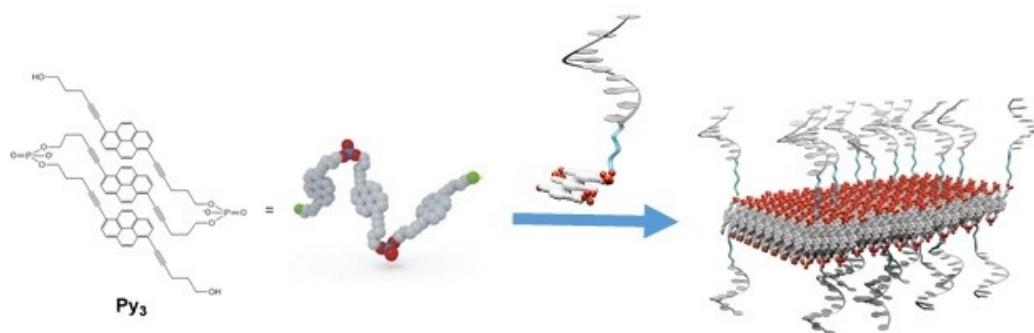


DNA functionalized supramolecular nanosheetsN. Bürki¹, Y. Cotelle¹, S. M. Langenegger¹, R. Häner^{1*}¹University of Bern

2D supramolecular polymers may find application as functional platforms. Previously it was shown that the phosphodiester-linked trimers of 1,6-dialkynyl-substituted pyrene **Py₃** self-assembled into supramolecular nanosheets in aqueous medium [1]. Here we doped the supramolecular nanosheets with pyrene DNA conjugates to functionalize the nanosheets. Further the functionalized nanosheets were hybridized with Au nanoparticles modified with the complementary DNA strand of the pyrene DNA conjugates. The two-dimensional supramolecular nanosheets were characterized by UV-vis spectroscopy and atomic-force microscopy (AFM).



[1] M. Vybornyi, A. V. Rudnev, S. M. Langenegger, T. Wandlowski, G. Calzaferri and R. Häner, *Angew. Chem. Int. Ed.*, **2013**, 52, 11488–11493.