OTHER ACTIVITIES

JIM WHITE HAS SPENT large amounts of time on the road attending meetings and visiting companies. Through his wife Yoko's influence, he has become a connoisseur of Japanese food and because of his travel, of Japanese restaurants in America. He rates New York and Honolulu as tops, San Francisco as very good. Chicago has some good places.

Active in polymer professional societies, he is a member of the Board of Directors of the Engineering Properties and Structure Division of the Society of Plastics Engineers and is active in various other societies including the Society of Rheology and the Polymer Engineering section within the AIChE. He is a member of numerous foreign professional and technical societies. Jim is a member of the Editorial Board of the Journal of Applied Polymer Science, Transactions of the Society of Rheology, and the Journal of Non-Newtonian Fluid Mechanics.

Jim White has long been an enthusiastic history buff, especially of the industrial revolution. He has sought out the locations and visited sites of the plants and laboratories which created the foundations of our present society including the first rubber manufacturing plant which is still operating in Manchester, England and Robert Owen's New Lanark Cotton Spinning Mills. He has traced the recorded steps of James Watt through 18th century Glasgow where Watt conceived the separate condenser for his steam engine. Many of his investigations have been presented at meetings or published in his papers.

His interests in history, though, go far beyond this to studies of the history of the dark ages and medieval period in Scotland and the German Hansa cities and Meiji Japan. However, his greatest interests have often been influenced by his own family background in trying to develop perspectives of Scottish history through the Industrial Revolution to modern times. This has led him through rainy Scotland and its moors, ancient battlefields and graves of Celtic scints usually accompanied by his wife Yoko who, essentially more intelligent than her husband, brings an umbrella.

This, then, is our enigmatic "Apostle of Polymer Engineering." A refugee from Brooklyn's subways to the bright sun of Tennessee, who bursts with enthusiasm to develop a new engineering discipline and establishing his program at Tennessee as a leading polymer education and research center. □

ChE book reviews

RATE PHENOMENA IN PROCESS METALLURGY

by Julian Szekely and Nicholas J. Themelis
Wiley-Interscience, New York, 1971

Reviewed by Ben. F. Oliver, U. of Tennessee

Rate Phenomena in Process Metallurgy is a textbook for the senior level or first-year graduate level. Actually, depending upon the subject being covered, the text may be used as a reference text both at lower and more advanced levels of Process Metallurgy and Chemical Engineering.

The text is divided into three main parts: Part I—the Review of Transport Phenomena, Part II—Techniques of Process Analysis, and Part III—Metallurgical Reaction Systems. This division is somewhat deceptive since the review in Part I is most extensive covering fluid mechanics, heat, diffusion and mass transfer. This review takes up some thirteen quantitative chapters. These chapters include important examples and mathematical techniques. This provides a chemical engineering base quite appropriate to the objectives of the book. Numerous process examples of a metallurgical nature are described and related to quantitative basic transport examples. Tables and graphs put the wide range of parameters, such as thermal conductivity, viscosity, diffusivity, etc., into a good perspective. While this reviewer finds units used in the text both convenient and comfortable, they certainly are not SI; but then again, neither is the wealth of information from which the book draws examples. There are numerous specific numerical examples used throughout the book. These put many things in proper perspective, including the problem of units.

The general format of the equations, notations and text appear very comfortable and particularly clear. The discussion of similarity and dimensionless groups is complete but not overdone. The blast furnace and BOF examples are both interesting and informative.

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CHEMICAL ENGINEERING DIVISION ACTIVITIES

Annual Lectureship Award to Robert Reid

The 1977 ASEE ChE Division Lecturer is Dr. Robert Reid of Massachusetts Institute of Technology. Bestowed annually on a distinguished engineering educator who delivers the Annual Lecture of the Chemical Engineering Division, the award consists of $1,000 and an engraved certificate. These will be presented to Dr. Reid at the ASEE Summer School for Chemical Engineering Faculty July 31-August 5, 1977 at Snowmass, Colorado. Dr. Reid's lecture is entitled "Superheated Liquids: A Laboratory Curiosity and An Industrial Curse". A paper based on his lecture will be published in *CEE*. During the 1977-78 academic year, Dr. Reid will visit three universities yet to be selected to speak on topics related to the subject matter of his award lecture. The 3M Company is supporting this activity in addition to the award itself.

Professor Reid spent his youth in Denver, Colorado and attended the Colorado School of Mines. After a four-year interruption during the second world war, he transferred to Purdue University where he obtained both a B. S. and M. S. in chemical engineering. His doctoral studies were carried out at M. I. T. after which he joined the faculty as Director of the Engineering Practice School at Oka Ridge, Tenn. He has been active in the AIChE and served as a Director from 1969-71 and as editor of the AIChE Journal from 1970 to 1976. He was the Institute Lecturer in 1968 and received the Warren K. Lewis award in 1976.

His research interests have covered a wide range of subjects including kinetics, boiling heat transfer, life support systems, crystallization, properties of materials, cryogenics and thermodynamics. Books include texts on crystal ization growth rates from solution, thermodynamics and the estimation and correlation of the properties of gases and liquids.

BOOK REVIEW

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There are some disadvantages to using this book as a text. There are no problems besides the examples. This is not an unsurmountable problem in that the notational format is quite standardized and clear and problems are readily formulated in a consistent context. To offset this, the use of the book as a reference text in an area that brings together classical chemical engineering and process metallurgy could be quite advantageous. The techniques of process analysis are applied to standard chemical process problems but can be carried over nicely to Part III, Metallurgical Reaction Systems.

This most certainly is a valuable book to have as a reference text and quite useable as a supplementary advanced text. I think it would have to be carefully used in any course based on a quarter system. If it were used in successive quarters, the book would be an excellent introductory text to bridge the technique of chemical engineering and process metallurgy. □

REACTION ENGINEERING: Sundberg, Carleson and McCollister

Continued from page 121.

that the reaction system employed is quite flexible and allows the instructor to vary the degree of complexity of the lab without changing the materials, equipment or method of analysis. □

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