



## グローバル COE 物質科学イノベーション講演会

### 演 題: **The Many Faces of the Materials Chemistry and Physics of the Organic-Inorganic Interfaces**

講 師: **Prof. Patrick Batail**

**CNRS-University of Angers (France)**

日 時: 2007 年 11 月 9 日 (金) 16:00～17:30

場 所: 理学部本館 N-308 講義室

共 催: 理学院「魅力ある大学院教育」イニシアティブ  
～高邁なる大志を抱いた T 型化学者養成～

要 旨: This seminar is about how the chemistry and physics of anisotropic, weak intermolecular interactions act in unison in low dimensional hybrid organic-inorganic solids. The talk will focus on a solid state chemist approach of current dimensionality issues in molecular solids supporting strongly correlated electronic systems. An attempt at formulating molecular materials chemistry targets in response to the perception of current theoretical dreams in the rich physics of systems of strongly correlated electrons in one-dimension will be presented. These include the engineering of crystals where interdependence of redox state and hydrogen bonding within self-complementary motifs, are coupled to collective electronic instabilities, molecular motion, and charge localization. In addition, this approach will be extended to reach out toward the issue of field effects in monomolecular  $\pi$ -functional nano-(meso) wires, and over to the new field of mineral liquid crystals and mesophases obtained by auto-assembly of nanostructured covalent mineral objects.

本公演は『化学研究総合講義Ⅱ』の一部として認定されております

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高邁なる大志を抱いた T 型化学者養成  
T-type Chemists with Lofty Ambition