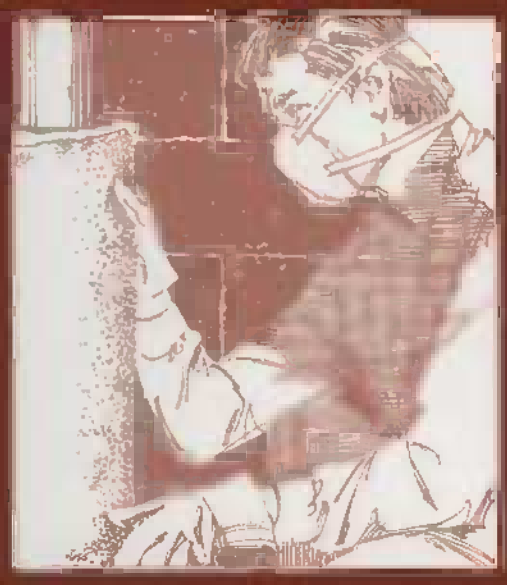
INSULATION MATERIALS

Testing and Applications

3rd Volume



Ronald S. Graves
Robert R. Zarr
Editors

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Ronald S. Graves and Robert R. Zarr, editors

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The quality of the papers in this publication reflects not only the obvious efforts of the authors and the technical editor(s), but also the work of the peer reviewers. The ASTM Committee on Publications acknowledges with appreciation their dedication and contribution of time and effort on behalf of ASTM.

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Foreword

This publication, *Insulation Materials: Testing and Applications, Third Volume,* contains papers presented at The Third Symposium on Insulation Materials: Testing and Applications, held in Quebec City, Quebec, Canada on 15-17 May 1997. The sponsor of the event was ASTM Committee C-16 on Thermal Insulation.

The symposium co-chairmen were Ronald S. Graves, R & D Services, Inc., Lenoir City, TN, and Robert R. Zarr, NIST, Gaitherburg, MD. They also served as editors of this publication.

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Overview

After several decades of development, the testing and applications of thermal insulation materials may be considered, by some, a mature technology. Yet, new insulation materials, systems, and test methods for the measurement of thermal properties continue to emerge and evolve. In advancing the state of the art, ASTM Committee C-16 on Thermal Insulation has periodically published the latest up-to-date information on thermal insulation materials, systems, and measurement technology based on symposia sponsored by the committee. This Special Technical Publication continues this tradition of communicating state-of-the-art technology to those engaged in this field of endeavor.

In many ways, developments in the thermal insulation community reflect society's technological interests and needs. For example, during the 1960s the insulation community turned its attention to the space program. Later, in the 1970s and the 1980s, public awareness of rising energy costs focused attention on effective energy conservation programs using thermal insulation. More recently, the community has been involved with mitigation of the effects that the production and consumption of energy have on the environment. This publication presents the thermal insulation community with the latest information on developments in residential, commercial, and industrial applications.

Currently, there are several areas of interest and the papers in this volume have been organized in six categories. These categories are fenestration testing, system testing, materials testing and properties, models and materials, test methods, and performance. The papers and presentations for this publication were truly international in scope, with participation from 13 countries: Austria, Canada, the Czech Republic, Denmark, Finland, France, Germany, Israel, Italy, Sweden, the United Kingdom, the United States, and the West Indies.

The editors of this Special Technical Publication gratefully acknowledge the contributions of the authors, technical reviewers, steering committee, and session chairpersons. The steering committee, session chairpersons, and technical reviewers are identified on the following page.

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