

Review: Applied Sciences and the Environment

Editors: D. Almorza and H.M. Ramos

Reviewed by [Xavier E. Gros](#)

*European Commission, Joint Research Center,
Holland*

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Almorza, D. and H.M. Ramos, eds. *Applied Sciences and the Environment*. Boston, Southampton: WIT Press, 1998. 360 p. US\$184.00 hardbound ISBN: 1-85312-603-9.

The fourth volume in the Environmental Engineering series, *Applied Sciences and the Environment* gathers 30 articles that were presented at the 1998 International Conference on Applied Sciences and the Environment held in Spain (and organized by the University of Cadiz and Wessex Institute of Technology). These proceedings are divided into three sections, namely: Measurement and Data Analysis, Pollutants and Environmental Chemistry, and Environmental Management and Control.

The contributions contained in this publication discuss both theoretical studies and real case studies on environmental scientific research. A great many of the authors propose graphical and statistical means to represent and analyze multivariate environmental data meaningfully. Among these we noticed the article by Balasch et al. that discusses statistical analysis of pollutants' concentration, and the one from Bratkowiak on graphical representation of air-pollution data. Others applied statistical methods to climatology (Sanchez et al.), or for the survey of oil pollution from ships in the Mediterranean Sea (Ventikos et al.). Gomar et al. proposed mathematical models to solve problems in agronomy, Fusco et al. developed a model for the prediction of spatial distribution of pollution level, while the numerical tool of Loukili et al. allows the protection and efficient management of drinking water. Fortunately not all papers evolve around statistics and mathematics, and it is refreshing to read about alternative monitoring approaches such as the use of a stable isotope technique for evaluation of organic matter movement and coastal environmental status in Osaka Bay (Meksumpun et al.), or the use of natural tracers to investigate transport of sediments (Ramos-Lerate et al.), to cite only a few. New technologies are also considered in the form of remote sensing techniques for analysis of water quality parameters (Chica-Olmo et al.), fiber optic chemical sensors (Blanco and Chen), and immunosensor for enhanced detection

of organic contaminants (Prieto et al.).

Because of the variety of topics presented, it is very unlikely that one will not find something of interest in *Applied Sciences and the Environment*. Such a publication shows that collaborative works between scientists and environmentalists can help evaluating damage to the environment, while new technological developments offer solutions to tackle pollution problems.

All in all, the book provides material suitable for students and researchers, and should be recommended for anyone interested in learning about techniques available for environmental monitoring or multivariate data analysis. It is only regrettable that articles cited in references are not written accurately in a consistent manner throughout the book, and that a subject index is missing.

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Xavier E. Gros, xgros@ieee.org), is Project Manager, European Commission, Joint Research Centre IAM, PO Box 2, 1755 ZG Petten, The Netherlands, voice: +31+(0)224-56-5111.

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