

microbiological aspects of metal contaminated soils are considered and a model of which forms the basis for practical methods of remediation is presented. Uniquely discussed is cleanup via vegetation remediation.

GARY F. BENNETT

*Handbook of Carcinogen Testing, 2nd edn.*, by H.A. Milman and E.K. Weisburger (Eds.), Noyes Data Corp., Park Ridge, NJ, 1994, US\$ 98.00, 856 pp., ISBN: 0-8155-1356-9

This book offers a total view of the bioassay method from initial phases to its application by determining the carcinogenicity of a chemical. Emphasis was placed in the first volume on correlation between structure and carcinogenicity, the Ames/Salmonella assay, mouse lymphoma and cytogenetics test, and tests for DNA damage.

In the second volume, information on the above topics has been updated and along with more recent advances has led to a chapter on "Alternatives to Animal Testing." Other new chapters deal with the analyses and possible reaction of the test chemical, on the immunological effects of the test chemical, and on the health and safety aspects of the bioassay process.

In view of the extensive use made by regulatory agencies and others of bioassay data in estimating risk, several chapters on exposure assessment, comparative risk, risk priorities, and risk communication were added to the second edition along with the economic aspects of the results of bioassay.

The length of the book (856 pages) indicates its completeness. There are 44 chapters written by a total of 88 authors. Major sections are entitled:

1. Predicting Carcinogenicity of Chemicals from their structure
2. Epidemiological Investigation
3. In Vitro Tests
4. Limited Bioassays
5. Long-Term Animal Bioassay
6. Bioassays for Insoluble Materials
7. Assays With Potential Utility
8. Risk Estimation
9. Regulatory Implications
10. Industry Perspectives.

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*Groundwater Contamination and Control*, edited by Uri Zoller, Marcel Dekker, Inc., New York, NY, 1994, 695 pp., US \$195, ISBN 0-8247-8991-1

This book has been written to provide a broad perspective on the sources contamination and nature of activities that affect groundwater quality. Authors from around