

# seminars

Tuesday 21st March 2017 12:00h

Nanociencia y Nanotecnología: lo pequeño es diferente

Nanoscience and Nanotechnology: small is different

C/Faraday, 9  
Conference Hall  
Imdea Nanociencia  
Ciudad Universitaria de Cantoblanco

## **Monodisperse and star-shaped organic semiconductors for photonic applications**

Prof. Peter Skabara  
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Well-defined and monodisperse oligomers can be considered to be intermediate of conjugated 'small molecules' and polymers, and can feature the best of both sets of attributes. Precise HOMO/LUMO energy levels, high thermal stability, good solubility and excellent film-forming properties are common features that can be achieved in such materials. Moreover, the precise structure of the material is known (compared with polydisperse systems) and this makes our understanding of structure-property relationships much easier to establish.

The synthesis and properties of some monodisperse conjugated star-shaped and linear structures will be presented in this talk, along with their application in organic lasers, sensors, electrogenerated chemiluminescence, light emitting diodes and LiFi communications.