# AICHE JOURNAL JANUARY, 1972 • VOL. 18, NO. 1

The AlChE Journal, an official publication of the American Institute of Chemical Engineers, is devoted in the main to theoretical developments and research in chemical engineering and allied branches of engineering and science.

### **PUBLISHER**

F. J. Van Antwerpen

#### **EDITOR**

Robert C. Reid

#### MANAGING EDITOR

Sylvia Fourdrinier

#### MANUSCRIPT EDITOR

Elizabeth Bond

#### EDITORIAL BOARD

Richard R. Bannister Elisabeth M. Drake Claiborne A. Duval, Jr. Gordon A. Hughmark William B. Isaacson Leon Lapidus Henry A. McGee, Jr. A. B. Metzner John M. Prausnitz Dale F. Rudd

Publication Office, 215 Canal street, Manchester, New Hampshire, Published in January, March, May, July, September, and November by the American Institute of Chemical Engineers, 345 East 47 Street, New York, New York 10017. All manuscripts should be submitted only to R. C. Reid, Massachusetts Institute of Technology, Room 12-190, Cambridge, Mass. 02139. Statements and opinions in the AIChE Journal are those of the contributors, and the American Institute of Chemical Engineers assumes no responsibility for them. Subscription: one year, member \$8.00; nonmember \$50.00; additional yearly postage, Canada \$1.00, Pan American Union \$1.50, other foreign \$2.00 (foreign subscriptions payable in advance). Single copies: \$10.00. Second-class postage paid at New York, N. Y. and additional mailing offices. Copyright 1972 by the American Institute of Chemical Engineers. National headquarters of AIChE is concerned about nondelivery of copies of the AIChE Journal and urgently requests subscribers to give prompt notification of any change of address. Sixty days must be allowed for changes to be made in the records.

Postmaster: Please send form 3579 to AIChE Journal, 345 East 47 Street, New York, N. Y. 10017.

## Journal Review Papers

In what we hope will initiate a successful series, the Journal's first review paper begins on the page opposite. Professor Kostin writes on Enzyme Engineering, summarizing current significant literature and pointing out important trends and possible applications.

Each succeeding issue will carry one such review which will provide indepth coverage of an important and relevant chemical engineering topic. Significant milestones will be noted and placed in perspective, current research trends interpreted, and future progress forecast. Since the authors are restrained by only minimum guidelines and since we have encouraged innovative approaches, variety will be the hallmark of the series. We anticipate each author will tailor his format to his subject and to his particular writing style.

These reviews are invited by the Journal Editorial Board members, by AIChE Divisions, or by the AIChE Research Committee. The authors receive no compensation for their Herculean effort. We on the Journal staft, as well as our readers, wish to express our appreciation for this very important and significant professional activity.

Next month, our review will present an analysis of how mathematical modeling, coupled with carefully kept plant records, can aid in the design of plants that are sensitive to maintenance. The review, entitled "Design and Maintenance of Economically Failure-Tolerant Processes," will be co-authored by Carl King and Dale Rudd. Looking ahead, we plan articles on the Two-Step Reactor by Michael Boudart, Drag Reduction by P. S. Virk, Control Theory and Applications by Alan Foss, as well as many others.

We hope you enjoy and profit from this series.