

A totally synthetic artificial pancreas ...

... is described by Y. Miyahara et al. in their Communication on page 2124 ff. A hydrogel bearing a phenylboronate derivative undergoes a glucose-dependent transition in its state of hydration under physiological conditions. The reversible surface-localized dehydration enables the provision of insulin to be controlled, thus offering a new basis for the treatment of diabetes with long-term stability and safety.

