

# Curriculum Vitae

**TAKASHI KATO, Professor, Ph. D. FRSC**

**Affiliation:** The University of Tokyo, School of Engineering,  
Department of Chemistry and Biotechnology

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**Education:** B.S. The University of Tokyo, 1983  
Ph.D. The University of Tokyo, 1988  
Postdoc Cornell University (Prof. Jean M. J. Frechet), 1988-1989



## Appointments and Recent Activities:

Research Supervisor of PREST Research Molecular Technology (JST) (2012-2018)  
*Polymer Journal* *Advanced Materials, Chemical Science, Advanced Science, Journal of Materials Chemistry C, Small, etc.*

## Recent Awards:

2017 The Chemical Society of Japan Award  
2014 Fellow of the Royal Society of Chemistry (FRSC)  
2012 The Japanese Liquid Crystal Society (JLCS) Awards  
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## Research Interests:

Design, Synthesis, Structural Control, and Functionalization of Self-Assembled Materials

## Selected Recent Publications:

1. Kato T.; Uchida J. *et al.* Functional Liquid Crystals towards the Next Generation of Materials *Angew. Chem. Int. Ed.*, **2018** 57, 4355.
2. Nakayama M.; Kato T. *et al.* Stimuli-Responsive Hydroxyapatite Liquid Crystal: Dynamic Control of Macroscopic Ordering and Magneto-Optical Functions *Nat. Commun.*, **2018**, 9, 568.
3. Sakamoto T.; Kato T. *et al.* Based on Thermotropic Liquid Crystals: Molecular Design of Sub-Na *Adv. Sci.*, **2018** 5, 1700405.
4. Kato T.; Yoshio M.; Ichikawa T, *et al.* Transport of Ions and Electrons in Nanostructured Liquid Crystals *Nature Reviews Mater.*, **2017**, 2, 17001.
5. Uchida J.; Kato T. *et al.* Self-Assembly of Giant Spherical Liquid-Crystalline Complexes and Formation of Nanostructured Polymer Gels Exhibiting Self-Healing Properties *Angew. Chem. Int. Ed.*, **2017** 56, 14085.
6. Sagara Y.; Yamane S.; Mitani M.; Weder C.; Kato T. Mechanoresponsive Luminescent Molecular Assemblies: An Emerging Class of Materials *Adv. Mater.* **2016**, 28, 1073-1095
7. Soberats B.; Kato T. *et al.* Ionic Switch Induced by a Rectangular-Hexagonal Phase Transition in Benzenammonium Columnar Liquid Crystals *J. Am. Chem. Soc.*, **2015**, 137, 13212.
8. Sakuda J.; Kato T. *et al.* -Crystalline Electrolytes for Lithium-Ion Batteries: Ordered Assemblies of a Mesogen- *Adv. Funct. Mater.*, **2015** 25, 1206.