

The AIChE JOURNAL, a monthly publication of the American Institute of Chemical Engineers, is devoted to fundamental research and developments having immediate or potential value in chemical engineering.

EDITOR

Morton M. Denn

MANAGING EDITOR

Haeja L. Han

EDITORIAL ASSISTANTS

Debra E. Soltanoff

Karen M. Simpson

CONSULTING EDITORS

Richard Alkire

Electrochemical Engineering

Bruce Finlayson

Computation

Joe D. Goddard

Transport Processes

Louis Hegedus

Catalysis/Surface Science

Sheldon Isakoff

Materials

Roy Jackson

Transport Processes

George E. Keller, II

Separations

John Riggs

Materials

Stanley Sandler

Thermodynamics

John Seinfeld

Aerosols/Atmospheric Science

Reuel Shinnar

Reaction Engineering

Michael Shuler

Biochemical Engineering

George Stephanopoulos

Systems/Design

Larry F. Thompson

Electronic Materials

PUBLISHER

Richard E. Emmert

PUBLICATIONS DIRECTOR

Diane Foster

New Symposium Series Title

Fiber Optics Engineering: Processing and Applications

Thomas O. Mensah & Pundi L. Narasimham, Editors

(AIChE Symposium Series Volume 83, No. 258)

These selected papers from AIChE Meetings in Anaheim, Houston, Seattle, New Orleans and Miami (1984-1986) emphasize processing and manufacturing.

CONTENTS

Chemical Vapor Deposition; Preform Fabrication. Review of Chemistry and Mechanisms of Deposition for Optical Waveguide. Fabrication by Vapor-Phase Deposition from a Combustion Flame. Environmental Aspects of the MCVD Process. Modal Calculations for Optical Fibers and their Impact on Processing. Use of Heat Transfer Analyses in the Manufacture of Large Preforms by the MCVD Process. Optical Fiber Drawing and Coating. Polymer Coatings for Lightguide Fibers. Heat Transfer Aspects of Silica Lightguide Fiber Drawing and Coating. Recent Advances in Fiber Drawing and Coating Technology. Temperature Dependence of Optical Fiber Coatings for Single-Mode Fiber. High Strength Hermetically Coated Optical Fibers. New Technology in the CPI: Fiber Optic Sensors. Sensor Technology: Fiber Optics.

1987 67 pp ISBN 0-8169-0418-9 LC87-17495

Pub S-258

AIChE Members \$15 Others \$30

AIChE Journal (ISSN 0001-1541) is published monthly by the American Institute of Chemical Engineers, 345 E. 47th St., New York, NY 10017. Manuscripts should be submitted to Editor Morton M. Denn, at the Dept. of Chemical Engineering, University of California, Berkeley, CA 94720, Phone (415) 643-6591. The statements and opinions in the *AIChE Journal* are those of the contributors, and AIChE assumes no responsibility for them. Annual subscription rates: \$275 for nonmembers, \$40 for members; outside U.S., add \$13 for postage. Single copies: \$30; outside U.S., add \$2 for postage. Second-class postage paid at New York, NY and additional mailing offices. Copyright 1988 by the American Institute of Chemical Engineers. Subscribers are requested to give prompt notification of any change of address. Postmaster: Send changes of address to *AIChE Journal*, 345 East 47th St., New York, NY 10017.

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by AIChE for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the \$3.00 per copy fee is paid directly to CCC, 21 Congress St., Salem, MA 01970. This consent does not extend to copying for general distribution, for advertising or promotional purposes, for inclusion in a publication, or for resale. Articles published before 1988 are subject to the same copyright conditions and the fee for each article is \$2.00. *AIChE Journal* fee code: 0001-1541/88 \$3.00.