

seminar

Tuesday November 29th

c/ Faraday, 9
Sala de Conferencias, Hall
Imdea Nanociencia
Ciudad Universitaria de Cantoblanco

12.00h **Molecularly imprinted polymers:
synthetic receptors for selective
extractions and beyond**

Dr. Antonio Martín-Esteban

Instituto Nacional de Investigación y Tecnología Agraria
y Alimentaria (INIA). Carretera de A Coruña km 7. 28040
Madrid (Spain)

Molecularly imprinted polymers (MIPs) are tailor-made synthetic materials possessing specific cavities designed for a target molecule. Since they recognize their target analyte with high affinity and selectivity, comparable to those of antibody-antigen, they are considered excellent materials able to perform selective extractions.

The incorporation of MIPs as sorbent in solid-phase extraction, so-called “molecularly imprinted solid-phase extraction” (MISPE), is already accepted in analytical laboratories and some MIPs are commercially available. Besides, MIPs incorporation to other sample preparation techniques, such as magnetic solid-phase extraction (MagSPE), solid-phase microextraction (SPME), stir bar sorptive extraction (SBSE) or liquid-phase microextraction (LPME), has been recently proposed and successfully applied to the extraction of different analytes from complex samples. Thus, the uses of MIPs in sample preparation, including the most recent developments in this field, will be described.

Besides, the incorporation of MIPs to other areas such as sensors, controlled release and decontamination will be briefly discussed.

[Nanociencia y Nanotecnología: lo pequeño es diferente
Nanoscience and Nanotechnology: small is different]



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