Raman spectra of thin solid films. VII?Uranyl superphtalocyanine

Clavijo, R. E.

Aroca, R.

Kovacs, G. J.

Jennings, C. A.

Duff, J.

Loutfy, R. O.

Raman and infrared spectra of evaporated uranyl superphthalocyanine (UO2SPc) films are reported. Raman spectra of UO2SPc (formed by five isoindoline subunits) depart from the general spectral trends observed in metallated phthalocyanines (four isoindoline subunits), and are indicative of very low molecular symmetry. Surface enhanced Raman scattering (SERS) spectra obtained on silver island films show appreciable differences from the normal unenhanced Raman spectra. This is unlike the situation for normal metallated phthalocyanines (where the SERS is simply the enhanced version of the normal Raman spectrum) and indicates a different interaction mechanism between the UO2SPc molecule and the metal islands.