

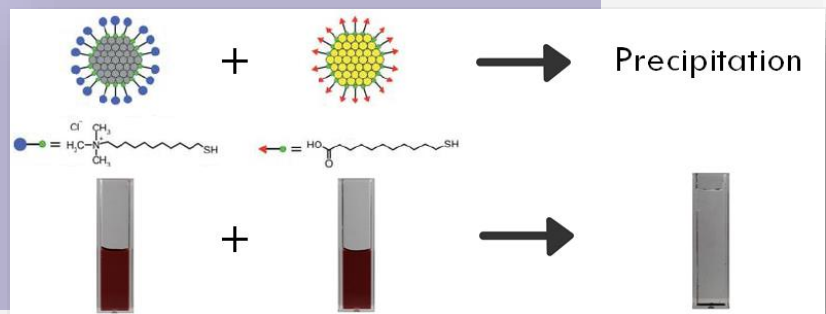
第15回  
Part 3

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## Precipitation of oppositely charged nanoparticles

It is known that the oppositely charged nanoparticles precipitate sharply only at the point of electroneutrality, i.e. the point at which the charges on the nanoparticles are compensated. We investigated the aggregation and precipitation properties of oppositely charged nanoparticles in the concentration range from 10 mM to  $10^{-3}$  mM (in terms of gold atoms). We used solutions of equally sized ( $\sim 6$  nm) gold nanoparticles functionalized and stabilized with either positively charged N, N, N-trimethyl(11-mercaptoundecyl)ammonium chloride (TMA) or with negatively charged mercaptoundecanoic acid (MUA). We found that precipitation of oppositely charged nanoparticles does not occur if the concentration of the nanoparticles is below a threshold even if the electroneutrality condition is fulfilled.

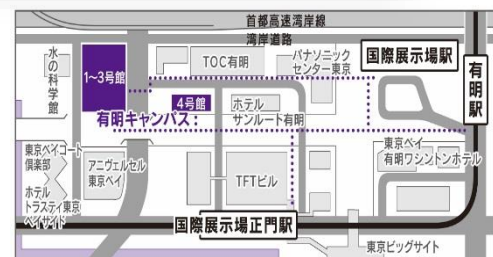


# 5月18日 (木) 16:30-18:00

武蔵野大学有明キャンパス, 4号館 4階 403室

事前登録不要・参加無料：どなたでも自由にご参加いただけます。

りんかい線「国際展示場駅」徒歩7分



コーディネーター： 上山 大信（武蔵野大学工学部数理工学 教授）  
※ 第15回は上の時間で、3名の講演者にご講演いただきます。

問い合わせ先： 武蔵野大学数理工学センター

[https://www.musashino-u.ac.jp/research/laboratory/mathematical\\_engineering/](https://www.musashino-u.ac.jp/research/laboratory/mathematical_engineering/)

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