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Title:	Design, Synthesis, Characterization and Photoswitching Studies of C 3 -symmetric Photoswitchable Tripodal Systems
Authors:	<a href="#">V., Sreelakshmi</a>
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Abstract:	The discovery of azoheteroarene based photoswitches has increased the stability of Z isomer and showed better photoswitching. Another remarkable fact is applications of C 3 symmetric systems in supramolecular chemistry, where structures like fibers, gels, solid spheres find applications in daily life. Herein, we present tri-substituted triazine core with isoxazole-based photoswitches with varying the linker such as amine, and ether. Three triazine-based tripodal systems were successfully synthesized. Their characteristaion is done with 1 H and 13 C NMR spectroscopy, photophysical studies including forward, reverse isomerisation and kinetic studies are done with the help of UV-Vis spectroscopy. These tripodal systems show good photoconversions and longer half-lives of photoswitched states. Due to the presence of aromatic moiety, some of the reported molecules show aggregation property, which we tried to understand with the help of UV-Vis spectroscopic and DLS techniques. The photoswitching property of certain molecules have been hindered at high concentration due to excessive aggregation caused by these supramolecular interactions.
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