ETH zürich

D MAVT

Professor David Norris

«Despite all we know and understand of their properties, we are constantly surprised when materials exhibit behavior that we were not clever enough to anticipate. This discovery of phenomena in new materials that we ourselves have engineered, fascinates me about our research.»

Optical Materials Engineering Laboratory
Institute of Process Engineering

We utilize nanotechnology to create materials that have interesting and advantageous interactions with light. By tailoring the size, shape, or periodicity of a solid, we alter its optical behavior and obtain properties not observed in nature. Because we fabricate and characterize all of our own structures and devices, researchers within OMEL become highly proficient in a broad range of skills, including nanofabrication, chemical synthesis, materials characterization, laser spectroscopy, electron microscopy, and optical microscopy.

Focus

- Materials fabrication
- Nanomaterials
- Nanophotonics

Tools and methods

Materials deposition, lithography, colloidal synthesis, electron microscopy, laser spectroscopy, optical microscopy

Further details online:
www.omel.ethz.ch