

# マテリアルサイエンス系セミナー(第16回)

## テーマ Nano scale spin sensing using nitrogen-vacancy centers in diamond

講演者: Dr. Abdelghani Laraoui,  
University of New Mexico

Center for High Technology Materials  
Research Assistant Professor

日時:平成29年3月13日(月) 15:30~16:30  
場所:マテリアルサイエンス系研究棟IV棟8階 中セミナー室

講演要旨: The use of spin state in nitrogen vacancy center in diamond as a probe for high-resolution magnetic and temperature sensing is presented. Including: Development of a novel approach for imaging thermal conductivity and temperature at the nanometer scale using diamond nanocrystal – contained Nitrogen Vacancy Centers (NVC) - attached to a thermal AFM tip, introducing novel methods for hyperpolarizing nuclear spins at arbitrary magnetic fields, and implementing NVC-assisted magnetometry of paramagnetic centers in diamond nanocrystals.

講演者略歴: M.S. in Condensed Matter Physics, Universite de Haute-Alsace Mulhouse-Colmar  
2007 Ph.D. in Nonlinear optics, condensed Matter Physics, University of Strasbourg  
2007 Postdoctoral researcher, University of Kaiserslautern  
2009 Postdoctoral researcher, CUNY-City College of New York  
2016 Assistant Professor, University of New Mexico•Center for High Technology Materials

参加申込・予約は不要です。直接会場にお越しください。  
お問い合わせ先: 共通事務管理課 共通事務第三係 (E-mail: ms-secr)