EDITORIAL AND BUSINESS ADDRESS Department of Chemical Engineering University of Florida Gainesville, Florida 32601

Editor: Ray Fahien

Associate Editor: Mack Tyner

Business Manager: R. B. Bennett

Advertising Representatives: Publications Board and Regional

CENTRAL: James H. Weber Chairman of Publication Board University of Nebraska Lincoln, Nebraska 68508 Richard S. Mayer Ohio University Athens, Ohio 45701 WEST: William H. Corcoran California Institute of Technology Pasadena, California 91109 SOUTH: Charles Littlejohn Clemson University Clemson, South Carolina 29631 SOUTHWEST: J. R. Crump University of Houston Houston, Texas 77004 EAST: Robert Matteson College Relations Sun Oil Company Philadelphia, Pennsylvania 19100 Miguel Hnatow New York University New York, N.Y. 10453 G. Michael Howard University of Connecticut Storrs, Connecticut 06268 George D. Keeffe Newark College of Engineering Newark, New Jersey, 07102 Peter Lederman Brooklyn Polytechnic Institute Brooklyn, New York 11201 Thomas W. Weber State University of New York Buffalo, New York 14214 NORTH: J. J. Martin University of Michigan Ann Arbor, Michigan 48104 NORTHWEST: R. W. Moulton University of Washington Seattle, Washington 98105 PUBLISHERS REPRESENTATIVE D. R. Coughanowr Drexel University Philadelphia, Pennsylvania 19104 UNIVERSITY REPRESENTATIVE Stuart W. Churchill University of Pennsylvania Philadelphia, Pennsylvania 19104 LIBRARY REPRESENTATIVES UNIVERSITIES: John E. Myers University of California Santa Barbara, California 93106 INDUSTRIAL: E. P. Bartkus Secretary's Department E. I. du Pont de Nemours Wilmington, Delaware 19898

Chemical Engineering Education
VOLUME 6, NUMBER 1 WINTER 1972

Feature Articles

Chemical Engineering Award Lecture - 1971

14 The Art and Science of Rheology, W. R. Schowalter

Symposium-Undergradute Education

- 36 Preparing the Engineer for His Unique Role, L. Waldo Leggett, Jr.
- **40** ChE Education for the Seventies, R. E. Balzhiser
- 45 Diversified and Special Programs in Undergraduate ChE Education, R. A. Keppel, R. W. Fahien, and M. Tyner

Departments

4 The Educator

 $John\ Happel\ of\ NYU$

8 Departments of Chemical Engineering

Montana State, Lloyd Berg

- 23 The Curriculum
- 23 Undergraduate Curricula in ChE (1969-70), C. W. Balch
- 25 Undergraduate Curricula in ChE (1970-71), Dee H. Barker

28 The Laboratory

Single Drop Liquid Extractions, O. C. Sandall

30 The Classroom

The Thermodorm, A. F. Gangi, N. E. Lamping, and P. T. Eubank

AICHE Annual Reports

- **48** Education and Accreditation Committee, S. G. Bankoff
- 50 ChE Education Projects Committee, C. Judson King

44, 52 News

15 Ch E Division Activities

35 Book Review

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 DeLand, Florida. Correspondence regarding editorial matter, circulation and changes of address should be addressed to the Editor at Gainesville, Florida 32601. 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 to non-members of the ChE Division of ASEE, \$6 per year mailed to members and \$4 per year to ChE faculty in bulk mailing. Individual copies of Vol. 2 and 3 are \$3 each. Copyright © 1972, 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.