AICHE JOURNAL NOVEMBER, 1972 • VOL. 18, NO. 6

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. Gorden A. Hughmark William B. Isaacson Leon Lapidus William H. Manogue 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, \$50; special member rate, \$8; 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.

Solid Waste - Resource Recovery - Decision-Making

In the summer of 1971, correspondence was initiated with the late Phil Witt, Chairman of the Solid Waste Section of the Environmental Division, to explore areas suitable for *Journal* Reviews. Many topics were considered. The two finally selected appear in this issue.

The first, by James Abert and Morris Zusman, reviews the state-of-the-art of handling municipal refuse with emphasis on the recovery of resources from such an operation. Successful implementation of many of the proposed techniques would be as a real advance in our attempt to minimize undesirable waste storage or disposal, as well as supplementing our decreasing supply of natural resources. So many of the new solid waste handling schemes involve traditional chemical engineering that it is fitting that this journal emphasize the problems and possible solutions.

The second review, by Albert Klee, deals with decision analysis. Why is this topic in the *Journal?* Quoting from some early correspondence with Phil Witt, "It is impossible to evaluate a waste disposal process by the usual means. There is usually a negative return on investment; constraints are imposed by regulatory bodies and the public reaction may be adverse. Understandably, everyone is reluctant to make a decision, yet one must be made."

Dr. Klee's more broadly based review is applicable to areas other than just solid waste handling. The key is the use of expert opinion in the decision-making process. Many of us act as consultants or experts both within and without our own organizations. Many of us also use consultants or experts regularly to provide input in areas for which we have insufficient expertise. How effective is this process in producing optimum decisions? After reading Dr. Klee's paper, perhaps we can view the interaction more objectively and benefit from his conclusions.

The Journal extends its appreciation to the Environmental Division for sponsoring these two reviews, and special thanks are due to Dr. Kurt Tauss and Professor Gary Bennett for shouldering much of the responsibility.