DESCRIPTION

This comprehensive collection of top-level contributions provides a thorough review of the vibrant field of chemistry education. Highly-experienced chemistry professors and education experts cover the latest developments in chemistry learning and teaching, as well as the pivotal role of chemistry for shaping a more sustainable future.

Adopting a practice-oriented approach, the current challenges and opportunities posed by chemistry education are critically discussed, highlighting the pitfalls that can occur in teaching chemistry and how to circumvent them. The main topics discussed include best practices, project-based education, blended learning and the role of technology, including e-learning, and science visualization.

Hands-on recommendations on how to optimally implement innovative strategies of teaching chemistry at university and high-school levels make this book an essential resource for anybody interested in either teaching or learning chemistry more effectively, from experience chemistry professors to secondary school teachers, from educators with no formal training in didactics to frustrated chemistry students.

ABOUT THE AUTHOR

Javier García-Martínez is Faculty member and Director of the Molecular Nanotechnology Lab at the University of Alicante, Spain, where he teaches at undergraduate and graduate levels, and created several courses on materials chemistry and nanotechnology. Javier has published extensively on chemistry, materials science, and nanotechnology and is inventor of more than twenty fi
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