

CONFERENCIA

***"Polymeric Ionic Liquids: Broadening the properties and applications of polyelectrolytes"*****Expositor:** Prof. Dr. David Mecerreyes**Resumen:**

The properties and classical applications of polyelectrolytes are being outspreading in the last years by the introduction of new ionic moieties (cations and anions) into the polymeric backbone. These new ionic moieties are being developed due to the scientific and technological interest in the field of ionic liquids and for this reason, some of the new polyelectrolytes are being named polymeric ionic liquids (PILs). Examples are found in the figure including polycations and polyanions having i.e. new cations; imidazolium, pyridinium, guanidinium, pyrrolidonium and anions including tetrafluoroborates, hexafluorophosphates, triflates, amidotriflates, and carboxylates. In the last few years, those innovative polyelectrolytes have been finding a wide range of applications in different technological fields such as polymer electrolytes for batteries, electrochromic devices, biosensors, solar cells, gas membranes, anion sensitive block copolymer micelles, smart surfaces and nanocomposites. In this presentation, we will review the recent developments in the synthesis and application of new polymeric ionic liquids by introducing the author's recent work and his perspectives for the field.

Biografía breve del expositor:

David Mecerreyes es graduado de la Universidad del País Vasco y PhD de la Universidad de Liege (Bélgica). Actualmente, lidera el Grupo POLYMAT en la Universidad del País Vasco. Su laboratorio investiga en química orgánica, química de polímeros, química supramolecular y nanomateriales. Su objetivo es la síntesis de materiales poliméricos innovadores para tecnologías emergentes en sectores de energía y medio ambiente.