

Photronics Society at UCSB
University of California Santa Barbara

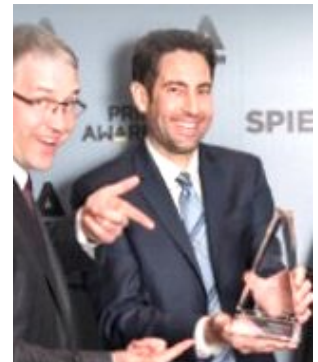
The Industry Perspective
lecture series

Substrate-Transferred Crystalline Coatings: An unexpected spin-off of fundamental research

Garrett D. Cole
Co-Founder and CEO
Crystalline Mirror Solutions LLC and GmbH

2:00 PM Wednesday, February 7th
Elings Hall (CNSI Building), Room 1601

Abstract: In this presentation, Garrett provides an overview of how two scientists from the University of Vienna stumbled upon an enabling technology, born from fundamental research in the burgeoning field of cavity optomechanics, and made a successful transition from academia to industry. The fruit of this endeavor is “Crystalline Mirror Solutions,” or CMS, a photonics start-up commercializing high-performance optics for laser-based precision measurement and manufacturing systems. Here, Garrett outlines the key elements that led to their successes, including the conception of the underlying technology, as well as the supporting infrastructure and funding organizations that ultimately assisted in bringing this idea out of the laboratory and onto the commercial market.



CMS wins the PRISM award



Bio: Garrett D. Cole, Co-Founder of Crystalline Mirror Solutions (www.crystallinemirrors.com), obtained his PhD in Materials from the University of California, Santa Barbara in 2005. Since completing his doctorate, he has held positions ranging from the first employee of a high-tech startup (Aerius Photonics LLC, now FLIR Electro-Optical Components), to a postdoctoral position at Lawrence Livermore National Laboratory, a Marie Curie Fellow of the Austrian Academy of Sciences, and, prior to leaving to found CMS, an assistant professor in the Faculty of Physics at the University of Vienna. In the course of his research career, Dr. Cole has co-authored 2 book chapters and published more than 50 journal articles and conference proceedings including papers in Science, Nature, Physical Review Letters, and the Proceedings of the National Academy of Sciences. Leveraging his expertise in micro- and nanofabrication, tunable lasers, and cavity optomechanics, Dr. Cole developed the proprietary substrate-transfer process at the heart of Crystalline Mirror Solutions and, along with Professor Markus Aspelmeyer, co-founded the venture in February 2012.

Light refreshments will be provided