



Earth and Environmental Science: Ecology, Environmental Chemistry, Environmental Sciences, Pollution, Earth Sciences, Earth System Sciences

François Dulac - CEA Saclay, Paris, France, Stéphane Sauvage - IMT Nord Europe, Douai, France, Eric Hamonou - Science Partners, Paris, France

Atmospheric Chemistry in the Mediterranean Region

Volume 1 - Background Information and Pollutant Distribution

- Provides an extensive review of past and recent literature on the atmospheric chemistry
- Examines the sources and fates of atmospheric pollutants over the Mediterranean basin
- Addresses the main impacts and considers the full cycle of aerosols and reactive gases

This two-volume set provides an extensive review of the abundant past and recent literature on the atmospheric chemistry in the Mediterranean region. The books document the experience gained on the atmospheric composition over the Mediterranean basin and close areas after almost six decades of studies, starting from early studies of radioactive aerosol fallouts and intense desert dust events in the 1960s, aerosol samples collected during oceanographic cruises in the early 1980s and including discoveries from subsequent surface monitoring stations, intensive campaigns, satellite climatologies, laboratory studies, as well as chemistry-transport and climate models. Through ten thematic sections, the authors examine the sources and fates of atmospheric pollutants over the Mediterranean basin and what we know about their major impacts on air quality and health, on the radiative budget and climate, on marine chemistry and biogeochemistry. This overview not only considers the full cycle of both aerosol and reactive gases including emissions, transport, transformation, and sinks, but also addresses the main impacts of the regional atmospheric chemistry. The volumes are an initiative from the ending ChArMEx project that has federated many studies on those topics in the past decade, and update the scientific knowledge by integrating the ChArMEx and non-ChArMEx literature. The books are contributed by a large pool of well-known authors from the respective fields, mainly from France and Greece, but also from fourteen other countries. All chapters have been peer-reviewed by international scientific experts in the corresponding domains.

Volume 1 provides background information on the Mediterranean atmosphere, and focuses on the synoptic and dynamic conditions affecting pollutant concentrations over the Mediterranean basin, aerosol concentrations and variability, and reactive gas concentrations and variability. - The targeted audience is the academic community working on atmospheric chemistry and its impacts on climate, air quality and marine biogeochemistry, especially teams having a special interest in the Mediterranean region, which includes many countries and institutes worldwide.

Springer Nature Customer Service - Ordering

Americas:

Call toll-free 1-800-SPRINGER (777-4643)
customerservice@springernature.com

Outside Americas:

+49 (0) 6221-345-0
row-booksellers@springernature.com

buchhandel-buch@springernature.com (German speaking countries)
asia-booksellers@springernature.com (Asia)

Springer

Edition No: 1

2023 . LIV, 583 p. 121 illus., 88 illus. in color.

Printed Book

Hard cover

ISBN 978-3-031-12740-3

EAN 9783031127403

129.99 € | £ 109.99 | \$ 139.99

139.09 € (D) | 142.99 € (A) | CHF 153.50

Available

Discount Group

Science (SC)

Professional Books (2)

Product Category

Monographs



Prices & other details are subject to change without notice. All errors and omissions excepted. £ and € are net prices, subject to local VAT. The €(D) / €(A) are gross prices and include German / Austrian VAT. CHF: recommended retail price including VAT. Americas: Tax will be added where applicable. Canadian residents, please add PST, QST and GST. Shipping costs are not included and depend on agreement with Sales and set up of the terms of delivery. Express shipping costs are calculated according to the weight, how and where it is shipped. For further information please contact our Customer Service Team via email.