第 684 回 化学・物質工学セミナー開催のお知らせ

下記の通りセミナーを開催致します。万障お繰り合わせの上、ご参加下さい。

Solid Electrolytes and Electrodes for Advanced Energy Storage and Conversion Devices

Prof. Dr. Venkataraman Thangadurai
Department of Chemistry, University of Calgary

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日時: 平成 29 年 11 月 13 日（月） 8:50 ~ 10:20
場所: 長崎大学文教キャンパス 総合教育研究棟 2 階 多目的ホール

Abstract
Solid state (ceramic) electrolytes exhibiting fast proton, oxide ion, lithium ion, sodium ion, and mixed ionic and electronic conduction are being considered for application in solid oxide fuel cells (SOFCs), proton conducting SOFCs, all-solid-state batteries and gas sensors. The functional properties of solids depend on crystal structure and composition. Large numbers of inorganic compounds and organic polymers show fast ionic conduction, while not all of them find application in practical devices. The key requirements for useful ceramic electrolytes are high ionic and negligible electronic conductivity over the employed range of activity of the mobile species, and chemical stability against reaction with the adjacent cell components. These remain challenging for scientists to develop durable solid-state ionic devices with high power density. Thangadurai group has developed several novel electrolytes and electrodes for next generation SOFCs, and all-solid-state Li batteries. In this talk, current development of materials for all-solid-state Li ion batteries and SOFCs will be discussed.

現在，最も有望なリチウムイオン伝導性固体電解質の一つを発見された先生による講演を拝聴できる機会です。是非，多数の皆様のご参加をお待ちしております。

本セミナーオーガナイザー 長崎大学大学院工学研究科 山田博俊
Tel: 095-819-2861 （内線 2861）／E-mail: h-yama@nagasaki-u.ac.jp

以上