



生物機能高分子セミナー
グローバル COE 物質科学イノベーション講演会

演題： **Smart Brush Polymers: Synthesis, Structure and Properties including Biocompatibility**

講師：



Prof. Moonhor Ree
(Pohang University of Science & Technology (POSTECH), Korea)

日時：2010年10月7日(木) 16:00 ~

場所：工学部 材料・化学棟 中会議室 (MC102)

主催：生物機能高分子部門

共催：グローバル COE「触媒が先導する物質科学イノベーション」
高分子学会北海道支部

要旨： New brush polymers with various numbers of bristle ends incorporating phosphorylcholine moieties were synthesized. The new phosphorylcholine-containing brush polymers demonstrate for the first time to form always a stable molecular multi-bilayer structure in thin films, providing phosphorylcholine-rich surfaces, which successfully mimic natural cell membrane surfaces. The films revealing hydrophilic surface repel fibrinogen and platelets from the film surface and excitingly exhibit bactericidal effects for bacteria. Moreover, the brush polymers show excellent biocompatibility *in vitro* as well as *in vivo*. In addition, some other smart brush polymers were newly synthesized and characterized in aspects of structure and properties. Their results will be discussed.

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本講演会は“総合化学特別研究第二”の講演として認定されます。単位を希望する方は受講してください。

共催：高分子学会北海道支部

連絡先：生物機能高分子部門 覚知 豊次 (内線：6602)