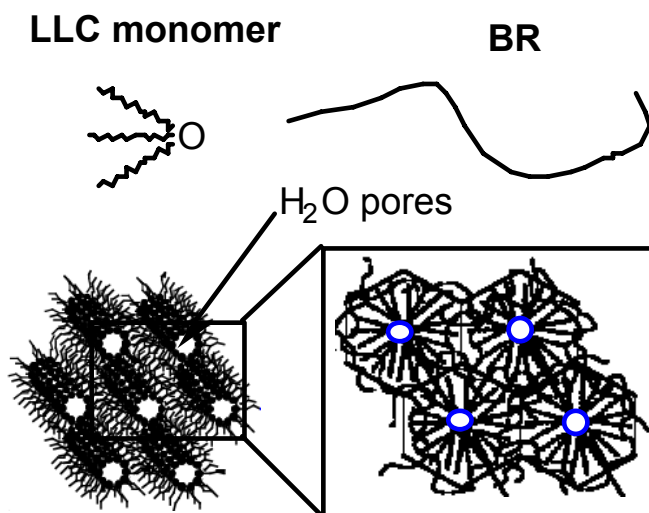


Cross-Linked Lyotropic Liquid Crystal-Butyl Rubber Composites: Promising "Breathable" Barrier Materials for Chemical Protection Applications

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A lyotropic liquid crystal (LLC) monomer was successfully blended and cross-linked with commercial butyl rubber (BR) to afford ordered, nanoporous polymer composites. These materials retain much of the excellent chemical resistance of BR but also provide a measure of water vapor permeability, which is lacking in pure BR materials but essential for protective garment applications.



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