Associate Professor CHAN Yin Thai

B.Sc., University of California, Berkeley, USA, 2001; Ph.D., Massachusetts Institute of Technology, USA, 2006; Postdoctoral associate, Stanford University, USA, 2006.

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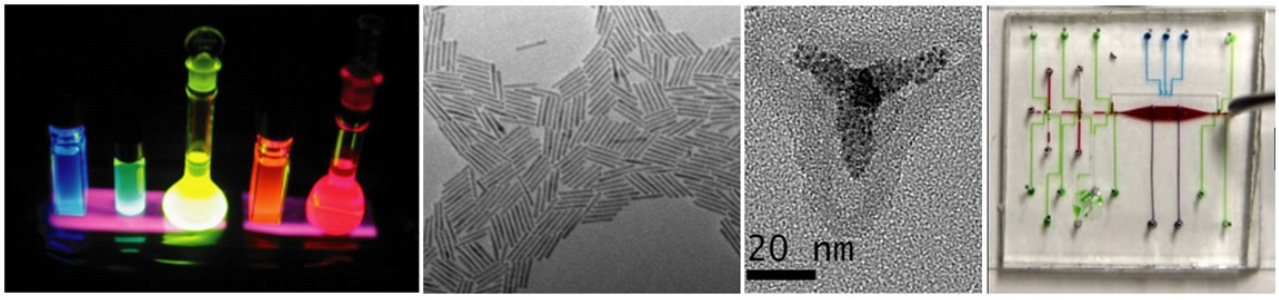
Recognition and Achievements

- Distinguished Lectureship Award from the Chemical Society of Japan, 2014
- Excellent Young Teacher Award, Faculty of Science, NUS, 2012
- Howard Hughes Medical Institute Postdoctoral Fellow, Stanford University, 2006-2008

Research Interests

Our research interests generally lie in the development of novel hierarchically complex semiconductor nanomaterials for optoelectronic, photocatalytic and biological imaging applications. Specific foci are:

- Biological and chemical sensing using nanoparticle-based multilayer microfluidics
- Synthesis and characterization of hybrid metal-semiconductor nanostructures
- Developing the surface chemistry of semiconductor nanoparticles for bio-imaging



Teaching Contributions

- CM2101 Physical Chemistry 2

Representative Publications

- Chakrabortty, S.; Guchhait, A.; Ong, X.; Mishra, N.; Wu, W.; Jhon, M. H.; Chan, Y. Facet to Facet Linking of Shape Anisotropic Inorganic Nanocrystals with Site Specific and Stoichiometric Control. *Nano Lett.* **2016**, *16,* pp 6431–6436
- Li, M.; Zhi, M.; Zhu, H.; Wu, W.-Y.; Xu, Q.-H.; Jhon, M. H.; Chan, Y. Ultralow-Threshold Multiphoton-Pumped Lasing from Colloidal Nanoplatelets in Solution. *Nat. Commun.* **2015**, *6.*
- Wu, W. Y.; Li, M. J.; Lian, J.; Wu, X. Y.; Yeow, E. K. L.; Jhon, M. H.; Chan, Y. Efficient Color-Tunable Multiexcitonic Dual Wavelength Emission from Type II Semiconductor Tetrapods. *ACS Nano* **2014**, *8*, 9349-9357.
- Lian, J.; Xu, Y.; Lin, M.; Chan, Y. Aqueous-Phase Reactions on Hollow Silica-Encapsulated Semiconductor Nanoheterostructures. *J. Am. Chem. Soc.* **2012,** *134*, 8754-8757.
- Liao, Y. L.; Xing, G. C.; Mishra, N.; Sum, T. C.; Chan, Y. Low Threshold, Amplified Spontaneous Emission from Core-Seeded Semiconductor Nanotetrapods Incorporated into a Sol-Gel Matrix. *Adv. Mater.* **2012**, *24*, OP159-OP164.
- Mishra, N.; Lian, J.; Chakrabortty, S.; Lin, M.; Chan, Y. Unusual Selectivity of Metal Deposition on Tapered Semiconductor Nanostructures. *Chem. Mater.* **2012**, *24*, 2040-2046.
- Li, X. H.; Lian, J.; Lin, M.; Chan, Y., Light-Induced Selective Deposition of Metals on Gold-Tipped CdSe-Seeded CdS Nanorods. *J. Am. Chem. Soc.* **2011**, *133*, 672-675.
- Chakrabortty, S.; Yang, J. A.; Tan, Y. M.; Mishra, N.; Chan, Y. Asymmetric Dumbbells from Selective Deposition of Metals on Seeded Semiconductor Nanorods. *Angew. Chem. Int. Ed.* **2010**, *49*, 2888-2892.