# Exploring the effect of ring closing on fluorescence of supramolecular polymers

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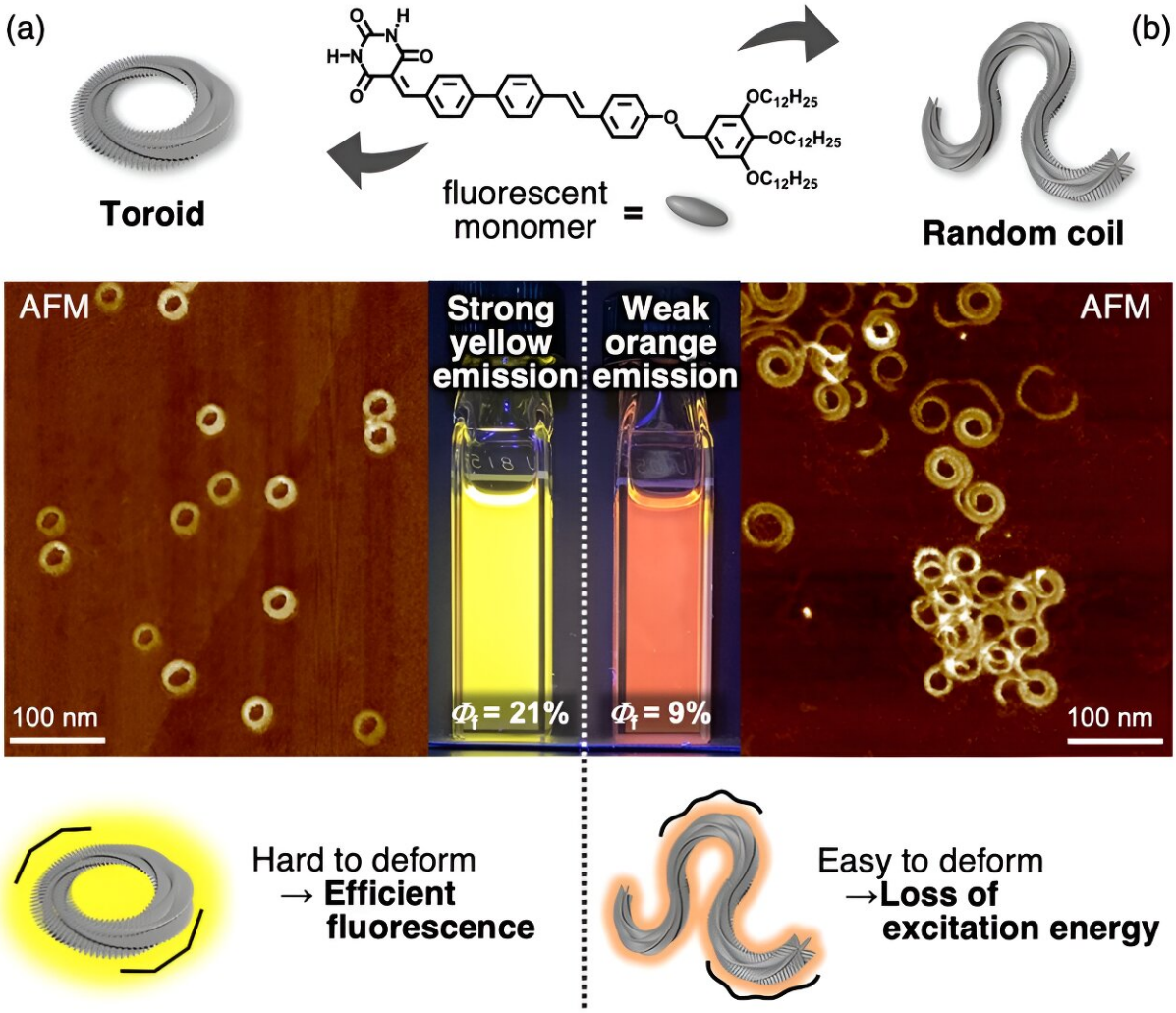


(a) The toroidal assemblies with no termini are not easily deformed in solution, resulting in less excitation energy loss and strong yellow fluorescence. (b) The randomly coiled assemblies are easily deformed, resulting in excitation energy

loss and a weak orange fluorescence. Credit: Sho Takahashi, Chiba University, Japan

In supramolecular chemistry, the self-assembly state of molecules plays a significant role in determining their tangible properties. Controlling the self-assembled state has garnered significant attention as it can be exploited to design materials with desired properties like charge transport capability and fluorescence wavelength.

For years, scientists have been trying to decipher how molecular organization impacts the properties of supramolecular assemblies that are in the nano (