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TAILORING MULTIPHASE CERAMICS(U) PENNSYLVANIA STATE
UNIV UNIVERSITY PARK DEPT OF CERAMIC SCIENCE AND
ENGINEERING R E TRESSLER ET AL. 09 DEC 85

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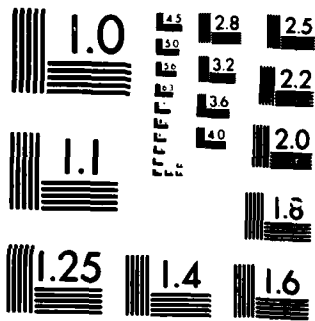
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<p>DTIC FILE COPY</p> <p>The Tailoring Multiphase Ceramics Conference emphasized the discussion and analysis of the properties of multiphase ceramic materials in which the microstructure is deliberately tailored for specific applications or properties. A number of internationally recognized authorities presented keynote and invited lectures on topics dealing with processing and fabrication of multiphase and composite ceramics, multiphase electroceramics, fiber and whisker reinforced composites, and high temperature multiphase ceramics. The results of recent research were presented in oral and poster sessions by leading researchers from several countries.</p>						
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FINAL REPORT

TAILORING MULTIPHASE CERAMICS

Contract

AFOSR-ISSA-85-00093

Pennsylvania State University

Department of Ceramic Science & Engineering

University Park, PA 16802

Richard E. Tressler and Robert E. Newnham

December 9, 1985

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THE PENNSYLVANIA STATE UNIVERSITY

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College of Earth and Mineral Sciences
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Area Code 814
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December 9, 1985

Dr. R. C. Pohanka
Department of the Navy
Office of Naval Research
Arlington, VA 22217-5000

Dear Dr. Pohanka:

I. Contract Information

Title: University Conference on Ceramic Science: Tailoring Multiphase
Ceramics, University Park, PA; July 17-19, 1985

Contract No: N00014-85-G-0168

Work Unit No: 032-676

Principal Investigators: R. E. Tressler, C. G. Pantano, R. E. Newnham,
G. L. Messing

ONR Scientific Officer: R. C. Pohanka

Period: 15 May 1985 to 14 May 1986

II. Research Description

This conference emphasized the discussion and analysis of the properties of multiphase ceramic materials in which the microstructure is deliberately tailored for specific applications or properties. A number of internationally recognized authorities presented keynote and invited lectures on topics dealing with processing and fabrication of multiphase and composite ceramics, multiphase electroceramics, fiber reinforced composites, and high temperature multiphase ceramics. The results of recent research were presented in oral and poster sessions by leading researchers from several countries.

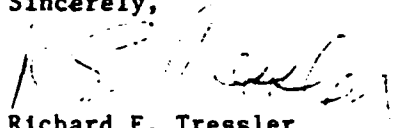
Perhaps the most significant outcome of this conference will be the published collection of papers. This book of conference proceedings will represent the state of the art in our understanding of the processing-structure-property inter-relationships for these materials which possess unique and useful electrical, magnetic, optical, mechanical and thermal properties as a result of

their multiphase nature. All the papers to be included in these conference proceedings have been collected and reviewed. They will be submitted to the publisher (Plenum Publishing Corp.) before the end of 1985.

The Table of Contents for the conference proceedings, as well as a complete registration list for the conference, are attached.

We, the Conference Co-Chairmen, are grateful for the financial support provided by the Office of Naval Research, the Air Force Office of Scientific Research, the Defense Advanced Research Projects Agency and the National Science Foundation.

Sincerely,



Richard E. Tressler
Carlo G. Pantano
Robert E. Newnham
Gary L. Messing

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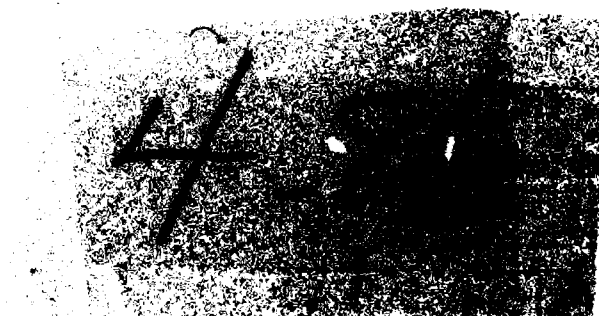
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