

# Protein Jell-o

A major challenge in fabricating protein arrays is maintaining the proteins in a native conformation. Hydrogels, a semi-wet environment, may offer advantages over conventional dry surfaces. Kiyonaka *et al.* propose to construct protein arrays with a 'supramolecular' hydrogel made from a self-assembling low-molecular-weight gelator. Structural characterization of their hydrogel revealed that the gelator forms thin crystalline fibers that aggregate into thicker fibrils containing nanoscale hydrophilic and hydrophobic regions. The hydrogel was then tested in an assay of the enzyme lysyl-endopeptidase. Cleavage of a peptide substrate coupled to the fluorescent probe DANSen could be readily monitored by changes in the wavelength and height of the emission peak. The authors suggest that supramolecular hydrogels are superior to conventional hydrogels in that more water is sequestered and the preparation process is simpler. (*Nat. Mat.* 3, 58–64, 2004) KA