well, but the material presented is found in a host of other books.

My conclusion is that the book, while well written and containing useful environmental information, is well ahead of its time in addressing potential problems and solutions for yet unrealized environmental impacts.

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Lawrence K. Wang, Yung-Tse Hung, Nazih K. Shammas (Eds.), Physicochemical Treatment Processes, Humana Press, Totowa, NJ, 2005, 743 pp., US$ 175.00, ISBN 1-58829-165-0.

This book will be the third of Wang's (and his co-workers') publications that I have reviewed recently. It is one of a series of handbooks ". . .developed as a complete set of environmental engineering textbooks for university professors/students and as a one-stop comprehensive reference source for practicing engineers, researchers, environmental students and the libraries that serve them." Twelve books, covering the total environmental spectrum, are planned.

Previous reviews have been written and published in the Journal of Hazardous Materials by this editor for two of Wang's prior books, *Air Pollution Control Engineering and the Handbook of Environmental Engineering*. The amount of work that Wang has done for any one of these books is impressive. In each and every volume I have reviewed, he has contributed to many chapters as well as serving as editor.

The book jacket for this volume notes: "The authors discuss the performance, potential, and limitations of each major physicochemical treatment process in detail – including the physical and chemical theory behind it, the applications, the design procedures, examples, references, and cost data – as a basis for intelligent planning and realization of abatement systems." The 17 well-written chapters in the book which are listed below were contributed by 29 engineers from universities, industries, government and consulting firms.

1. Screening and comminution
2. Flow equalization and neutralization
3. Mixing
4. Coagulation and flocculation
5. Chemical precipitation
6. Recarbonation and softening
7. Chemical oxidation
8. Halogenation and disinfection
9. Ozonation
10. Electrolysis
11. Sedimentation
12. Dissolved air flotation
13. Gravity filtration
14. Polymeric adsorption and regenerant distillation
15. Granular activation carbon adsorption
16. Physicochemical treatment processes for water reuse
17. Introduction to sludge treatment

As I noted above, the book is well written with clear explanations of the processes, explanations enhanced by the use of charts, tables, and equipment and process diagrams. Almost all the chapters have, much to my liking, several example problems.

Although cost data are found in three chapters (Ozonation, Activated Carbon and Solids Removal), they are missing in other chapters; inclusion of cost estimation information for all unit operations would have been beneficial. A topic of personal interest, oil and grease removal, is barely mentioned much to my surprise as oil and grease are key water pollutants. A final comment involves references. The book is well referenced, but, in my opinion, Wang has included too many references to his own work; I say this recognizing his extensive publication record. My preference would have been for citations to have been from the broader published literature.

That said, I must conclude with strong praise of another excellent book by Wang and his collaborators. The book will find a significant market with practicing engineers as well as, I predict, faculty who will adopt it for use as a text even though its price is high for student purchase.

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