

# *Biometric Consortium 2005 Conference*

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**Topic:** Multispectral Fingerprint Imaging

**Abstract:**

Biometric anti-spoofing or spoof detection for a fingerprint sensor can be done using optical techniques that examine the subsurface skin properties. In particular, by collecting images using multiple wavelengths of illumination light and different optical polarization conditions, genuine skin can be readily distinguished from many different materials and methods used for spoofing. In addition, the resulting multispectral images can be used to enhance the ability of the sensor to achieve good biometric performance over a broader range of physiological and environmental conditions. Such performance enhancement enables the matching threshold to be made more stringent than it otherwise could, which further increases the overall system security against spoof attempts.

In this talk, we discuss how multispectral imaging may be used to provide greater protection against spoofs while also increasing the usability of a fingerprint sensor.

**Biography:**

Rob Rowe is currently CTO and VP RD&E at Lumidigm, Inc. Rob co-founded Lumidigm in July of 2001 as a spin-out from InLight Solutions, a company developing optical instrumentation for medical measurements. While at InLight, Rob led several successful technology and business development efforts. Earlier in his career, Rob held technical positions with companies in the US and Europe including Leica, General Motors and Sandia National Laboratories. Rob is a coinventor on 6 issued patents, with numerous others pending. He has a Ph.D. in Optics from the University of Arizona and a B.S. in mechanical engineering from Kettering University.