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Raman spectral analysis of wet-spun films of CaDNA with varying amounts of CaCl₂ as a function of relative humidity M. SCHWENKER SMITH, SCOTT LEE, University of Toledo, ALLAN RUPPRECHT, University of Stockholm — Raman spectroscopy has been used to probe the amount of DNA in the B conformation in wet-spun films of CaDNA which contain varying amounts of CaCl₂ as a function of relative humidity. This determination is made by measuring the relative intensity of the B-form marker band at about 834 cm⁻¹. Our experiments show that CaDNA is in the B conformation from 98% relative humidity (rh) down to 75% and is disordered at lower humidities. Interestingly, a maximum in the relative amount of B-DNA is observed near 80% rh.

> Scott Lee University of Toledo

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