EIIRIS Evening Colloquium

EIIRIS
Electronics-Inspired
Interdisciplinary
Research Institute

第１６回イブニングコロキアム

異分野融合研究の芽を育てるフリーディスカッションの場です。
皆様のお越しをお待ちしております。

【日時】　平成26年8月27日（水）
17：30−18：30

【場所】　EIIRIS 1階 エントランスホール

【講師】　Cristina Blanco−Andujar
(University College London)

【演題】

When magnetism and biology come together: the wonders of sub-molecular size probes

The incorporation of nanotechnology into the field of life sciences has provided a better understanding of biological processes due to the use of sub-molecular size probes, opening up new possibilities in the study of certain ailments and disorders. The incorporation of magnetic nanoparticles for biomedical applications paves the way towards multifunctional technologies, given their *actuation, sensing* and *heat generation* capabilities. The latter, also known as magnetic hyperthermia, has become of special interest within the medical field as the generated heat from exposure of magnetic nanoparticles to an oscillating magnetic field can be transferred to cells or tissues to induce tumour remission. Iron oxide nanoparticles constitute the main choice for biomedical applications due to their biocompatibility and the existence of formulations already in use and approved by the US Food and Drug Administration. From contrast agents to heating vectors, iron oxide nanoparticles offer an excellent platform for the development of new biomedical tools. Herein, work with iron oxide for drug delivery and magnetic hyperthermia will be presented, as well as the existing limitations and the latest challenges in the field.

【会費】　100円

担当：中鉢 淳（内線6901）