

www.angewandte.org 2012-51/29 Sialyl Lewisx a pre-organized binding epitope a pre-organized water oligomer

Noncanonical Nucleobases
Review by T. Carell et al.

Philosophy of Science Essay by G. Franck

Single-Walled Carbon Nanotubes

Minireview by U. H. F. Bunz, S. Menning, and N. Martín

Supramolecular Hydrogen-Bonded Systems
Minireview by A. P. H. J. Schenning

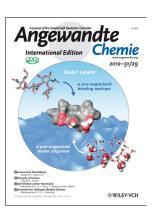
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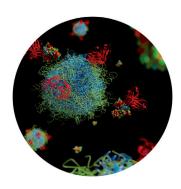


Cover Picture

Florian P. C. Binder, Katrin Lemme, Roland C. Preston, and Beat Ernst*

A surrogate for clustered water molecules attached to a scaffold is how the "preorganized water oligomer" sialyl Lewis^x can be described. The impetus for its binding to E-selectin is investigated by B. Ernst et al. in their Communication on page 7327 ff. Using isothermal titration calorimetry they show the key factors are the high degree of pre-organization allowing an array of directed hydrogen bonds, and the entropic benefit on releasing water molecules from the large binding interface.



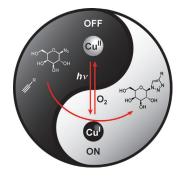


Enzyme Catalysis

In their Communication on page 7132 ff. F. Caruso et al. describe an efficient method for the enzymatic site-specific protein functionalization of polymer capsules.

Switchable Catalyst

In their Communication on page 7137 ff., J.-M. Vincent et al. describe a light-activated copper(I) tren click catalyst that can be switched off by air and then on again with bubbling argon followed by irradiation.





Functionalizable Directing Groups

In their Communication on page 7246 ff., Y. Huang et al. describe a triazine directing group for C_{sp^2} –H activation/functionalization that exhibits substantial post-functionalization synthetic versatility.