

**MAK Value Documentations, The MAK-Collection for Occupational Health and Safety, vol. 22. H. Greim (Ed.), Wiley-VCH, Verlag GmbH & Co. KGaA, Weinheim, Germany (2006). 348 pp., Price: US\$ 200.00, ISBN: 3-527-31135-1**

This book is one of a series of books in the MAK-Collection written to provide “. . .comprehensive and authoritative information for occupational health and safety professionals.” These books cover “. . .both the toxicological substantiation of threshold values for chemicals in the workplace (MAK and BAT values) and the suitable monitoring methods.”

This volume contains reviews of the following chemicals:

- Cadmium and its inorganic compounds.
- Copper and its inorganic compounds.
- Cyclohexylamine.
- 1-Dodecanol.
- Nickel and its inorganic compounds.
- Ochratoxin A.
- 2-Octyl-1-dodecanol.
- Palladium and its inorganic compounds.
- Propane.
- Talc (without asbestos fibers).
- Tellurium and its inorganic compounds.

Information for each chemical in the above list includes:

- toxic effects and mode of action;
- mechanism of action.
- toxicokinetics and metabolism;
- effects in humans;
- animal experiments and in vitro studies;
- manifesto (MAK value/classification);
- references.

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9 November 2006

Available online 8 December 2006

doi: 10.1016/j.jhazmat.2006.11.067

**Practical Wastewater Treatment, D.L. Russell. Wiley/Interscience, Hoboken, NJ (2006). 285 pp., price US\$ 89.95, ISBN 0-471-78044-8**

This book evolved from an American Institute of Chemical Engineers (AIChE) course taught by Russell. The course's (and

book's) goals are to “. . .equip readers with the skills and knowledge needed to design a wastewater treatment plant and to handle various types of industrial wastes.”

The book is a straightforward presentation of the basics of water pollution control. It has the following, relatively short chapters: (1) introduction, (2) effects of pollution, (3) flow measurement, (4) sampling and statistical considerations, (5) important concepts from aquatic chemistry, (6) elements of biological treatment, (7) precipitation and sedimentation, (8) filtration theory and practice, (9) disinfection, (10) nitrogen removal, (11) phosphorus removal, (12) anaerobic treatment, (13) micro/ultrafiltration, (14) reverse osmosis, (15) carbon adsorption, (16) ion exchange, (17) dissolved air flotation and techniques, (18) coagulation, flocculation, and chemical treatment, and (19) waste topics.

Having taught an continuing education course on industrial waste pretreatment myself, I can appreciate the author's approach to writing this book. He has found a good balance between background, theory, and practical applications.

When I first “paged through” the book, as I commonly do in my review process, I was disturbed to find no list of references at the end of each chapter. But then I realized that in teaching such a course, one does not normally reference most of the material presented. There are, however, key references cited within the text. Moreover, Russell notes in the preface that he has “. . .taken some pains to assemble various Web sources and references, including helpful papers and articles and even computer programs onto a disk, which was originally supplied as a supplement to the course. The disk is available from me for a modest fee.” That disk would be an excellent resource for readers. Perhaps it could have been (maybe should have been) included as part of the book as is commonly done these days.

On the disk, Russell notes: “. . .there are several different biological models which are useable and, which solve the basic differential equations for the growth of activated sludge.” In addition to the above, there are several other models supplied with the disk.

That minor criticism aside, I commend the book to readers. It is not that the book has a great deal of new information. Rather, the book is a clear, concise, coverage of water pollution control from a practical standpoint.

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13 November 2006

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doi: 10.1016/j.jhazmat.2006.11.065