
Considered an essential laboratory resource by analytical scientists and laboratory managers worldwide, the *Official Methods of Analysis of AOAC INTERNATIONAL (OMA)*, 18th Edition is the most comprehensive collection of validated analytical methods available anywhere. In it, you will find methods for dietary supplements, food, beverage, agricultural, microbiological, pharmaceutical, and environmental analyses.

**Availability:** ORG 2263 COBIO

---


Both the 17025:1999 standard and especially ANSI/ISO/ASQ,9001-2000 standard require that a laboratory document its procedures for obtaining reliable results. The Laboratory Quality Assurance Manual details to the user how to a prepare a new laboratory quality assurance manual, which will be appropriate to use as a procedures manual for a particular laboratory, a sales tool to attract potential customers, a document that can be to answer regulatory questions, and ultimately a tool to become a registered ISO 9001/2000 Lab and gain related certifications based on the standard. The Laboratory Quality Assurance Manual: incorporates changes to ANSI/ISO/ASQ 9001-2000 pertaining to laboratories; provides blank forms used in preparing a quality manual; provides information on the interrelationship of ANSI/ISO 17025:1999 and ANSI/ISO/ASQ 9001-2000.

**Availability:** ORG 2264 COBIO
Expanded and updated, The CRC Handbook of Laboratory Safety, Fifth Edition provides information on planning and building a facility, developing an organization infrastructure, planning for emergencies and contingencies, choosing the correct equipment, developing operational plans, and meeting regulatory requirements. Still the essential reference tool, the New Edition helps you organize your safety efforts to adhere to the latest regulations and use the newest technology. Thoroughly revised, the CRC Handbook of Laboratory Safety, Fifth Edition includes new OSHA laboratory safety standards, the 1994 NRC radiation safety standards, guidelines for X-ray use in hospitals, enforcement of standards for dealing with blood-borne pathogens, OSHA actions covering hazardous waste operations and emergency response, and the latest CDC guidelines for research with microbial hazards. Every word on every page has been scrutinized, and literally hundreds of changes have been made to bring the material up to date.

See what's new in the New Edition: New figures and tables illustrating the new material, Internet references in addition to journal articles, Changes in the Clean Air Act regarding incineration of hospital, medical, and infectious waste, Obsolete articles removed and replaced - over one hundred pages of new material, New information on respiratory protection guidelines.

**Availability:** ORG 2265 COBIO

Social network analysis, which focuses on relationships among social entities, is used widely in the social and behavioral sciences, as well as in economics, marketing, and industrial engineering. Social Network Analysis: Methods and Applications reviews and discusses methods for the analysis of social networks with a focus on applications of these methods to many substantive examples. As the first book to provide a comprehensive
coverage of the methodology and applications of the field, this study is both a reference book and a textbook.

Availability: ORG 2266 COBIO

---


There is an increasing need for analysts to understand and be able to quantify the performance of analytical instruments, in particular with respect to the following: specifying equipment for purchase; estimating uncertainties in instrumenental measurements; quantifying and demonstrating performance quality. This text links together an understanding of performance characteristics with an appreciation of the limitations imposed by instrument design, leading to the interplay of the validation and qualification processes within quality assurance systems. A unique framework of topics covers the major instrumental techniques of spectrophotometry, chromatography, capillary electrophoresis, and atomic emission spectroscopy. The use of over 200 questions and answers, together with cross-referencing, helps to develop a thorough understanding of the various concepts that underpin the different techniques. This book will appeal to a broad range of professional chemists, technicians and students, weither with reference to specific analytical techniques, or within a general course of study in instrumental performance.

Availability: ORG 2267 COBIO

Le tecniche di network analysis suscitano in Italia un crescente interesse, grazie ai contributi che le loro applicazioni hanno fornito allo sviluppo teorico della sociologia contemporanea. Il libro fornisce una sistematica discussione delle tecniche, illustrando in modo elementare le nozioni di base della teoria dei grafi e dell'algebra delle matrici. L'impianto del testo segue le fasi di una ideale ricerca empirica, che parte dalla formulazione delle ipotesi sulla base di una concezione relazionale dei fenomeni sociali, definisce operativamente i concetti di relazione, legame, soggetto, gruppo e struttura, discute le modalità di raccolta e organizzazione dei dati. Viene illustrata la rappresentazione grafica dei reticoli, assistita dal calcolatore, la rappresentazione matriciale e le relative operazioni che permettono il calcolo di indici strutturali, posizionali e di configurazione. Tutte le procedure illustrate sono corredate da esempi ricavati da ricerche classiche, con discussione dei risultati, sia dal punto di vista tecnico sia sostanziale. Particolare attenzione è dedicata alla rilevanza teorica dei concetti e alla loro origine nella sociologia classica. Le prospettive di sviluppo teorico e i vantaggi e i limiti dell'apparato tecnico vengono confrontate con le tecniche tradizionali di indagine, in una sorta di bilancio critico. Il volume si conclude con una guida pratica ai più diffusi programmi informatici di network analysis.

Availability: ORG 2268 COBIO


The revised and updated edition of this bestselling text provides an accessible introduction to the theory and practice of network analysis in the social sciences. It gives a clear and authoritative guide to the general framework of network analysis, explaining the basic concepts, technical measures and reviewing the available computer programs. The book outlines both the theoretical basis of network analysis and the key techniques for using it as a research tool. Building upon definitions of points, lines and paths,
John Scott demonstrates their use in clarifying such measures as density, fragmentation and centralization. He identifies the various cliques, components and circles into which networks are formed, and outlines an approach to the study of socially structured positions. He also discusses the use of multidimensional methods for investigating social networks.

**Availability:** ORG 2269 COBIO


The Study of Plant Disease Epidemics is a comprehensive manual that introduces readers to the essential principles...
and concepts of plant disease epidemiology. This useful reference and textbook provides a detailed exposition on how to describe, compare, analyze, and predict epidemics of plant disease for the ultimate purposes of developing and testing control strategies and tactics. The authors have synthesized the research advances from the last four decades, with a special emphasis on research done in the last 15 years, to produce a useful framework for: Measuring plant disease; Quantifying and modeling disease development in time and space; Quantifying patterns of disease and sampling for disease in populations; Determining decision thresholds for control interventions; Characterizing the relationship between disease development and crop loss. This new reference introduces a coherent theory of disease development in plant host populations over time and space, coupled with detailed explanations of the components of diseases in crops and forests. This theory demonstrates how different levels of mathematical complexity can lead to unifying principles of disease invasion, persistence, and rates of temporal increase and disease expansion from foci. In addition, the book shows how disease control strategies are intricately related to fundamental population-biology parameters. The information on modeling and statistical analysis provides the needed tools and procedures for researchers to help them properly measure and analyze collected epidemiological data and maximize its value. The methods and principles described throughout the book explain how to translate this valuable data and utilize it to make informed disease management decisions.

Availability: ORG 2271 COBIO


Over 90 scientists worldwide contributed their research to this comprehensive volume on the biology, epidemiology and control of Verticillium, as presented at the Seventh International Verticillium Symposium. Advances in Verticillium Research and Disease Management includes research on molecular biology and vegetative compatibility of Verticillium species and strains; the epidemiology, physiology and host-parasite interactions of Verticillium
species; and the management of Verticillium wilt diseases using biological, cultural and chemical means. Future research priorities are also discussed in the areas of taxonomic relations of species and strains, soil microbiology and new disease management approaches.

Availability: ORG 2272 COBIO


The Identification of Fungi : An Illustrated Introduction with Keys, Glossary, and Guide to Literature is a comprehensive manual that gives beginners the skills to identify fungi. In addition to plant pathogenic fungi, the manual covers mushrooms, slime molds, fungi of clinical significance, indoor air fungi, and other aspects of mycology. This manual covers all groups of fungi and fungus-like organisms and includes over 500 diagrams and line drawings. Descriptions of major groups (phylogenetic and artificial), simplified keys to family, and an illustrated glossary enable placement of common fungi into the appropriate taxonomic category. Text and glossary are coordinated to introduce fundamentals of mycological terminology. Over 30 pages of references are provided for literature on identification of cultures and specimens, and references are also given for contemporary phylogenetic research on each major taxonomic group.

Availability: ORG 2273 COBIO

With about 1.5 million species estimated to exist worldwide, members of the kingdom Fungi represent one of the largest biodiversity resources of our planet, fulfilling crucial ecological roles especially in
terrestrial ecosystems. Fungi are also one of the most diverse groups in terms of taxonomy, morphology and life cycles. These aspects are covered in Mycology Vol. 1 and Mycology Vol. 2, the long-awaited second edition of the original videodiscs published in 1990-1994.


*Mycology Vol. 1* shows representative examples of the 'Lower Fungi' (Chytridio- and Zygomycota). Also included are several intriguing groups of organisms such as slime molds, Oomycota and plasmodiophorids which are not taxonomically related to the fungi but are nonetheless widely studied by mycologists. This interactive DVD-ROM contains about 160 film scenes illustrating the structure, development and reproduction of lower fungi and fungus-like organisms. The video clips are supplemented with stills which show organization forms as well as plant disease symptoms caused by pathogenic fungi. The film sequences include spoken narrative describing the activity on the screen. The video clips, painstakingly prepared and including many spectacular time-lapse sequences, demonstrate the timeless beauty and fascination of these organisms. The contents of Mycology Vol. 1 have been extensively rearranged following a modern taxonomic framework.

**Availability: ORG 2274 COBIO DVD**


*Mycology Vol. 2* includes typical representatives of the two Divisions of "Higher Fungi" - the Ascomycota and Basidiomycota. Both are very large groups with many examples of fungi of economic significance, e.g., plant and animal pathogens, mycorrhizal symbionts, agents of decay and industrial fermentations, sources of food and as subjects for scientific research. The video clips include many spectacular time-lapse sequences, e.g., fungal growth and spore puffing. The contents of Mycology Vol. 2 have been extensively rearranged following a modern taxonomic framework.

**Availability: ORG 2275 COBIO DVD**
Leading researchers in the field are discovering that mycotoxins pose a significant health risk in both animal feed and foods for human consumption. However, the pace of distributing current information on their findings has been lagging until now. With its distinguished editors and international team of contributors, Mycotoxins in Food summarizes the wealth of the world's most recent research on how to assess the risks from mycotoxins, detect particular mycotoxins and control them at differing stages in the supply chain. Mycotoxins in Food addresses risk assessment techniques, sampling methods, modeling, and detection techniques used to measure the risk of mycotoxin contamination. Current regulations governing mycotoxin limits in food are provided as well. The book includes chapters on the use of HACCP systems and mycotoxin control at different stages in the supply chain. Case studies demonstrate how these controls work for particular products. The last section details particular mycotoxins, form ochratoxin A and patulinto to zearealenone and fumonisins. Assessing, detecting, and controlling mycotoxins is central to guaranteeing food safety. Therefore, it is important to understand the latest discoveries and data concerning these toxic compounds in order to limit animal and human exposure. This work is an authoritative reference for all those concerned with ensuring the safety of food.

Availability: ORG 2276 COBIO