

that these subjects are necessarily irrelevant now, but there are trends and fashions in turbulence as elsewhere, and at least some of them are now as dated as last year's hats. In compensation, exceedingly brief sections on strange attractors and coherent structures have been added at the end.

"Mathematical theory" in the title does not refer to anything that is likely to be of great interest to a mathematician, but rather to an emphasis on the mathematical underpinnings, and on

manipulation and derivation. There is relatively little discussion of the physical basis and implications of these ideas. Stanisic does develop Kraichnan's direct interaction approximation, and applies it to Burgers' equation, in a quite accessible way, something that is rare to find in a text. The majority of the text is devoted to homogeneous situations.

This book might be useful as an adjunct text in a turbulence course, supplementing something more physically oriented. Engineering students (at least

now need to hear more discussion of turbulence structure and mechanisms, and the limitations of models.

Throughout (at least in section headings) the author has used "Reynolds' stresses" and "Reynolds' averaging" in lieu of "Reynolds stresses" and "Reynolds averaging". It is difficult enough to train the television generation not to make these errors, without having to deal with negative reinforcement from a text.

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## Books Received But Not Reviewed

*Inverse Heat Conduction*, by J. V. Beck, B. Blackwell and C. R. St. Clair

*Fluid Mechanics*, by F. White (McGraw-Hill Publishing Co.)

*Heat Transfer*, by J. Holman (McGraw-Hill Publishing Co.)

*Archives of Heat Transfer, Volume 1*, edited by N. Afgan (Hemisphere Publishing Corp.)

*Understanding Process Integration II*, by R. Smith (Hemisphere Publishing Corp.)

*Foundation of the Theory of General Equilibrium*, by Y. Balasko (Academic Press)

*Radiative Transfer in Nontransparent Dispersed Media*, by H. Reiss (Springer-Verlag)

*Heat and Mass Transfer in Refrigeration and Cryogenics*, edited by J. Bovgard and N. Afgan (Hemisphere Publishing Corp.)

*Continuum Mechanics*, by Chung (Prentice-Hall)

*Transient Phenomena in Multiphase Flow*, edited by N. H. Afgan (Hemisphere Publishing Corp.)

*Coal Combustion: Science and Technology of Industrial and Utility Applications*, edited by Junkai Feng (Hemisphere Publishing Corp.)

*Welding Metallurgy*, by S. Kou (John Wiley & Sons, 1987)

*Matrices for Engineers*, by A. Kraus (Hemisphere Publishing Corp., 1978)

*Heat Transfer: Korea, US Seminar on Thermal Engineering and High Technology*, by J. H. Kim, S. T. Ro and T. S. Lee (Hemisphere Publishing Corp., 1988)

*Atmospheric Pollution*, by E. E. Pickett (Hemisphere Publishing Corp., 1987)

*Thermodynamic High Temperature Process Data*, by A. L. Suris (Hemisphere Publishing Corp., 1987)

*Drying 86 (2 Vols.)*, edited by A. S. Mujumdar (Hemisphere Publishing Corp., 1986)

*Drying 87*, edited by A. S. Mujumdar (Hemisphere Publishing Corp., 1987)

*Principles of Magnetoplasma Dynamics*, by L. C. Woods (Oxford Univ. Press, 1987)

*Advances in Drying*, edited by A. S. Mujumdar (Hemisphere Publishing Corp., 1987)

*Process Flow Engineering*, by N. P. Cheremisinoff and P. N. Cheremisinoff (Technomic, 1987)

*Advances Engineering Thermodynamics*, by A. Bejan (John Wiley & Sons)

*Elements of Heat Transfer*, by Y. Bayazitoglu and M. N. Ozisik (McGraw-Hill Publishing Co.)

*Thermodynamic Properties of Gases*, by S. L. Rivkin (Hemisphere Publishing Corp.)

*Circulating Fluidized Bed Technology II*, edited by P. Basu and J. F. Large (Pergamon Press)

*Physicochemical Hydrodynamics*, by R. F. Probst (Butterworth Publishers)

*Fluid Mechanics and Hydraulics (Schaums Outline Series)*

*Properties of Selected Ferrous Alloying Elements (Cindas Data Series on Material Properties, Vol III-1)*, edited by Y. S. Touloukian (Hemisphere Publishing Corp.)

*A6A Gas Handbook*, edited by K. Ahlberg (Almqvist & Wiksell)

*Properties of Nonmetallic Fluid Elements (Cindas Data Series on Material Properties, Vol III)*, edited by Y. S. Touloukian and C. Y. Ho

*Physical Property Data for the Design Engineer*, edited by C. F. Beaton, G. F. Hewitt (Hemisphere Publishing Corp.)

*Archives of Heat Transfer*, edited by N. Afgan (Hemisphere Publishing Corp.)

*Understanding Process Integration II*, by Dr. R. Smith (Hemisphere Publishing Corp.)

*Foundation of the Theory of General Equilibrium*, by Balasko (Academic Press)

*Springer Tracts in Modern Physics—Vol. 113: Radiative Transfer in Nontransparent, Dispersed Media*, edited by G. Höhler, E. A. Niekisch (Springer-Verlag)

*Transport Properties of Fluids: Thermal Conductivity, Viscosity, and Diffusion Coefficient*, by Joseph Kestin (Hemisphere Publishing Corp.)

*Properties of Inorganic and Organic Fluids*, by P. E. Liley, T. Makita and Y. Takana (Hemisphere Publishing Corp.)

*Specific Heat of Solids*, by Ared Cezairliyan (Hemisphere Publishing Corp.)

*Thermodynamic Properties of Gases, 4th edition*, by S. L. Rivkin (edited by D. D. Wagman)