## A PRACTICAL GUIDE TO

# TOXICOLOGY AND HUMAN HEALTH RISK ASSESSMENT

LAURA ROBINSON

WILEY

A Practical Guide to Toxicology and Human Health Risk Assessment

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Laura Robinson

Toxicology Consulting Ltd, Brighton, UK



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#### **Foreword**

In 2015 a patient told me of how his life was saved in 1969 by the prompt action of his site foreman, following a mining accident when he was accidentally exposed to cyanide gas. Still here to tell the dramatic tale, 46 years later, of nitrates, oxygen, and then hospitalization, it really emphasized the need for an understanding of how we could reduce the harmful impact of chemicals.

As Laura writes in her first chapter, "we live in a chemical environment, and therefore, we need to be aware of the ways in which chemicals can cause harm." This book allows us to do just that. Having distilled the spirit of each topic into readily comprehensible principles, which can then be used to address wider matters, the chapters are well organized and broken down into clear parts. At the back of each chapter, there are references that are useful for further study.

Anyone for whom toxicology has any relevance, e.g. nurses, doctors, paramedics, allied health professionals, pharmacists, environmentalists, chemists, pathologists, industrialists, and also toxicologists, in training and in practice, will find this book invaluable.

Dr Susan Elton, MBBS, MRCGP, DOccMed, Postgraduate Certificate in Law

#### **Preface**

Toxicology is the cornerstone to all aspects of chemical safety. Knowledge of the subject is needed in a wide variety of disciplines, not just the chemical industry but also other areas, including medicine, the emergency services, and forensics.

Many problems arise from the understanding of toxicology and its application in hazard communication and chemical safety. This has been highlighted by the numerous online webinars and face-to-face toxicology training sessions that have been delivered by Toxicology Consulting Ltd over the past five years.

The overall goal of this book is therefore to provide a very practical and easy-to-use guide that will enable the reader to quickly build up his or her knowledge and understanding (in terms of its application) of toxicology.