

Abstract

Four of the biggest problems in IR spectroscopy are limited spatial resolution, sample preparation requirements ATR sample contact requirement and dispersive artifacts of samples. Photothermal Spectroscopy Corp is overcoming these limitations with a breakthrough technology based on optical photothermal IR spectroscopy (O-PTIR). This seminar discusses O-PTIR and its major benefits in the field of IR spectroscopy, including:

- Sub-micron spatial resolution
- Transmission FTIR quality spectra in reflection mode on thick samples
- Non-contact optical technique with none of the limitations of ATR
- Spatial resolution and sample preparation advantages found in Raman technology but with IR sensitivity
- Works on any sample prepared for IR or Raman spectroscopy
- Concurrent acquisition of IR and Raman spectroscopic data

Biography

Curtis Marcott is currently a Senior Partner at Light Light Solutions, a spectroscopic consulting firm. A former research fellow at Procter & Gamble, Curtis was the 2011 President of the Society of Applied Spectroscopy and is a member of the Editorial Advisory Board of Applied Spectroscopy. He is a past member of the editorial advisory boards of Analytical Chemistry and Vibrational Spectroscopy, the A-page advisory panel of Analytical Chemistry, and the board of managers of the Coblenz Society. He served as program committee chairman for the 2009 FACSS Conference and the Sixth International Conference on Advanced Vibrational Spectroscopy (ICAVS-6). Dr. Marcott received the 1993 Williams-Wright Award from the Coblenz Society for achievement in vibrational spectroscopy, and was named the 2001 Cincinnati Chemist of the Year. Dr. Marcott is currently an Affiliated Professor of Materials Science and Engineering at the University of Delaware and an Adjunct Professor in the Department of Chemistry and Biochemistry at Miami University in Oxford, OH. Curtis obtained his PhD in Chemistry from the University of Minnesota in 1979.