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DEPARTAMENTO DE QUÍMICA FÍSICA
UNIVERSIDAD COMPLUTENSE DE MADRID

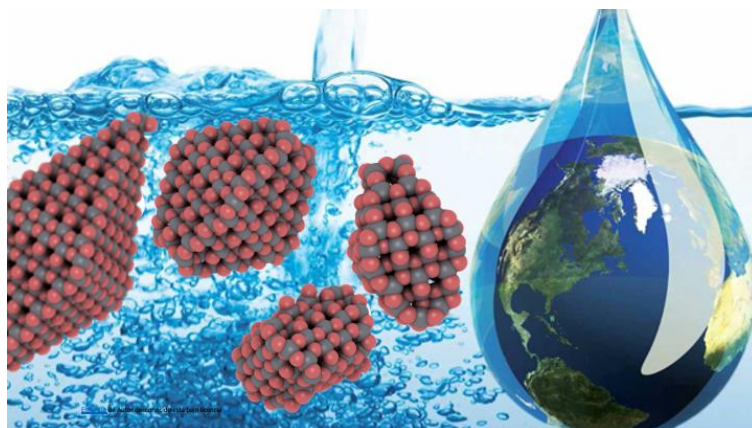
Martes 24 de mayo de 2022 – 11:30 h
Aula QC16

Crystal Facet Engineering for Tailoring Photoactive TiO₂ Nanoparticles

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Heterogeneous photocatalysis emerges as a sustainable and alternative strategy for several applications, including degradation of environmental pollutants, solar fuel production, and self-cleaning surfaces. The success of this strategy depends strongly on the properties of the nanostructures employed as photocatalysts. Among the large number of semiconducting materials investigated for photocatalytic applications, titanium dioxide (TiO₂) continues to be the workhorse in the field. In this presentation, I will discuss the importance of the interplay between size, morphology, and energy gap in photoactive TiO₂ nanoparticles and its implication in photocatalysis. Due to these photoactive systems usually operate under water conditions, it is of fundamental interest the understanding of the role of water on the stabilization of photoactive TiO₂ nanoparticles. Thus, the second part of my talk will be focused on hydrated titania nanoparticles.



Se ruega enviar un correo a smarggi@ucm.es si se está interesado en acceder vía telemática.