

# ADVANCED FUNCTIONAL MATERIALS

## MEMBRANES

Effective separation of hexaphenylbenzene from n-heptane is demonstrated on page 4729 by A. G. Livingston and co-workers. Ultrathin and free-standing polymer films with intrinsic microporosity (PIM-1) are precisely fabricated on porous substrates. The organic solvent nanofiltration performance with exceptionally fast permeation of n-heptane through PIM-1 layers down to 35 nm in thickness are presented. Membranes show highly non-monotonic performance with film thickness and ageing resistance.

