**STRUCTURE OF BIOPOLYMER GELS**

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Over the last decade a great deal of effort has been devoted to understanding the structure of swollen polymer networks using small angle scattering techniques.1,2 Small angle neutron scattering (SANS) has provided much information not otherwise available.3 Scattering measurements made on polymer networks swollen in a low molecular weight solvent reveal how the elastic forces exerted by cross-links produce nonuniformities in the polymer concentration...

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REFERENCES  
[1] Hecht, A.M.; Horkay, F.; Geissler, E. *Phys. Rev. E.* 64 (2001) 041402.

[3] Endo, H.; Miyazaki, S.; Haraguchi, K.; Shibayama, M. *Macromolecules* (2008) 41, 5406.

[3] Higgins, J.S.; Benoit, H.C. *Polymers and Neutron Scattering,* Clarendon Press, Oxford, 1994.