

**An Introduction to Dynamics of Colloids** by J.K.G. Dhont, **Studies in Interface Science, Vol. 2.** Series editors: D. Möbius, R. Miller, Elsevier Science B.V., Netherlands, 1996, 660 pages, Hardcover. Price: US\$ 297.00. ISBN 0-444-82009-4.

This book is a self-contained treatment of the fundamentals of a number of aspects of colloid physics. It is intended to bridge the gap that exists between more or less common knowledge to researchers in this field and existing textbooks for graduate students and beginning researchers. For many aspects of the theoretical foundation of modern colloid physics one has to resort to original research papers, which are not always easy to comprehend. This book is aimed to pro-

vide the theoretical background necessary to understand (most of) the new literature in the field of colloid physics.

Both chemists and physicists are active in colloid science. In many cases the mathematical background of chemists is less developed than for physicists. To make this book accessible also for those with a chemistry background, the first chapter contains a section on the mathematical techniques that are frequently used. Complex function theory is worked out in relative detail, since this is a subject that is often missing in mathematics courses for chemists. More complicated mathematical steps in derivations are always worked out in appendices or in exercises. In addition, for the same reason, the

first chapter contains a section on fundamental notions from statistical mechanics. Each chapter is written rather independently from the others, covering the following topics: Brownian motion of non-interacting particles, light scattering, fundamental equations of motion, hydrodynamics, diffusion, sedimentation, critical phenomena and phase separation kinetics. The book can be highly recommended as a textbook for interested students but as well for researchers in the strongly developing field of colloid dynamics.

F. Kremer, Leipzig