



# 第131回触媒化学研究センター談話会

---

演 題 : Deposition of size-selected nanoclusters on surfaces and their interactions with small molecules

講演者 : MURAKAMI Jun-ichi 先生  
( National Institute of Advanced Industrial Science and Technology, CHUBU, *Group Leader* )

日 時 : 2 0 0 2 年 1 0 月 2 3 日 ( 水 )  
1 5 : 0 0 - 1 6 : 0 0

会 場 : 北海道大学理学部 本館  
S - 3 0 2 室 ( 3 階 )

要 旨 : Reaction of small molecules with gas-phase metal nanoclusters has been a subject of intensive study. The studies have shown that the chemistry is very size- and composition-selective. For revealing the chemistry of deposited nanoclusters on surfaces, it is therefore important to softland and immobilize size-selected clusters on substrates. Owing to the recent advent of cluster sources and cluster deposition techniques, it is now feasible to study chemistry of deposited monodisperse metal nanoclusters.

We are currently studying reactions of small molecules like  $N_2$  with transition-metal nanoclusters that are size-selected and soft-landed on surfaces. The reactions are studied mainly by X-ray photoelectron spectroscopy. In the lecture, recent results on the reaction study, as well as those on soft-landing and fixation of metal nanoclusters, will be presented and discussed.

《連絡先》北大触媒化学研究センター 表面反応ダイナミクス分野  
松島 龍夫 (TEL 011-706-3695)