OSSC
Optical Society of Southern California

Meeting Announcement
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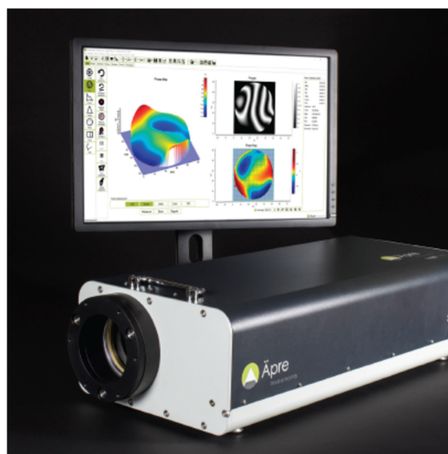
An Introduction to Spectrally Controlled Interferometry for the Measurement of Flat and Spherical Optics

Donald (Don) A. Pearson II
Äpre Instruments, Tucson, Arizona
dpearson@apre-inst.com



Conventional interferometry is widely used to measure spherical and flat surfaces with nanometer level precision but it is often plagued by back or multiple surface reflections. At this meeting I will describe a new method of isolating the measurement surface by controlling the spectral properties of the source (Spectrally Controlled Interferometry - SCI). Using spectral modulation of the interferometer's source enables formation of localized fringes where the optical path difference is non-zero. As a consequence, it becomes possible to form white-light like fringes in common path interferometers, such as the Fizeau or Twyman-Green. ÄPRE's SCI technology does not require mechanical phase shifting, resulting in simpler instruments and offers the ability to upgrade existing interferometers. Furthermore, SCI allows absolute measurement of distance, including radius of curvature of lenses, in a single setup with the possibility of improving the throughput and removing some of the pitfalls of inaccurate measurements.

About our speaker: With nearly 35 years' experience in the optics and photonics industries, Don has a wide breadth of knowledge in optical and electro-optical systems, fiber optic communications, optical manufacturing, optical metrology, lasers and laser platforms, and optoelectronics. Don's sound technical expertise and strong business acumen have allowed him to succeed in many diverse roles and organizations. Don's career path has included roles as an Optical Scientist, Senior Engineer, Development Engineer, Test Engineering Manager, Marketing Manager, VP of Sales & Marketing, and CEO. During his tenure, Don has been instrumental for many of the program successes realized by top-tiered organizations such as SAIC, McDonnell Douglas, CTS Microelectronics, and Lucent Technologies. He has also realized many successes at smaller and start-up organizations such as OptoLynx, Opto Technology and now Äpre Instruments.

Don has a BS Degree in Electro-Optic Engineering and a MBA. Don's MBA concentration was in International Business and Marketing. Additionally, he successfully completed an Executive Development Program in Strategic Planning through Michigan State's Eli Broad School of Executive Management. Don is a long-term, active member in OSA, SPIE, ASPE, and APOMA. Don has one US patent and has authored and delivered multiple presentations on the topics of Aspheric Metrology and Advanced Interferometry at numerous conferences and technical meetings.

This meeting will be held on-line via WebEx. Log-in details will be e-mailed to all those registered just prior to the meeting.