

EDITORIAL AND BUSINESS ADDRESS

Department of Chemical Engineering
University of Florida
Gainesville, Florida 32611

Editor: *Ray Fahien*

Associate Editor: *Mack Tyner*

Business Manager: *R. B. Bennett*

(904) 392-0881

Editorial and Business Assistant: *Bonnie Neelands*

(904) 392-0861

Publications Board and Regional Advertising Representatives:

SOUTH: *Charles Littlejohn*
Chairman of Publications Board
Clemson University

Homer F. Johnson
University of Tennessee

Vincent W. Uhl
University of Virginia

CENTRAL: *Leslie E. Lahti*
University of Toledo

Camden A. Coberly
University of Wisconsin

WEST: *William H. Corcoran*
California Institute of Technology

George F. Meenaghan
Texas Tech University

SOUTHWEST: *J. R. Crump*
University of Houston

James R. Couper
University of Arkansas

EAST: *G. Michael Howard*
University of Connecticut

Leon Lapidus
Princeton University

Thomas W. Weber
State University of New York

NORTH: *J. J. Martin*
University of Michigan

Edward B. Stuart
University of Pittsburgh

NORTHWEST: *R. W. Moulton*
University of Washington

Charles E. Wicks
Oregon State University

PUBLISHERS REPRESENTATIVE
D. R. Coughanowr
Drexel University

UNIVERSITY REPRESENTATIVE
Stuart W. Churchill
University of Pennsylvania

LIBRARY REPRESENTATIVES
UNIVERSITIES: *John E. Myers*
University of California, Santa Barbara

Chemical Engineering Education

VOLUME IX

NUMBER 1

WINTER 1975

FEATURES

40 *Award Lecture - 1974*

Biotechnology—An Old Solution to
New Problems, *E. Gaden*

DEPARTMENTS

2 **The Educator**

Bruce Finlayson of U. of Washington

4 **Departments of Chemical Engineering**

University of Waterloo

32 **Classroom**

An Introductory Design Course for
Engineering Freshmen, *G. Younquist*

8 **Views and Opinions**

Some Comments on ChE Laboratory
Courses, *J. M. Douglas*

31 **Book Review**

31 **News**

Laboratory

10 **Flow Curve Determination for Non-Newtonian Fluids,**

W. Walavender and T. Chen

16 **Teaching Process Synthesis, K. Overholser,**

C. Woltz and T. Godbold

22 **Preliminary Appraisal of a Self Paced Laboratory, H. Rase**

24 **Reporting Precision of Experiments**

K. Hall, D. Kirwan and O. Updike

28 **Some Simple Experiments for First Year Students, A. Gerrard**

CHEMICAL ENGINEERING EDUCATION is published quarterly by the Chemical Engineering Division, American Society for Engineering Education. The publication is edited at the Chemical Engineering Department, University of Florida. Second-class postage is paid at Gainesville, Florida, and at DeLeon Springs, Florida. Correspondence regarding editorial matter, circulation and changes of address should be addressed to the Editor at Gainesville, Florida 32611. Advertising rates and information are available from the advertising representatives. Plates and other advertising material may be sent directly to the printer: E. O. Painter Printing Co., P. O. Box 877, DeLeon Springs, Florida 32028. Subscription rate U.S., Canada, and Mexico is \$10 per year, \$6 per year mailed to members of AIChE and of the ChE Division of ASEE, and \$4 per year to ChE faculty in bulk mailing. Write for prices on individual back copies. Copyright © 1975. Chemical Engineering Division of American Society for Engineering Education, Ray Fahien, Editor. The statements and opinions expressed in this periodical are those of the writers and not necessarily those of the ChE Division of the ASEE which body assumes no responsibility for them. Defective copies replaced if notified within 120 days.

The International Organization for Standardization has assigned the code US ISSN 0009-2479 for the identification of this periodical.