## 化学・物質工学セミナー

下記のとお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.

第 623 回例会

記

日時: 平成 24 年 7 月 12 日(木) 14:30~15:30

場所:総合教育研究棟 2F 208 講義室

演題: Functionalized Gold Nanoparticles for Electrochemical

and Optical Sensors for Small Molecules

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## [Abstract]

Synthesis of gold nanoparticles (AuNPs) capped with thiadiazole and triazole ligands containing thiol and amine groups and their characterization by different methods will be presented. Fabrication of thin films of AuNPs on different electrode substrates by self-assembly and electropolymerization will be discussed. The thin films of AuNPs will be used as sensors for biologically important vitamins, amino acids and neurotransmitters. Finally, detection of toxic metal ions, particularly Hg(II) using the colloidal solution of AuNPs by spectrofluorimetry method will be demonstrated.

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