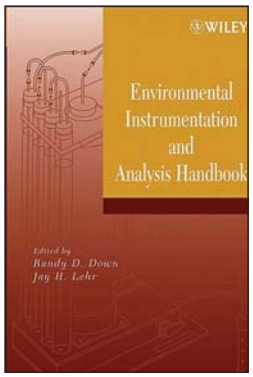
Books

Environmental Instrumentation and Analysis Handbook

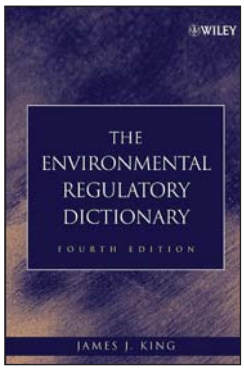
Edited by Randy D. Down and Jay H.Lehr, Wiley-Interscience, Hoboken, NJ, 1,068 pp., $158.00, 2004, ISBN 0-471-46354-X



Environmental science professionals can choose from a wide variety of instrumentation and methodologies when analyzing field conditions at potential contamination sites. This, however, can become a burden when trying to determine which approach will be the most optimal and accurate for measuring a particular site. *Environmental Instrumentation and Analysis Handbook* comprehensively catalogs the benefits and drawbacks of virtually every available tool and technique. The book is divided into six topics: instrumentation methodologies; water quality parameters; groundwater monitoring; wastewater monitoring; air monitoring; and flow monitoring. More than three dozen veteran environmental professionals describe the basic science that supports their field analyses, and then provide invaluable firsthand case studies. The book combines all of the pertinent data into one resource, providing new help for field professionals who need to understand which instruments and procedures have worked best under certain conditions, and how to successfully implement them.

The Environmental Regulatory Dictionary, Fourth Edition

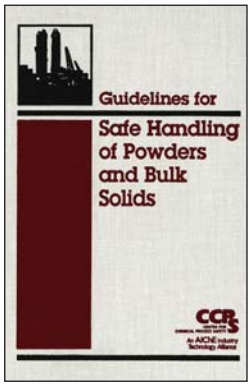
James J. King, Wiley-Interscience, Hoboken, NJ 520 pp., $99.95, 2005, ISBN 0-471-70526-8



The fourth edition of this reference book provides definitions for more than 5,000 terms of the Environmental Protection Agency's Code of Federal Regulations Title 40 (40 CFR) to help readers better understand and follow these complex compliance regulations. Each term is defined using the exact wording found in 40 CFR, and every definition for a given term is included to ensure thoroughness. This publication also serves as a guide to finding topics in the 30,000-page 40 CFR. Unlike the cumbersome 40 CFR, which is organized by section, all the *Dictionary's* terms and definitions are presented in alphabetical order for easy access. Each term is then cross-referenced to the section of 40 CFR.

Guidelines for Safe Handling of Powders and Bulk Solids

Principal authors, Stanley S. Grossel and Robert Z. Galosh, Center for Chemical Process Safety (CCPS), New York, NY, and John Wiley & Sons, Hoboken, NJ, 480 pp., $119.00, 2004, ISBN 0-8169-0951-2



Powders and bulk solids, handled widely in the chemical, pharmaceutical, agriculture, smelting, and other industries, present unique fire, explosion, and toxicity hazards. Indeed, substances which are practically inert in consolidated form may become quite hazardous when converted to powders and granules. The U.S. Chemical Safety and Hazard Investigation Board is currently investigating dust explosions that occurred in 2003 at WestPharma, CTA Acoustics, and Hayes-Lemmerz, and is likely to recommend that companies that handle powders or whose operations produce dust pay more attention to understanding the hazards that may exist at their facility. This new CCPS guidelines book discusses the types of hazards that can occur in a wide range of process equipment and with a wide range of substances, and presents measures to address these hazards. It is organized into eight chapters:

- Introduction and Overview
- Particulate Characteristics and Properties
- Particulate Hazard Scenarios and Examples
- Assessing Particulate Hazards
- Equipment Hazards and Preventive/Protective Measures
- Designing and Installing Systems to Prevent and Control Combustion, Explosions, Uncontrolled Reactions, and Release of Toxic Particulate Solids
- Plant Operation and Maintenance
- Occupational Health and Environmental Considerations.

The book also features two appendices on Commercial Testing Facilities for Powder/Dust Hazard Assessments and Equipment Overview. The equipment overview appendix is comprehensive, covering: bag openers; blenders/mixers; drying equipment; dust collectors; extruders; feeders and rotary valves; instrumentation; pneumatic conveyors; portable containers; sampling systems; screens and classifiers; silos and hoppers; size reduction and enlargement equipment; tableting systems; valves for solids; and more.

AIChE members and CCPS sponsors receive a 20% discount off the list price for this guidelines book. To order, call 800-242-4363 (international customers call 212-591-8100) or visit http://www.aiche.org/pubcat.