics. Top-ranking adhesives authorities presented papers selected to emphasize the major requirements of proper design of joints, specific surface treatment, selection of proper adhesive, and adequate process control. Each speaker was selected primarily on the basis of his familiarity with the practical aspects of adhesives technology.

The discussion of polymers in these papers has been intentionally limited since the presentations were made primarily for the benefit of design engineers who would have little or no background in polymer chemistry. These papers should be helpful to the polymer chemist, however, by showing him the applications in which polymeric adhesives are being used and the factors that must be considered. Being better informed about the requirements of polymeric adhesives in end items, the polymer chemist may understand more fully the investigations that should be undertaken in synthesizing and developing new polymeric adhesives useful in structural applications.

A considerable part of the money allocated to research and development by both industry and government agencies has been spent to keep pace with the ever-changing requirements of modern weapons and space vehicles. It is hoped that the matters discussed herein will acquaint you with the advanced capabilities of modern bonding technology and develop your confidence in the effective use of structural adhesives.

M. J. BODNAR  
*Editor,*  
*Symposium on Adhesives for Structural Applications*

*Picatinny Arsenal*  
*Dover, New Jersey*