

Chemistry With Light

Innovative Didactics for Studies and Teaching

This textbook is aimed at student teachers and educators in the subjects of chemistry, biology, physics, computer science, and geography.

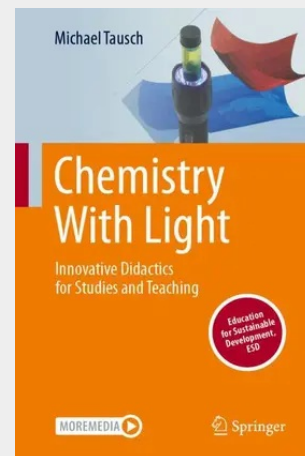
Sunlight, the energetic driving force for life on Earth, is expected to advance to the forefront of technology by the end of the 21st century. To promote this, the call is: "More light! Also in school lessons!" Chemistry plays a key role in this because it investigates and describes the phenomena of interactions at the level of the smallest particles in substances with the smallest energy packets of light—photons.

This book aims to initiate and support necessary innovations in chemistry teaching. In alignment with the basic concepts of chemistry education and other STEM subjects, the future-relevant significance, conceptual foundations, and curricular integration of light-involved processes are scientifically justified and explained, didactically simplified and structured. Experiments play a central role in this.

The online platform / provides teaching and learning materials in digital formats and free of charge. They can be accessed via direct in the printed book as well as in the e-book version. Chemistry education research questions and approaches are discussed, commented on, and prepared for discussion in subject didactics seminars.

Chemistry with light conveys "science for future," enabling a sustainable, environmentally friendly, and climate-neutral design of the future of our technological civilization.

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