グローバル COE 物質科学イノベーション講演会

演 題：**”Synthesis of cylindrical molecular objects and polymers with areal repeat units”**

講 師：**Prof. Dieter A. Schlüter**
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日 時：2011 年 10 月 28 日（金）14:45～15:45

場 所：工学部材料化学棟 ~~MC102~~
has been changed to **MC208**

The first part of the lecture will discuss how conventional polymer chains can be systematically thickened to the degree that they attain a persistent cylindrical shape and turn into molecular objects. A particular representative, a fifth generation dendronized polymer, is the largest ever synthesized macromolecule with structure precision. Emphasis will be placed upon the aspect why thickening of polymer chains makes sense and to which applications this can lead. The second part will deal with synthetic attempts towards sheet like polymers with areal repeat units. The present interest in graphene, a naturally occurring two-dimensional polymer, makes clear that there is no synthetic method available that would allow accessing such polymers.[1] After a brief overview of “organic” and “polymer” approaches performed so far, the concepts will be presented which are presently being pursued in the author’s laboratory. They rest upon carefully designed monomers, interfacial as well as single crystalline ordering, and both metal-complexation and light-induced polymerizations. The lecture will provide a state-of-the-art picture including the not yet published first solution to the problem.

1. 本講演会および Prof. Schlüter による 4 回の講義に全参加し（集中講義・別紙参照）、レポートを提出すると「先端総合化学特論 II (Modern Trends in Chemical Sciences and Engineering II)」の 1 単位が認定されます。

2. 上記とは別に、本講演会は「化学研究先端講義 (Topical Lectures in Chemical Sciences & Engineering) / 総合化学特別研究第二(Research in Chemical Sciences & Engineering II)」の一部として認定されています。

3. 出席回数は上記 1.2.どちらかの科目でのみのカウントとなります。

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