

## Library Indian Institute of Science Education and Research Mohali



## DSpace@IISERMohali (/jspui/)

- / Thesis & Dissertation (/jspui/handle/123456789/1)
- / Master of Science (/jspui/handle/123456789/2)
- / MS-16 (/jspui/handle/123456789/3766)

Please use this identifier to cite or link to this item: http://hdl.handle.net/123456789/3934

Title: Design, Synthesis, Characterization and Photoswitching Studies of C 3 -symmetric

Photoswitchable Tripodal Systems

V., Sreelakshmi (/jspui/browse?type=author&value=V.%2C+Sreelakshmi) Authors:

Keywords: Photoswitching Studies

C 3 -symmetric Photoswitchable Tripodal Systems

Issue Date: 28-Jul-2021

Publisher: **IISERM** 

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.

URI: http://hdl.handle.net/123456789/3934 (http://hdl.handle.net/123456789/3934)

Appears in

MS-16 (/jspui/handle/123456789/3766) Collections:

Files in This Item:

File Description Size Format

It is under embargo period.odt (/jspui/bitstream/123456789/3934/1/lt%20is%20under%20embargo%20period.odt)

OpenDocument 9 47 kΒ

Text

View/Open (/jspui/bit

Show full item record (/jspui/handle/123456789/3934?mode=full)

**.** (/jspui/handle/123456789/3934/statistics)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.