



# Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali / Thesis & Dissertation / Master of Science / MS-19

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/5777>

Title:	All-reflective UV-Vis-NIR Absorption Spectroscopy setup for micro-sized samples.
Authors:	<a href="#">Patil., Parimal Pitambar .</a>
Keywords:	All-reflective UV-Vis-NIR Absorption. UV-Vis-NIR Absorption Spectroscopy setup. Spectroscopy setup for micro-sized samples. UV-Vis-NIR Absorption Spectroscopy setup for micro-sized samples
Issue Date:	May-2024
Publisher:	IISER Mohali
Abstract:	Absorption spectroscopy is the technique that measures the absorption of light incident on a material as a function of wavelength due to light-matter interactions. During the MS thesis, we set out to investigate whether a UV-Vis-NIR absorption spectroscopy setup can be built to analyse the samples in the range of a few micrometres. The setup was mesured for beam spot measurement for sample size to be less 20 micrometres. The setup uses all-reflective components in its design to minimise spectral losses. We demonstrate the capability of the setup using common spectrally active materials like red-dyed acrylic, gel ink and yellow volatile corrosion inhibitor (VCI) film. The performance is validated using a commercial UV-Vis-NIR absorption spectroscope..
URI:	<a href="http://hdl.handle.net/123456789/5777">http://hdl.handle.net/123456789/5777</a>
Appears in Collections:	<a href="#">MS-19</a>

## Files in This Item:

File	Description	Size	Format	
<a href="#">Under Embargo period.odt</a>		9.72 kB	OpenDocument Text	<a href="#">View/Open</a>

Show full item record



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

Theme by



Customized & Implemented by - Jivesna Tech