



# 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-13 (/jspui/handle/123456789/914)**


Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/1030>

Title:	Ordering transitions in nematic liquid crystals driven by self-assembly of ceramide
Authors:	P.R., Neelima (/jspui/browse?type=author&value=P.R.%2C+Neelima)
Keywords:	Introduction to Liquid crystals Anisotropy Elasticity and birefringence Chemicals used Cleaning of glass slides
Issue Date:	8-Sep-2018
Publisher:	IISERM
Abstract:	An important barrier to progress in cancer therapy is the impotence to control the equilibrium between cell proliferation and apoptosis. Some lipids play a vital role in controlling the cellular signaling pathways that mediates these processes for example, ceramide. So we investigated the self-assembly of ceramide (lipid) at liquid crystals (LCs) - aqueous interface. The impact of two different systems namely grid system and droplet system on the dynamics of the LCs ordering transitions driven by the lipid was studied. At saturation coverage, the lipid orders the LCs in an orientation that is perpendicular to the interface. The Effect of Langmuir Blodgett films of the lipid on LC- aqueous interface at different surface pressure was also studied to get an insight in to the slow ordering of LCs in the other two systems. Over all this study will offer a novel method for the detection of a biologically relevant lipid and this will pave a new pathway for the detection of cancer.
URI:	<a href="http://hdl.handle.net/123456789/1030">http://hdl.handle.net/123456789/1030</a> ( <a href="http://hdl.handle.net/123456789/1030">http://hdl.handle.net/123456789/1030</a> )
Appears in	MS-13 (/jspui/handle/123456789/914)
Collections:	

Files in This Item:

File	Description	Size	Format	
MS13049.pdf (/jspui/bitstream/123456789/1030/3/MS13049.pdf)		1.17 MB	Adobe PDF	<a href="#">View/Open (/jspui/bitstream/123456789/1030/3/MS13049.pdf)</a>

Show full item record (</jspui/handle/123456789/1030?mode=full>)

 (</jspui/handle/123456789/1030/statistics>)

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