25th Lecture on Molecular Engine
第２５回発動分子科学セミナー

“Nanometric chiral platform for the induction of chiroptical properties to functional nanoparticles/molecules”

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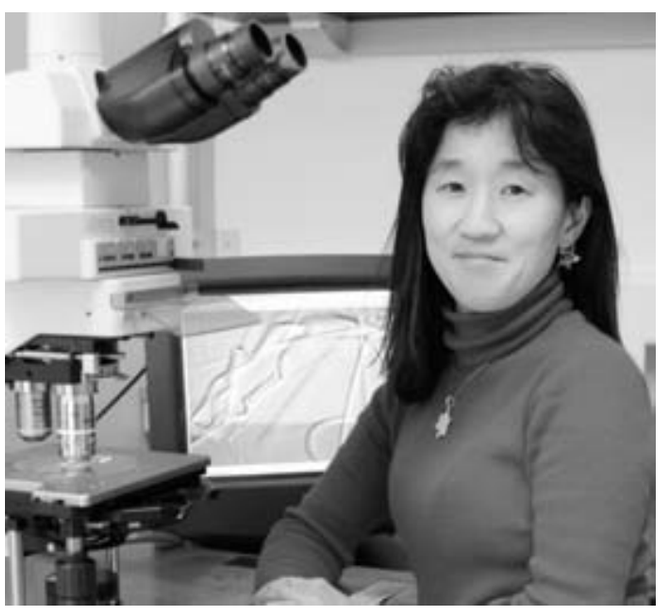
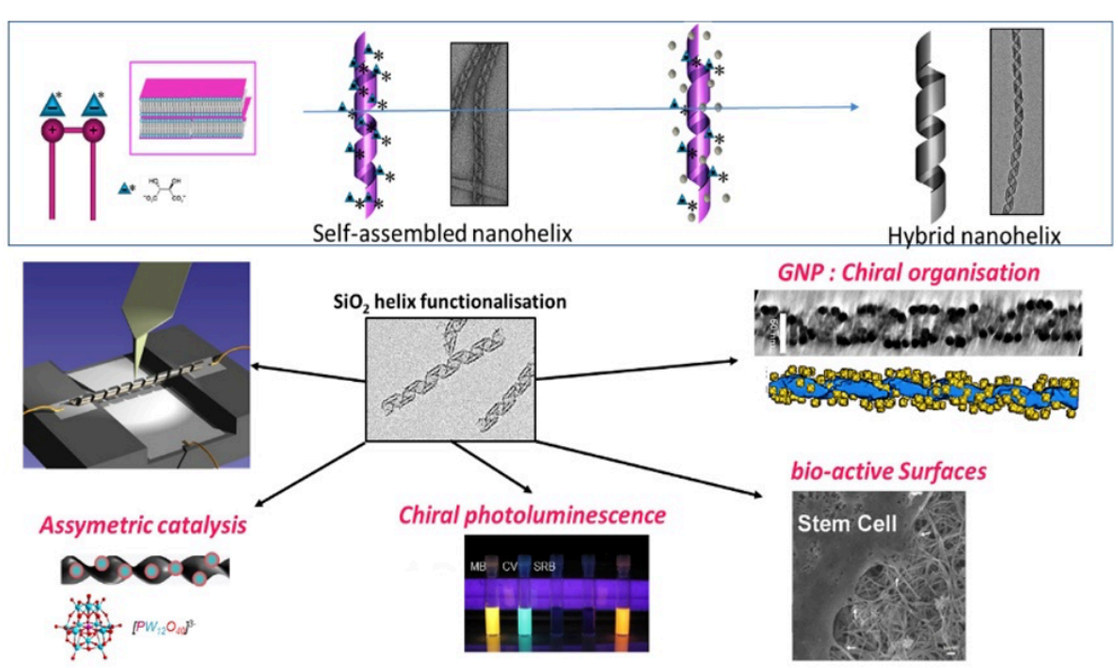


Nanometric helices with controllable pitches are attractive not only to mimic nature, but also for the wide range of applications in materials sciences, chemical and biomaterial sensing, and enantioselective catalysis. We have reported that chiral supramolecular assembly system can be achieved from non-chiral cationic surfactants with chiral counterions[1]. In this talk, I discuss how such structures can then be used as scaffold to obtain hybrid organic/inorganic nanohelices,[2] which can then be used as chiral platform to 1) organize chirally achiral nanoparticles or dyes[3] or to 2) perform *in-situ* synthesis of nanometric helical metals/ quantum dots/crystals and induce chiroptical signals from them.[4] Finally, such functionalized chiral nano structures show interaction with Intrinsically chiral or pro-chiral molecules, possibly giving access to enantioselective sensors.



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日時: ２０２２年８月２３日（火）
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Ｂ２棟４階４２６会議室

連絡先: 金原 数（内線 5781）

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