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Chapter 5 The particle size distribution; 5.1. Introduction; 5.2. The particle size definitions and the particle shape; 5.3. Definition and units; 5.4. An optimum particle size grid; 5.5. Transforming the size distribution; 5.6. Uncertainty of the PSD measurements; 5.7. Methods of PSD measurements

5.8. Aquatic PSD data5.9. Problems; Chapter 6 Refractive indices and morphologies of aquatic particles; 6.1. The refractive index: introductory remarks; 6.2. Refractive index of water and seawater; 6.3. Refractive indices of particles; 6.4. Morphologies of aquatic particles; 6.5. Problems; Appendix; Bibliography; List of major symbols and abbreviations; Index

Sommario/riassunto

Light scattering-based methods are used to characterize small particles suspended in water in a wide range of disciplines ranging from oceanography, through medicine, to industry. The scope and accuracy of these methods steadily increases with the progress in light scattering research. This book focuses on the theoretical and experimental foundations of the study and modeling of light scattering by particles in water and critically evaluates the key constraints of light scattering models. It begins with a brief review of the relevant theoretical fundamentals of the interaction of light with