

# ENGINEERING DIELECTRICS

● VOLUME IIA



ELECTRICAL PROPERTIES OF  
SOLID INSULATING MATERIALS:  
MOLECULAR STRUCTURE AND  
ELECTRICAL BEHAVIOR

*Bartnikas/Eichhorn, editors*

ASTM STP 783

**ENGINEERING  
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Committee D-9 on  
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# Foreword

This publication is Volume IIA of a monograph series entitled *Engineering Dielectrics*. The series is to consist of six volumes, namely:

- Volume I Corona Measurement and Interpretation
- Volume II Electrical Properties of Solid Insulating Materials
  - Part A, Molecular Structure and Electrical Behavior
  - Part B, Measurement Techniques
- Volume III Solid-Liquid Insulating Systems
  - Part A, Insulating Liquids
  - Part B, Impregnated Systems
- Volume IV Cable Insulating Systems
- Volume V Transformer and Generator Coil Insulating Systems
- Volume VI Capacitor and Bushing Insulating Systems

The editor of the entire series is R. Bartnikas of the Institut de Recherche d'Hydro-Quebec, with assistant editors giving assistance with certain volumes. The assistant editors for Volume I and Volume IIA are E. J. McMahon of E. I. du Pont de Nemours & Co. and R. M. Eichhorn of Union Carbide Corp., respectively. The series is sponsored by ASTM Committee D-9 on Electrical Insulating Materials.

## Related ASTM Publications

Engineering Dielectrics, Volume I: Corona Measurement and Interpretation, STP 669 (1979), 04-669000-21

ASTM Standards on Metallic Electrical Conductors (B-1), Twelfth Edition (1980), 03-201080-3

1982 Annual Book of ASTM Standards, Part 39, Electrical Insulation—Test Methods: Solids and Solidifying Fluids (1982), 01-039082-21

1982 Annual Book of ASTM Standards, Part 40, Electrical Insulation—Specifications: Solids, Liquids, and Gases; Test Methods: Liquids and Gases; Protective Equipment (1982), 01-040082-21

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*A child's thoughts concerning an extraordinary type of tree:*

*A New Tree*

*What is it?*

*It is an electrical tree.*

*How high does it grow?*

*It grows about one inch high.*

*What does it grow from?*

*It usually grows from a needle or a sharp point.*

*What does it look like?*

*It looks like a tree.*

