

New books and publications

New IUPAC books

IUPAC Series on Analytical & Physical Chemistry of Environmental Systems. Series Editors: J. Buffle, University of Geneva, Geneva, Switzerland & H. van Leeuwen, Agricultural University, Wageningen, The Netherlands

The main purpose of this series is to make chemists and other scientists aware of the most important biophysico-chemical processes which influence the behaviour of environmental systems, in terms of sound quantitative theoretical concepts. The volumes of this series emphasize processes which are specifically related to environmental systems, systems with which chemists with a main background in homogeneous reactions in solutions are often unfamiliar.

The main aim of this series is to discuss in detail:

- (i) the important bio-physico-chemical processes and structures
- (ii) the analytical tools which exist or should be developed to study these processes and structures

The interdisciplinary nature of the IUPAC Series ensures that these volumes are invaluable for chemists, biochemists, biologists, ecologists and environmental engineers.

Previously published volumes:

Environmental Particles, Vol.1, edited by J. Buffle & H.P. van Leeuwen. Lewis Publishers (1992), ISBN 0 87371 589 6.

Environmental Particles, Vol.2, edited by J. Buffle & H.P. van Leeuwen. Lewis Publishers (1993), ISBN 0 87371 895 X.

Metal Speciation and Bioavailability in Aquatic Systems, Vol. 3, edited by A. Tessier & D.R. Turner. John Wiley & Sons (1996), ISBN 0 471 95830 1.

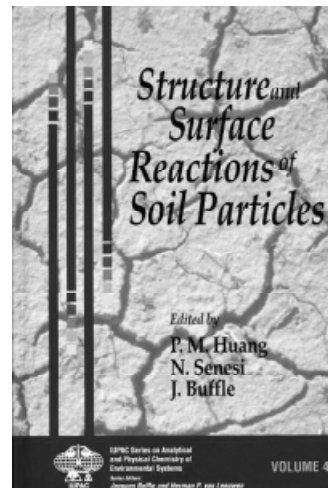
Structure and Surface Reactions of Soil Particles, Vol. 4, edited by P.M. Huang, N. Senesi & J. Buffle. John Wiley & Sons (1998), ISBN 0 471 95936 7.

A fundamental understanding of soil structures and processes at the molecular and microscopic level is essential to understanding and regulating the behaviour of environmental systems. *Structure & Surface Reactions of Soil Particles*, the definitive guide to the analysis of soil, addresses the basics of structure and surface reactions of soil particles and colloids.

Here, leading scientists review and evaluate the best sampling and analysis methods currently available, and summarize possible future research. Ideal for graduate

students, chemists and biologists working in environmental analysis and soil chemists studying the effects of landfill, pesticides and climate change, this book specially covers:

- Minerals-organics-microbes interactions in the soil environment.
- Fractal approach in the evaluation of soil particle dimensions.
- Aggregation and surface chemistry.
- Modern advanced instrumentation in analysis of soil particles.



Atmospheric Particles, Vol. 5, edited by R.M. Harrison & R. van Grieken. John Wiley & Sons (1998), ISBN 0 471 95935 9.

Devoted specifically to the chemistry of atmospheric particles which can impose environmental health impacts, for instance, by acting as catalysts in the air, speeding up processes such as global warming and ozone depletion.

After considering the sources and distribution of airborne particles, the authors then discuss sampling methods and methods of chemical analysis of individual aerosol types.

- First book to deal solely with airborne particles and their impact on climate, health and the atmosphere.
- Leading scientists review and evaluate the best methods available for analysis of atmospheric chemistry.
- Excellent overview of current research and forthcoming developments in this rapidly expanding area.

