DESCRIPTION

Provides deep insight into the concepts and recent developments in the area of supramolecular chemistry in water.

Written by experts in their respective field, this comprehensive reference covers various aspects of supramolecular chemistry in water from fundamental aspects to applications. It provides readers with a basic introduction to the current understanding of the properties of water and how they influence molecular recognition, and examines the different receptor types available in water and the types of substrates that can be bound. It also looks at areas to where they can be applied, such as materials, optical sensing, medicinal imaging, and catalysis.

Supramolecular Chemistry in Water offers five major sections that address important topics like water properties, molecular recognition, association and aggregation phenomena, optical detection and imaging, and supramolecular catalysis. It covers chemistry and physical chemistry of water; water-mediated molecular recognition; peptide and protein receptors; nucleotide receptors; carbohydrate receptors; and ion receptors. The book also teaches readers all about coordination compounds; self-assembled polymers and gels; foldamers; vesicles and micelles; and surface-modified nanoparticles. In addition, it provides in-depth information on indicators and optical probes, as well as probes for medical imaging.

-Covers, in a timely manner, an emerging area in chemistry that is growing more important every day

-Addresses topics such as molecular recognition, aggregation, catalysis, and more
- Offers comprehensive coverage of everything from fundamental aspects of supramolecular chemistry in water to its applications

- Edited by one of the leading international scientists in the field

Supramolecular Chemistry in Water is a one-stop-resource for all polymer chemists, catalytic chemists, biochemists, water chemists, and physical chemists involved in this growing area of research.

---

 ABOUT THE AUTHOR

**Stefan Kubik** is Professor of Organic Chemistry at the University of Kaiserslautern. He has authored more than 1000 keywords for the chemistry encyclopedia Römpp-Online, acted as Guest Editor of the online themed collection of Organic & Biomolecular Chemistry on Supramolecular Chemistry in Water together with A. Dalla Cort and A. P. Davis, and is Associate Editor of the Journal of Inclusion Phenomena and Macrocyclic Chemistry.

---

To purchase this product, please visit [https://www.wiley.com/en-us/9783527344673](https://www.wiley.com/en-us/9783527344673)