

health benefits can be expected when specific actions are taken. Evaluations of the economic consequences of risk management options are separate activities and require specific experts.

Generally, those who have to apply the results of risk assessment will find that this book provides a wealth of information to improve their understanding. Those who are directly involved in the process will enjoy the interesting examples, and will appreciate the discussions of the difficulties and the comments of other colleagues about cases where their work is hampered by having insufficient data. However, the book would have been further improved by a discussion about the need for specific risk assessments for sensitive populations.

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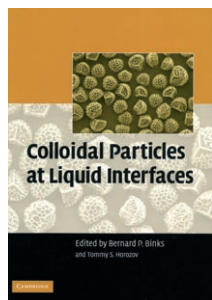
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Colloidal Particles at Liquid Interfaces



Edited by *Bernard P. Binks* and *Tommy S. Horozov*. Cambridge University Press, Cambridge 2006. 503 pp., hardcover
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The behavior of colloidal particles at liquid interfaces is one of the classical subjects of colloid and interface science.

The first important studies on emulsions and foams date back to the beginning of the 20th century, and emulsions stabilized by particles—the so-called Pickering emulsions—were described as early as 1907.

In recent years this area of research has experienced a kind of renaissance, and many new studies on this classical subject have been published. This is certainly related to the advances in the control and design of colloidal particles with new properties. One example is the Pickering emulsions stabilized by thermoresponsive poly(*N*-isopropylacrylamide) microgels. These emulsions break down on heating and can form again when cooled down, which makes them interesting for extraction and separation techniques or for controlled release of active agents. Other interesting new stabilizers for Pickering emulsions are light-sensitive particles, and also the recently synthesized Janus particles.

The book edited by Binks and Horozov covers all subjects related to this rapidly evolving field, and contains chapters from authors who are experts in their respective areas. The first chapter, written by the editors, gives a good overview and contains a short, but nevertheless sufficient, introduction to the thermodynamics of particle adsorption at liquid interfaces. It also reviews most of the important early literature in the area. After this essentially introductory chapter, the book is divided into two main parts. The first deals with adsorption at flat interfaces and the second focuses on curved interfaces. In Chapter 3, Hidalgo Alvarez and co-authors give a more detailed theoretical description of the physics related to the field. Chapter 4 by Goedel gives a comprehensive overview about the use of interfacial self-assembly of colloidal particles for templating purposes, which is aimed at the preparation of mem-

branes with a well-defined pore-size distribution and a low incidence of defects. Personally, I very much like the chapter by Velikov and Velev (Chapter 7), which gives an enormous number of references on the very active topic of “New Materials Derived from Particles Assembled on Liquid Surfaces”. In addition to the chapters that one would expect in a book on particles at liquid interfaces, there are also some on topics that are rather exotic from the point of view of a colloid scientist, such as the chapter about metal foams (Chapter 11). However, this shows that the book really aims to embrace all aspects of the subject.

The collection of contributions presented here is certainly not a beginner's textbook for undergraduate or even first-year graduate students, since there are no chapters introducing the basics of the most commonly used experimental methods, and there is hardly any cross-referencing between the chapters. One has to rely on the index to find related points in the different contributions. It appears that most of the authors were not aware of the content of the other chapters. This weakness of the book with regard to its use as a standard textbook can, on the other hand, also be an advantage, since the chapters can be read independently as reviews of their specific areas.

I would not recommend the book for undergraduate students. However, for researchers already working in the area of colloidal particles at liquid interfaces, and also for those who want to enter this fascinating field, this book is a must.

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