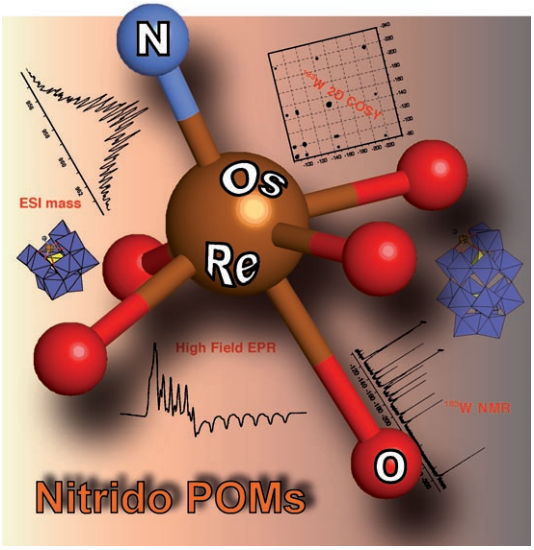
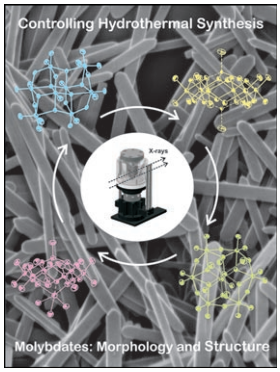
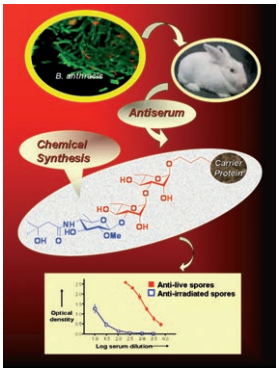
Polyoxometalates or POM…

… are remarkable because of their molecular and electronic tunability, and their range of properties and applications. In their Full Paper on page 9150 ff., E. A. Maatta, A. Proust et al. discuss various routes to nitrido derivatives, which may act as nitrogen-atom transfer reagents to organic substrates. ^{183}W and ^{15}N NMR, EPR, IR, and UV/Vis spectroscopies and cyclic voltammetry have been used to address their electronic and molecular structures.

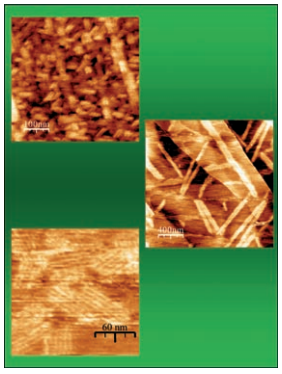




Hydrothermal Synthesis
In their Concept article on page 9122 ff., G. R. Patzke and A. Michailovski describe the fascinating and complex research area of the hydrothermal synthesis of cutting-edge molybdenum-based nanomaterials and polyoxometalates (POMs). A "melting pot" of interdisciplinary research activities joining in situ methods, combinatorial techniques and experimental structure–synthesis studies is discussed.



Oligosaccharide Anthrax Vaccines
In their Full Paper on page 9136 ff., G.-J. Boons, C. P. Quinn and co-workers describe the synthesis and antigenic analysis of the BclA glycoprotein oligosaccharide from the *Bacillus anthracis* exosporium in addition to other oligosaccharide analogues. These structures may provide a foundation for directing immune responses to spore structures during the early stages of the *B. anthracis* infection process.



Self-Assembly of Tetrathiafulvalenes
In their Full Paper on page 9161 ff., D. B. Amabilino et al. describe how nanometer-scale fibres containing π-electron-rich units can be favored by employing the amide group as a noncovalent assembler. The formation of these fibers is sensitive to solvent, surface, and constitution and composition of the molecule, but it is controllable.