

In many parts of the world, a shortage of well-trained people rather than lack of capital is the major obstacle to progress. Educational programs are an essential factor in breaking the manpower bottleneck which impedes self-sustained economic development. Since educational programs are necessarily long-range in nature, continuity and experienced leadership are essential. U. S. universities like the University of Houston are uniquely equipped to provide such leadership.

All this suggests three challenges which confront American universities. The first is to train experts in international affairs. The second is to instill in the coming generations of citizens and community leaders a basic understanding of the importance and complexity of world affairs so that they not only will be able to review intelligently policies of the government but also will be better prepared to take a personal part in foreign activity if called upon. The third is for the university itself to take an active part in foreign programs under both governmental and private sponsorship.



CHEMICAL ENGINEERING DIVISION

Members of the ChE Division are reminded that the closing date for nominations for the sixth annual ChE Division 1969 Lectureship award is February 15, 1969. Nomination forms may be obtained from Dr. George Burnet, ChE Department, Iowa State University, Ames, Iowa, 50010. The award is sponsored by the Minnesota Mining and Manufacturing Company.

ASEE DIVISION ACTIVITIES

ASEE Annual Meeting, 23-26 June 1969, Pennsylvania State University. Chemical Engineering Division Program will consider educational aspects of selected interactions between chemical engineering and important social problems: 1. Health Problems, 2. New Energy Sources, 3. Urban Affairs. For further details, contact Chemical Engineering Division Program Chairman, K. B. Bischoff, Department of Chemical Engineering, University of Maryland, College Park, Maryland 20742.

ChE book reviews

Unit Operations of Chemical Engineering, 2nd Ed., W. L. McCabe and J. C. Smith.
McGraw-Hill Book Company, Inc. (1967),
pp viii + 1007, \$15.50 .

The second edition of this book, like the first, is an undergraduate treatment of unit operations. It is divided into five sections: Introduction, Fluid Mechanics, Heat Transfer and Its Applications, Mass Transfer and Its Applications, and Operations Involving Particulate Solids. Section 1 (Introduction) contains one chapter which consists of a brief presentation of the basic laws and concepts needed for the understanding and mastery of the material to follow. Section 2 (Fluid Mechanics) contains eight chapters covering fluid statics, the flow of fluids through conduits, and past immersed objects, pumping and metering of fluids, and agitation and mixing of liquids. Both incompressible and compressible fluids are treated and some material on non-Newtonian fluids is included. Section 3 (Heat Transfer and Its Applications) contains seven chapters covering conduction, convection, radiation, heat exchangers, and evaporation. Section 4 (Mass Transfer and Its Applications) consists of eight chapters covering phase equilibria, distillation, diffusion, absorption, humidification, leaching and extraction, and crystallization. Section 5 (Operations Involving Particulate Solids) contains five chapters covering properties and handling of solids, size reduction, mixing, mechanical separations, and drying.

Throughout the book, the treatment of equipment and theory is well balanced and many example problems illustrating the principles and theory set forth are included. In addition, most chapters contain a number of excellent problems for which a solution manual is available from the publisher.

Those familiar with the first edition will find a number of changes incorporated in this edition. Most of the long chapters in the first edition have been broken down into a number of shorter chapters in the present edition and the material considerably rearranged and updated by the inclusion of material from transport phenomena.

The book is well written and relatively free from errors. It is highly recommended.

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