

PP 11 - Liquid Crystalline Properties of Acetylchitosan

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Acetylated chitosan derivatives with different degrees of acetylation were prepared by mixing partially deacetylated chitosan and acetic anhydride, according to a procedure similar to that proposed for the preparation of acetoxypolypropylcellulose. The degree of acetylation of these derivatives was determined by Elemental Analysis and Nuclear Magnetic Resonance (NMR). Thermotropic and lyotropic mesophases were studied in function of this parameter and were fully characterized by Infrared Spectroscopy, Differential Scanning Calorimetry and Polarized Optical Microscopy. Results obtained are discussed based on the available literature on this subject.