

# 第16回錯体物性化学講演会

## Dr. Maheswaran Shanmugam

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金属錯体を基盤とする分子磁性体の磁気熱効果や分子量子ビットへの応用研究を精力的に展開されている Maheswaran Shanmugam 博士 (IIT, India) をお招きして、講演会を開催いたします。皆さまのご来聴をお待ち申し上げます。

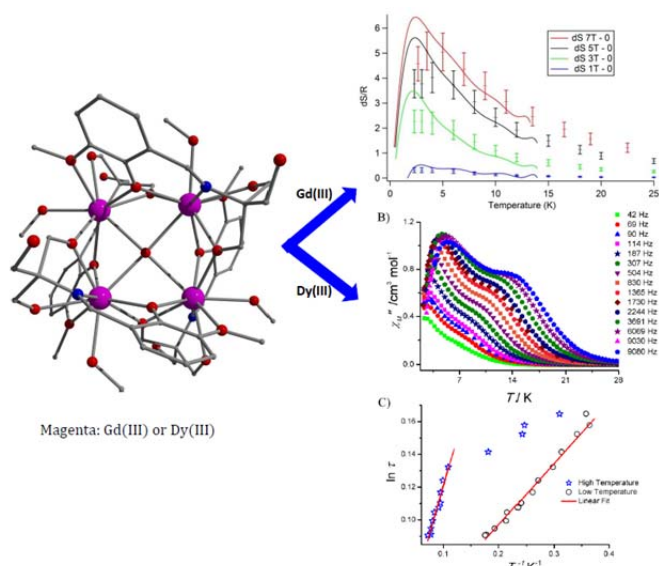


日時：2015年5月29日(金) 16:30 ~ 18:00

場所：理学部2号館2階 化学第三講義室

講演タイトル：

### Effect of Magnetic Anisotropy on Magnetic Coolant Property of Square Based $\text{Ln}_4$ (where $\text{Ln} = \text{Dy}, \text{Tb}, \text{Gd}$ ) Complexes



**Abstract:** Cryogenic liquids such as  $^3\text{He}$ - $^4\text{He}$  are currently being used to achieve ultra-low temperatures and this requires a complicated mechanical setup. More over  $^3\text{He}$  is becoming rare and expensive; hence an alternative for cryogenic liquids is mandatory. As the blocking temperature of the molecular nano magnets are lies close to 4-5 K, these MNMs could be a suitable candidate and an alternative to achieve ultra-low temperature with the aid of external magnetic field. The factors which influence the magnetic cooling efficiency of a series of square based lanthanide complexes will be discussed in this presentation.

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