DNA-based synthetic receptors ...

... can transiently load or release a molecular cargo under dissipative control. In their Communication on page 10489 ff., L. J. Prins, F. Ricci, and co-workers show that the DNA nanomachine can load a cargo and, through the action of a chemical fuel, release it in a time-controlled fashion. The process allows highly selective fuel consumption exclusively in the activated complex and a high tolerance to the presence of waste products.