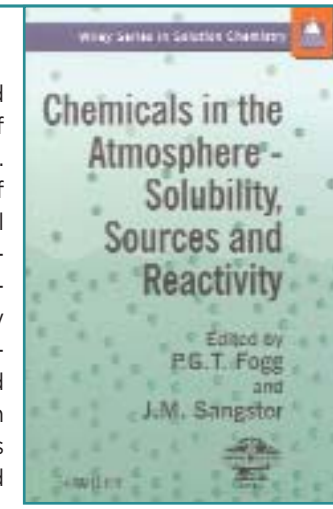
## Chemicals in the Atmosphere: Solubility, Sources and Reactivity

Peter Fogg and James Sangster (editors)
John Wiley & Sons, 2003
(ISBN 0-471-98651-8)




This book—the outcome of a project of the Commission on Solubility Data—follows discussions between members of this commission and the Commission on Atmospheric Chemistry extending over several years. The book provides a broad survey and theoretical basis of many aspects of the behavior of stable and unstable chemicals in the atmosphere. There is special emphasis on heterogeneous processes at all levels of the atmosphere. Modern techniques of investigation and of modeling such processes are discussed and many experimental data relating to interaction of gases with cloud droplets and with surfaces of solid particles are included. There is a detailed account of theoretical and practical aspects of Henry's law constants, including their relationship to infinite dilution activity coefficients. Experimental values have been compiled and evaluated for dissolution in pure water and in some cases sea water of 15 inorganic and 153 organic stable compounds.

www.iupac.org/publications/books/author/fogg.html

## Photochemical Purification of Water and Air

Advanced Oxidation Processes: Principles, Reaction Mechanisms, Reactor Concepts
Thomas Oppenländer
Wiley-VCH, Weinheim, 2002
(ISBN 3-527-30563-7)

While the treatment of water and exhaust gas using ultraviolet light offers both ecological and economic advantages, information on photo-initiated advanced oxidation technologies (AOTs) has been dispersed among various journals and proceedings until now. This authoritative and comprehensive handbook is the first to cover both the photochemical fundamentals and practical applications, including a description of advanced oxidation processes (AOPs) and process engineering of suitable photoreactors. The author presents various real-world examples, including economic aspects and uses the IUPAC recommendations for nomenclature in photochemistry. The book's many references to current scientific literature will facilitate research involving water and air industries. Throughout, over 140 detailed figures illustrate photochemical and photophysical phenomena.

Following is an excerpt from the foreword by James R. Bolton (president of Bolton Photosciences, Inc. and executive director of the International Ultraviolet Association): "Professor Oppenländer is well qualified to write about the AOPs/AOTs since he has contributed to this literature in a very significant manner. This book will be of considerable value to graduate students, science and engineering faculty, scientists, process engineers and sales engineers in industry, government regulators, and health professionals."

www.wiley-vch.de