



高分子学会九州支部外国人学者講演会



Global COE Seminar

Perspectives on Functional Polymer Thin Films for Sustainable Growth

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九州大学工学部4号館（伊都地区）物質系5番講義室

参加費無料

Char 先生は韓国ソウル大学の教授で、韓国を代表する高分子科学の研究者です。高分子年次大会での招待講演のため来日されており、九大訪問の機会に講演会を企画しました。多数ご出席くださいますようご案内申し上げます。

Abstract

Ever since the Nobel Laureate Prof. Feynman envisioned the future of manipulating matter at the atomic scale in 1959, many countries, including Korea, enthusiastically invested huge amount of their resources into the so-called Nanotechnology (NT). It is now about time to evaluate whether the buzz word NT and the money spent on NT has really contributed to the national interests or industry. In order to generate any functions in final products, which are far superior to any existing materials, new advanced materials should be carefully designed and engineered. The nanoscale materials represent many interesting and unprecedented properties owing to its small scale such as the quantum confinement effect and large surface area. The nanoscale objects should then be properly incorporated in final products as heterogeneous materials. Typical choice for nanohybrids would be nanoscale objects dispersed in soft matter, which aids efficient processing of the hybrid material.

When it comes to functional thin films for applications such as ultrasensitive sensors and high performance devices, factors such as surface effects should be additionally considered. In this presentation, I would like to address the design of nanoscale objects as well as the dispersion or orientation of such nanoscale objects within polymer thin films. Examples such as block copolymer thin films, layer-by-layer (LbL) thin films, and nanoporous thin films will be given to address further industrial applications.

連絡先

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