



HANDBOOK
of
LABORATORY
SAFETY

SECOND EDITION

Editor
NORMAN V. STREER

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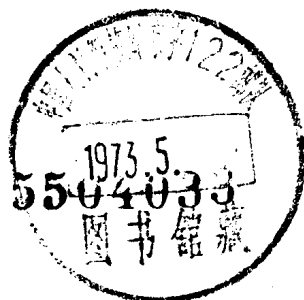


HANDBOOK of LABORATORY SAFETY

SECOND EDITION

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Preface to the Second Edition

The purpose of the *Handbook of Laboratory Safety* is to provide convenient information for hazard recognition and control. Fires, explosions and exposures to chemicals, biological agents and other hazards can usually be anticipated and measures taken to prevent such occurrences or minimize the consequences.

One of the new chapters in the Second Edition outlines several methods of organizing laboratory safety programs. The Handbook also emphasizes accident investigation and analysis, and the responsibility to report unexpected hazards encountered in experimental work.

Four new chapters have been added on Protective Equipment. They cover respiratory protective equipment, ear protection, eye hazards, and protective clothing. New chapters on Toxic Hazards include Principles and Procedures for Evaluating Toxicity of Chemicals, Mode of Action of Toxic Substances, Hazards of Isocyanates, and Chemical Cyanosis and Anemia Control. Chapters have been added on Protective Lockout and Tagging of Equipment, Grounding Electronic Equipment, Producing and Handling High Purity Water, and Laboratory Animal Housing. Two new chapters have been added to the section on Radiation Hazards.

Readers are invited to offer suggestions for changes in future editions and to report any errors which may be found. Comments and inquiries should be directed to the Publisher.

Comprehensive fire and health hazard data for 1094 chemicals are listed in tables at the end of the book. The tables include related physical properties of the chemicals and references to more detailed information available from other sources.

A great many people deserve credit for their contributions to this book, most notable the Advisory Board and the authors who prepared the text and the tables. Major impetus to prepare the book and valuable insights came from personnel and professional associates met during my experience at Michigan State University in the Office of Safety Services and at the University of Minnesota in the School of Public Health and the University Health Service. Understanding and support which were essential to completing the Second Edition were given by my wife Lyn.

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