Reviews on books and media

Logan BE: environmental transport processes

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In his newly published second revised edition of *Environmental Transport Processes*, the author, Bruce E. Logan, has reviewed the most important processes and the most useful mathematical formulas that dominate the field of environmental transport processes. Each chapter is structured in two parts: first, there is a full explanation of each chapter topic, followed by exercises and examples to help the reader easily understand the treated issue.

The book is divided into 19 chapters, beginning with elemental concepts like mole and mass concentration, mole and mass fraction and mass balance in Chap. 1. Equilibrium calculations in liquids and gases are dealt with in Chap. 2. One of the slowest transport processes, diffusive transport, and the formulas and facts surrounding this process are explained in Chap. 3. The salient mathematical demonstrations of the transport equation are interpreted in Chap. 4. Chapters 5 and 6 focus on mass transport processes.

In Chaps. 6–9, the author describes transport processes in biological environments, such as biofilms, aggregated microorganisms and share reactors. Chap. 10 deals with dispersion processes, where the author explains the properties of this process in different environments.

The last five chapters focus on transport processes in non-biological environments such as transport processes in rivers, lakes and oceans; aggregation and coagulation processes in natural or engineered systems; and chemical and particle transport in porous media.

Taking a didactic approach with its exercises and examples, this book allows readers to consolidate their knowledge in the subject of transport phenomena in natural and engineered environmental systems. This edition would be beneficial for students who already have taken courses in this topic and need a guidebook to have a better understanding of environmental transport processes. It also would be useful for people that work with these issues. *Environmental Transport Processes* can be recommended both to undergraduate and graduate students seeking to gain a good comprehension of environmental transport processes.

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