

ASTM Materials Science Series—7

IRREVERSIBLE EFFECTS OF  
HIGH PRESSURE AND  
TEMPERATURE ON  
MATERIALS



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

*ASTM Special Technical Publication No. 374*

# IRREVERSIBLE EFFECTS OF HIGH PRESSURE AND TEMPERATURE ON MATERIALS

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ASTM Materials Science Series—7

A Symposium

Presented at the

INTERNATIONAL CONFERENCE ON MATERIALS

AMERICAN SOCIETY FOR TESTING AND MATERIALS

Philadelphia, Pa., February 3-6, 1964



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## FOREWORD

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This volume is the seventh in the "Materials Science Series" of publications sponsored by the ASTM Division of Materials Sciences.

The papers in this publication were presented at the ASTM International Conference on Materials during ASTM Committee Week, February 3-6, 1964 at Philadelphia, Pa.

Seven papers were presented at the symposium which was divided into two sessions on Tuesday, February 4, 1964. Chairmen of the morning and afternoon sessions were, respectively, E. V. Clougherty of Manlabs, Inc. and A. A. Giardini of the U.S. Army Electronics Research and Development Laboratories.

The subject matter is confined to the irreversible effects produced by high-pressure, high-temperature treatment, and changes in a variety of metals, alloys, and organic and inorganic substances are discussed.

The symposium was sponsored by the ASTM Division of Materials Sciences, and the symposium chairman was Larry Kaufman of Manlabs, Inc

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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 symposiums at National Meetings of the Society.

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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.



