EDITORIAL AND BUSINESS ADDRESS:

Chemical Engineering Education
Department of Chemical Engineering
University of Florida
Gainesville, FL 32611

PHONE and FAX: 904-392-0861 e-mail: cee@che.ufl.edu

EDITOR

Ray W. Fahien

ASSOCIATE EDITOR

T. J. Anderson

CONSULTING EDITOR Mack Tyner

MANAGING EDITOR
Carole Yocum

PROBLEM EDITORS

James O. Wilkes and Mark A. Burns
University of Michigan

LEARNING IN INDUSTRY EDITOR William J. Koros

University of Texas, Austin

PUBLICATIONS BOARD

· CHAIRMAN ·

E. Dendy Sloan, Jr. Colorado School of Mines

• PAST CHAIRMEN •

Gary Poehlein

Georgia Institute of Technology

Klaus Timmerhaus University of Colorado

· MEMBERS ·

Anthony T. DiBenedetto

University of Connecticut

Thomas F. Edgar

University of Texas at Austin

Richard M. Felder

North Carolina State University

Bruce A. Finlayson

University of Washington

H. Scott Fogler

University of Michigan

J. David Hellums

Rice University

Angelo J. Perna

New Jersey Institute of Technology

Stanley I Sandler

University of Delaware

Richard C. Seagrave

Iowa State University

M. Sami Selim

Colorado School of Mines

James E. Stice

University of Texas at Austin

Phillip C. Wankat

Purdue University

Donald R. Woods

McMaster University

Chemical Engineering Education

Volume 29

Number 2

Spring 1995

EDUCATOR

66 Helen C. Hollein, of Manhattan College, C. Stewart Slater

DEPARTMENT

70 Northeastern University, Ralph A. Buonopane

AWARD LECTURE

76 Computer-Aided Design and Operation of Batch Processes, G. V. Reklaitis

LABORATORY

86 Bioseparation via Cross-Flow Membrane Filtration, Helen C. Hollein, C. Stewart Slater, Rita L. D'Aquino, Annmarie L. Witt

CLASSROOM

- **94** Exorcising Maxwell's Demon: Entropy, Information, and Computing, *B. G. Kyle*
- 96 An Ancient Method for Cooling Water Explained by Mass and Heat Transfer, J. Ignacio Zubizarreta, Gabriel Pinto
- 106 Determining Residence Time Distributions in Complex Process Systems: A Simple Method, *Paul D. Gossen, G. Ravi Sriniwas, F. Joseph Schork*
- 134 Terse Words in Tight Margins, Robert R. Hudgins

RANDOM THOUGHTS

102 Just Another Day at the Office, Richard M. Felder

LEARNING IN INDUSTRY

WPI Projects Globalize Engineering Education in the Pacific Rim, Y.H. Ma, L. Schachterle, J.F. Zeugner

LABORATORY

- 116 Unsteady-State Heat Transfer from a Steam-Heated Coil to a Tank of Water, Peter Rice
- 120 Polymer Processing: For the Undergraduate Unit Operations Laboratory, Ajit V. Pendse, John R. Collier

CURRICULUM

126 A Course on Tissue Engineering, Susan L. Ishaug, Antonios G. Mikos

CLASS AND HOME PROBLEMS

130 Problems on Fluids in Motion and at Rest, A.R. Konak

93, 111, 125 Book Reviews

- 100 ASEE Annual Meeting: ChE Division Program
- 104 Letters to the Editor: Why Do You Belong to ASEE?
- 133 Letter to the Editor
- 136 Books Received

CHEMICAL ENGINEERING EDUCATION (ISSN 0009-2479) is published quarterly by the Chemical Engineering Division, American Society for Engineering Education, and is edited at the University of Florida. Correspondence regarding editorial matter, circulation, and changes of address should be sent to CEE, Chemical Engineering Department, University of Florida, Gainesville, FL 32611-2022. Copyright © 1995 by the Chemical Engineering Division, American Society for Engineering Education. The statements and opinions expressed in this periodical are those of the writers and not necessarily those of the ChE Division, ASEE, which body assumes no responsibility for them. Defective copies replaced if notified within 120 days of publication. Write for information on subscription costs and for back copy costs and availability. POSTMASTER: Send address changes to CEE, Chemical Engineering Department., University of Florida, Gainesville, FL 32611.