Title:	Photoswitchable rhodamine-based probe for pH sensing
Authors:	Lingala, Kshitesh
Keywords:	Photoswitchable rhodamine-based pH sensing
Issue Date:	May-2023
Publisher:	IISER Mohali
Abstract:	Photoswitchable probes have emerged as a promising tool for monitoring pH changes in biological systems. Considering the importance of monitoring pH variations in living cells and tissues in diagnosis of diseases, probes undergoing pH-dependent photoswitching and exhibiting fluorescence response that can be used to visualize pH changes will be useful. Particularly, the probes undergoing a reversible change under the influence of UV and visible light in their response to pH variations enable real-time detection and imaging of pH fluctuations. Overall, photoswitchable probes offer a versatile and powerful platform for pH sensing with broad implications for fundamental research and clinical diagnostics. In this regard, we report the design, synthesis and development of a photoswitchable probe for pH sensing. The preliminary studies are discussed in the thesis.
URI:	http://hdl.handle.net/123456789/5421
Appears in Collections:	MS-17

Files in This Item:

File	Description	Size	Format	
embargo period.pdf		6.04 kB	Adobe PDF	View/Open

Show full item record