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Review of *Radioactive Aerosols* by C. Papastefanou, Elsevier, New York, 2008.

This book covers the topic of radioactive aerosols with sufficient breadth to justify its ambitious title; topics include sources, health effects, fate and transport, measurement methods, and use as indicators for atmospheric processes. The book begins with brief introduction to atmospheric aerosol physics. Sources of radioactive aerosols are discussed ranging from naturally occurring radioactive aerosols including cosmic ray formation mechanisms and radon and thoron decay products and their attachment to existing aerosol to anthropogenic production of radioactive aerosols from nuclear device testing, nuclear reactors, and particle accelerators. The fate and transport of radioactive aerosols are also addressed by chapters on atmospheric transport and deposition with information on resuspension of deposited particles. Tables and formulae are given to enable calculation of aerosol deposition and resuspension.

Of particular interest is the chapter on human exposure and dose. The subtleties of the relationship of the ambient aerosol distribution to the activity distribution of radon decay products and the subsequent effect on inhalation dose are well presented.

The book contains numerous tables and graphs summarizing information found in the literature as well as a comprehensive list of citations. It is useful for those desiring an introduction to the various topics covered as well as those familiar with the subject as a good compilation of basic references for a literature search.

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