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Library of Congress Cataloging in Publication Data

Symposium on the Fracture Mechanics of Ceramics,  
Pennsylvania State University, 1973.  
Fracture mechanics of ceramics.

Includes bibliographical references.

CONTENTS: v. 1. Concepts, flaws, and fractography. —v. 2. Microstructure, materials, and applications.

1. Ceramics—Fracture—Congresses. I. Bradt, Richard Carl, 1938- ed. II. Hasselman, D. P. H., 1931- ed. III. Lange, F. F., 1939- IV. Pennsylvania State University. V. Title.

TA430.S97 1973

620.1'4

73-20399

ISBN 0-306-37591-5 (v. 1)

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First half of the proceedings of a symposium on the  
Fracture Mechanics of Ceramics, held at Pennsylvania State University,  
University Park, Pennsylvania, July 11-13, 1973

© 1974 Plenum Press, New York  
A Division of Plenum Publishing Corporation  
227 West 17th Street, New York, N.Y. 10011

United Kingdom edition published by Plenum Press, London  
A Division of Plenum Publishing Company, Ltd.  
Davis House (4th Floor), 8 Scrubs Lane, Harlesden, London, NW10 6SE, England

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# Fracture Mechanics of Ceramics

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Volume 1

Concepts, Flaws, and Fractography

**Volume 1 • Concepts, Flaws, and Fractography**

**Volume 2 • Microstructure, Materials, and Applications**

## PREFACE

These volumes constitute the Proceedings of a Symposium on the Fracture Mechanics of Ceramics, held at the Pennsylvania State University, University Park, Pennsylvania, July 11, 12, and 13, 1973.

The theme of the symposium focussed on the mechanical behavior of brittle ceramics in terms of the characteristics of cracks. The 52 contributed papers by 87 authors, present an overview of the current understanding of the theory and application of fracture mechanics to brittle ceramics.

The program chairmen gratefully acknowledge the financial assistance for the Symposium provided by the Office of Naval Research, the College of Earth and Mineral Sciences of the Pennsylvania State University, the Materials Research Center of Lehigh University, Bethlehem, Pennsylvania and Westinghouse Research Laboratories, Pittsburgh, Pennsylvania.

Special appreciation is extended to the expert organization provided by the J. Orvis Keller Conference Center of the Pennsylvania State Conference Center of the Pennsylvania State University. In particular, Mrs. Patricia Ewing should be acknowledged for the excellent program organization and planning. Dean Harold J. O'Brien, who was featured as the after-dinner speaker and who presented a most stimulating talk on the communication between people, also contributed to the success of the meeting.

Finally, we also wish to thank our joint secretaries for the patience and help in bringing these Proceedings to press.

University Park  
Bethlehem  
Pittsburgh, Pennsylvania  
  
July, 1973

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