

ASTM Materials Science Series—3

*Symposium on*

Stress-Strain-Time-Temperature  
Relationships in Materials



Published by the  
AMERICAN SOCIETY FOR TESTING AND MATERIALS  
1916 Race St., Philadelphia 3, Pa.

*ASTM Special Technical Publication No. 325*

# SYMPOSIUM ON STRESS-STRAIN-TIME- TEMPERATURE RELATIONSHIPS IN MATERIALS

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ASTM Materials Science Series — 3

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Presented at the  
SIXTY-FIFTH ANNUAL MEETING  
AMERICAN SOCIETY FOR TESTING AND MATERIALS  
New York, N. Y., June 27, 1962



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## FOREWORD

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This volume is the third in a series of books on various aspects of materials sciences, and is sponsored by the ASTM Division of Materials Sciences.

The papers and the Panel Discussion were presented at two sessions on Wednesday, June 27, 1962, during the Sixty-fifth Annual Meeting of the Society.

The symposium was sponsored by the ASTM Division of Materials Sciences in cooperation with the Society of Rheology and the Metals Engineering Division of the American Society of Mechanical Engineers.

Mr. A. C. Webber, E. I. du Pont de Nemours and Co., Inc., served as Symposium Chairman. Mr. Morris Cohen, Massachusetts Institute of Technology, presided over the morning session during which the papers were presented, while Mr. I. V. Williams, Bell Telephone Laboratories, Inc., presided over the Panel Discussion in the afternoon.

A paper by J. D. Lubahn, "Creep and Recovery of a Zirconium-Tin-Columbium Alloy," presented on Monday, June 25, during the Session on Nonferrous Metals, has been included in this volume because of its pertinence to the theme of the symposium.

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NOTE.—The Society is not responsible, as a body, for the statements  
and opinions advanced in this publication.

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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.

THIS PUBLICATION is one of many issued by the American Society for Testing and Materials in connection with its work of promoting knowledge of the properties of materials and developing standard specifications and tests for materials. Much of the data result from the voluntary contributions of many of the country's leading technical authorities from industry, scientific agencies, and government.

Over the years the Society has published many technical symposiums, reports, and special books. These may consist of a series of technical papers, reports by the ASTM technical committees, or compilations of data developed in special Society groups with many organizations cooperating. A list of ASTM publications and information on the work of the Society will be furnished on request.