

Bilayer Networks of TTF Derivatives at the Solid-Liquid Interface

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Abstract

The current work is an endeavour to explore the complementary fields of substrate-induced phases and 2D crystallization, in order to attain a fundamental understanding of the role of interfaces and surfaces upon crystallization. This study strives to further our insight into how the first stages of crystallization occur, i.e. from the moment the first layer of molecules assembles onto the surface, subsequently the second and the third, and so on. Scanning tunneling microscopy (STM) has been employed to investigate the growth and organisation of the self-assembly of tetrakis-(octadecylthio)-tetrathiafulvalene at the solid-liquid interface. The impact of temperature, concentration, solvent solubility over the organisation of networks from the monolayer to the multilayer system is addressed.

References

- [1] Roland Resel and co-workers, *Adv. Funct. Mater.* (2016) (26) [2233–2255]
- [2] Neil R Champness and co-workers, *Chem. Soc. Rev.*, (2017), (46), [2520—2542]