

Because of its nontechnical language and comprehensive nature, this book would be useful to the public, toxicologists, nutritionalists, food processors, environmental regulators, risk assessors, and many others.

CURTIS C. TRAVIS and VICKI GAMBLE

Developmental Toxicology: Risk Assessment and the Future, by Ronald D. Hood (Ed.), Van Nostrand Reinhold, New York, NY, 1990, ISBN 0-442-00422-2, 279 pp., \$49.95.

This book addresses areas of needed research outlined by the U.S. Environmental Protection Agency's Guidelines for the Health Assessment of Suspected Developmental Toxicants (1986). In *Developmental Toxicology*, state-of-the-art information on practical applications provides a step above a mere iteration of the problems involved in the risk assessment of developmental toxicology.

The book is divided into several sections: Executive Summary, Introduction, Summary of Research Needs, and essays by experts in the field. The Executive Summary, Summary of Research Needs, and essays work together to identify assessment problems, resulting research needs, and the importance of these research needs. The Executive Summary suggests possible project areas for future research, funding, and prioritization. In the Summary of Research Needs, each topic's research possibilities are elaborated on and given a ranking of high, medium, or low priority.

There are 19 essays in the book, ranging in topic from Maternal vs. Developmental Effects to Mathematical Modeling of Teratogenic Effects. The authors analyze new research areas, some of which are: paternally mediated effects, nonbehavioral functional effects, pharmacokinetic and physiologically based models, structure-activity relationships, and mathematical modeling.

Each chapter discusses problem areas and potential solutions in developmental toxicology. For example, Ronald Hood, the book's editor, questions "blind acceptance" of the use of the A/D (adult/developmental) ratio and the RTI (Relative Teratogenic Index), the use of NOELS and LOELS, and the use of statistical rather than biological significance of data. Todd Thorslund questions using mathematical models that are commonly employed in cancer risk assessment for teratogenic risk assessment. Hood offers no apparent solutions to the gaps in knowledge he identifies, but Thorslund presents five specific ways to improve current mathematical modeling and also provides two example models.

The book's organization makes information easily accessible, with each section amplifying the previous sections. There are adequate figures and tables and a good index. The individual essays are concise and clearly presented. The

reader will find the information in varying degrees of difficulty, depending on his or her experience and familiarity with the subject.

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Safe Laboratories, Principles and Practices for Design and Remodeling, edited by P.C. Ashbrook and Malcolm M. Renfrew, Lewis Publishers, Inc., Chelsea, MI, 1991, ISBN 0-87371-200-5, 166 pp., \$49.95 (in North America); (\$59.95 outside).

This vital and often overlooked procedure for the design and reconstruction of laboratories is often a second thought with little attention given to economics or safety.

Two chemists and educators, both with flawless credentials and experience, assembled 22 co-authors to approach the problems. This reviewer is favorably impressed with the volume. The 18 chapters are grouped into five sections, with general classifications as Different Perspectives on Design of Safe Laboratories; Generic Issues Affecting Design of Safe Laboratories; Ventilation and Fume Hoods, Putting Principles into Practice, and Working Together Design Safe Laboratories.

The overall impression is good, but additional references are badly needed (10 of the 18 chapters have no references, although several have photos and drawings of good quality). Several chapters could be expanded, for example, Leslie Bretherick should certainly have written many more than 5 pages. The discussions in Section III, Chapters 9–12 could be coordinated and made less confusing as to what is really required to produce a “safe” fume hood or ventilation system. A paper-back edition would have reduced the price and added to the work’s contribution to the real world.

In summary, this is a useful and informative volume.

HOWARD H. FAWCETT