**Ultra-thin poly(3-hexylthiophene) films from the air/water interface to solid substates**

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Poly(3-hexylthiophene) (P3HT) is a regioregular conducting polymer widely used in the manufacture of field-effect transistors and photovoltaic cells [1,2]. Device performance strongly depends on the organization of the polymer, which is significantly influenced by the deposition method. Classical deposition techniques as drop casting or spin-coating lead to heterogeneous materials. We formed highly organized and homogeneous P3HT films at the air/water interface through the Langmuir technique, then transferred them onto solid substrates. Employing Grazing Incidence X-ray Scattering, X-ray Reflectivity, and X-ray Fluorescence, we extensively analyzed the structural properties of the layers both at the air/water interface and following deposition onto solid substrates. [3]. The effect of doping by F4TCNQ co-deposition on the structure was also determined. These results where compared with the optical properties and conductivity measurements [4].

**References**

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