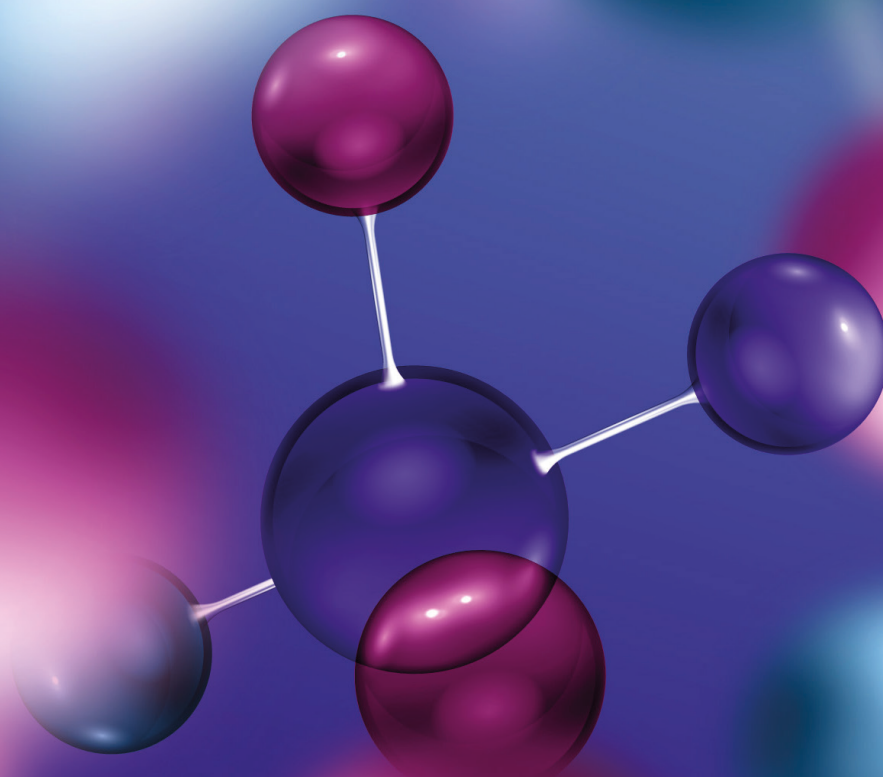




Ca' Foscari
University
of Venice
Department of
Molecular Sciences
and Nanosystems

Prof. **Henrik Sundén**

Università di Göteborg, Sweden

From Synthetic Method Development to Molecular Materials: OTHO and Organoboron Chemistry

mercoledì 28 ottobre 2026, ore 11.00

Aula Delta 2A, edificio Delta, Campus Scientifico

The development of new synthetic methods can open unexpected directions, ranging from new molecular reactivity to functional materials. In this presentation, I will show how our studies of oxotriphenylhexanoate (OTHO) chemistry have expanded from organic synthesis into supramolecular materials and organoboron chemistry. First, I will discuss the synthesis of OTHO derivatives and their development as low-molecular-weight gelators, focusing on how systematic structural variation influences self-assembly and gel formation. Understanding these structure–gel relationships provides a foundation for using the OTHO scaffold to design functionalized supramolecular materials. I will then show how observations made during OTHO synthesis, particularly involving boron tribromide, opened a separate direction in organoboron chemistry and the development of new synthetic transformations.

Together, these studies illustrate how research originating in synthetic organic chemistry can evolve toward both functional supramolecular materials and new molecular reactivity.

Bio: Henrik Sundén is Professor of Organic Chemistry at the University of Gothenburg. His research focuses on the development of new synthetic methods and their application in molecular and materials chemistry. His group's research spans organocatalysis, photochemistry, organoboron chemistry, and supramolecular materials. A particular focus is the development of low-molecular-weight gelators and understanding how molecular structure governs self-assembly and material properties. More recently, his group has developed boron-mediated strategies for selective C–H functionalization, providing new approaches to the synthesis of functional organic molecules.

Organizzazione di:
Matteo Gigli
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