電子科学研究所学術講演会

ポリオキソメタレート合成と物性開拓の第一人者であるグラスゴー大学 DeLiang Long 先生をお招きして、下記の通り講演会を開催いたします。

日時: 平成 29 年 9 月 14 日 16:00~ 場所: 電子科学研究所 1 階会議室

Electron Transfer Reaction within Polyoxometalate Clusters of Redox Active Templates

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Compared with polyoxometalates (POMs) constructed from conventional templates (PO₄³⁻, SO₄²⁻, SiO₄²⁻, etc.), POMs based on redox-active templates, e.g. SeO₃²⁻, TeO₃²⁻, are of greater interest since they have more diverse structural types and redox activities, enabling them to have extraordinary potential in applications. In the last decade, we have been pioneering in this area and have discovered a number of POM clusters supported by redox-active templates, SO_3^{2-} , HPO_3^{2-} , TeO_6^{6-} , IO_3^{-} and IO_6^{5-} . This talk presents the confined electron transfer reactions and the related electronic properties of the structure types $\{W_{18}O_{54}(XO_3)_2\}$ (X = S, Se and P-H) and $\{W_{18}O_{56}(XO_6)\}$ (X = W, I and Te), as well as the attempts in the design and manipulation of these clusters as molecular electronics.

主催:北海道大学電子科学研究所学術交流委員会

共催:人・環境と物質をつなぐイノベーション創出ダイナミック・アライアンス

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