










PCL Microscopy Lab

Principle

<p>Mission</p>	<p>Understanding polymer morphology is key to understanding polymer properties and behavior. In the Microscopy Lab, we work with scientists and engineers to explain material properties as a function of physical characteristics. We provide critical analyses throughout the polymer life cycle—from nascent resin, raw materials, formulations and end-use customer parts. Our wide scope of capabilities allows us to partner in the development process at each of these stages and provide quality images and analysis to promote a better understanding of our materials.</p>																		
<p>Techniques</p>	<p>Microscopy</p> <ul style="list-style-type: none"> • Optical Microscopy with Polarized Light Microscopy • Scanning Electron Microscopy (SEM) • Transmission Electron Microscopy (TEM) <p>Image Analysis</p> <ul style="list-style-type: none"> • Fiber Length Distribution • Black Specs <p>Elemental Analysis</p> <ul style="list-style-type: none"> • Energy Dispersive Spectroscopy (EDS) • Laser-Induced Breakdown Spectroscopy (LIBS) <p>Surface Science</p> <ul style="list-style-type: none"> • Rugosity (Surface Roughness) • Contact Angle with Surface Free Energy <p>Sample Preparation</p> <ul style="list-style-type: none"> • Hot Stage to 600 °C • Ultramicrotome with Cryo Capability • Cross sectioning with polisher and cryofracture • Muffle Furnace for polymer ashing • Band saw for resizing 																		
<p>Team</p>	<p>Microscopy Lab - E1106</p> <table border="1" data-bbox="186 1239 771 1776"> <thead> <tr> <th data-bbox="186 1239 337 1272"></th> <th data-bbox="337 1239 571 1272">Contact</th> <th data-bbox="571 1239 690 1272">Ext</th> <th data-bbox="690 1239 771 1272">Office</th> </tr> </thead> <tbody> <tr> <td data-bbox="186 1272 337 1423">  </td> <td data-bbox="337 1272 571 1423"> <p>Sujithra (Suji) Chandrasekaran Morphology Microscopy</p> </td> <td data-bbox="571 1272 690 1423"> <p>770-772-8264</p> </td> <td data-bbox="690 1272 771 1423"> <p>E1051</p> </td> </tr> <tr> <td data-bbox="186 1423 337 1617">  </td> <td data-bbox="337 1423 571 1617"> <p>Brandon Perry Morphology Microscopy</p> </td> <td data-bbox="571 1423 690 1617"> <p>8887</p> </td> <td data-bbox="690 1423 771 1617"> <p>E1084.8</p> </td> </tr> <tr> <td data-bbox="186 1617 337 1776">  </td> <td data-bbox="337 1617 571 1776"> <p>Madison Stoic Morphology Microscopy</p> </td> <td data-bbox="571 1617 690 1776"> <p>8487</p> </td> <td data-bbox="690 1617 771 1776"> <p>E1084.7</p> </td> </tr> </tbody> </table>				Contact	Ext	Office		<p>Sujithra (Suji) Chandrasekaran Morphology Microscopy</p>	<p>770-772-8264</p>	<p>E1051</p>		<p>Brandon Perry Morphology Microscopy</p>	<p>8887</p>	<p>E1084.8</p>		<p>Madison Stoic Morphology Microscopy</p>	<p>8487</p>	<p>E1084.7</p>
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