EIIRIS Special Seminar

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Electronics-Inspired Interdisciplinary Research InStitute

EIIRIS特別セミナー

海外からEIIRISに招聘した研究者の帰国前の講演会です。
皆様のお越しをお待ちしております。

【日時】平成２５年１０月２８日（月）
１４：００－１５：００

【場所】 VBL３階ﾌﾟﾛｼﾞｪｸﾄ研究交流室

【講演者】
Daniel Ortega Ponce 先生

【演題】
New horizons in transmission electron microscopy for nanotechnology

Present appointments:
Junior Researcher at the IMDEA Nanoscience institute, Madrid, Spain
Honorary Research Associate at the UCL Institute of Biomedical Engineering, London, UK

Cutting-edge advances in nanoscience and nanotechnology are undoubtedly linked to the development of new characterization methods constantly pushing the boundaries of the established levels of detection and resolution. Despite the relentless efforts in this direction, current challenges in both fundamental and applied science, from the paradigmatic graphene to the cancer fight, demand new ways of gaining a deeper knowledge of their inner structure at the nanoscale. In his famous talk 'There's plenty of room at the bottom', the Nobel Prize-winning physicist Richard Feynman asked "Is there no way to make the electron microscope more powerful?". Several decades later, there are reasons for him to be happy: resolutions down to 0.5 angstroms can be achieved in the most advanced transmission electron microscopes (TEM's).
In this talk, I will address the past, present and future of TEM as one of the most powerful multi-purpose characterization techniques, also giving some glimpses about forthcoming improvements that, instead of just focusing on better resolution levels, will pave the path forward to characterize samples in their native state - a major breakthrough in TEM yet to come.

担当：EIIRIS事務室（橋詰、小林：7245）