

**Volume 03.06, October 2007**  
**Molecular Spectroscopy; Surface Analysis**

**Standards and Related Materials Contained in this Volume:**

- [E131-05 Standard Terminology Relating to Molecular Spectroscopy - \(View Full Text\)](#)
- [E168-06 Standard Practices for General Techniques of Infrared Quantitative Analysis - \(View Full Text\)](#)
- [E169-04 Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis - \(View Full Text\)](#)
- [E204-98\(2002\) Standard Practices for Identification of Material by Infrared Absorption Spectroscopy, Using the ASTM Coded Band and Chemical Classification Index - \(View Full Text\)](#)
- [E250-98\(2002\) Standard Practice for Use of CODEN - \(View Full Text\)](#)
- [E260-96\(2006\) Standard Practice for Packed Column Gas Chromatography - \(View Full Text\)](#)
- [E275-01 Standard Practice for Describing and Measuring Performance of Ultraviolet, Visible, and Near-Infrared Spectrophotometers - \(View Full Text\)](#)
- [E334-01\(2007\) Standard Practice for General Techniques of Infrared Microanalysis - \(View Full Text\)](#)
- [E355-96\(2007\) Standard Practice for Gas Chromatography Terms and Relationships - \(View Full Text\)](#)
- [E386-90\(2004\) Standard Practice for Data Presentation Relating to High-Resolution Nuclear Magnetic Resonance \(NMR\) Spectroscopy - \(View Full Text\)](#)
- [E387-04 Standard Test Method for Estimating Stray Radiant Power Ratio of Dispersive Spectrophotometers by the Opaque Filter Method - \(View Full Text\)](#)
- [E388-04 Standard Test Method for Wavelength Accuracy of Spectral Bandwidth Fluorescence Spectrometers - \(View Full Text\)](#)
- [E516-95a\(2005\) Standard Practice for Testing Thermal Conductivity Detectors Used in Gas Chromatography - \(View Full Text\)](#)
- [E573-01\(2007\) Standard Practices for Internal Reflection Spectroscopy - \(View Full Text\)](#)
- [E578-07 Standard Test Method for Linearity of Fluorescence Measuring Systems - \(View Full Text\)](#)
- [E579-04 Standard Test Method for Limit of Detection of Fluorescence of Quinine Sulfate in Solution - \(View Full Text\)](#)
- [E594-96\(2006\) Standard Practice for Testing Flame Ionization Detectors Used in Gas or Supercritical Fluid Chromatography - \(View Full Text\)](#)
- [E673-03 Standard Terminology Relating to Surface Analysis - \(View Full Text\)](#)
- [E682-92\(2006\) Standard Practice for Liquid Chromatography Terms and Relationships - \(View Full Text\)](#)
- [E684-04 Standard Practice for Approximate Determination of Current Density of Large-Diameter Ion Beams for Sputter Depth Profiling of Solid Surfaces - \(View Full Text\)](#)
- [E685-93\(2005\) Standard Practice for Testing Fixed-Wavelength Photometric Detectors Used in Liquid Chromatography - \(View Full Text\)](#)
- [E697-96\(2006\) Standard Practice for Use of Electron-Capture Detectors in Gas Chromatography - \(View Full Text\)](#)
- [E827-02 Standard Practice for Identifying Elements by the Peaks in Auger Electron Spectroscopy - \(View Full Text\)](#)
- [E840-95\(2005\) Standard Practice for Using Flame Photometric Detectors in Gas](#)

[Chromatography - \(View Full Text\)](#)

[E902-05 Standard Practice for Checking the Operating Characteristics of X-Ray Photoelectron Spectrometers - \(View Full Text\)](#)

[E925-02 Standard Practice for Monitoring the Calibration of Ultraviolet-Visible Spectrophotometers whose Spectral Slit Width does not Exceed 2 nm - \(View Full Text\)](#)

[E932-89\(2002\) Standard Practice for Describing and Measuring Performance of Dispersive Infrared Spectrometers - \(View Full Text\)](#)

[E958-93\(2005\) Standard Practice for Measuring Practical Spectral Bandwidth of Ultraviolet-Visible Spectrophotometers - \(View Full Text\)](#)

[E983-05 Standard Guide for Minimizing Unwanted Electron Beam Effects in Auger Electron Spectroscopy - \(View Full Text\)](#)

[E984-06 Standard Guide for Identifying Chemical Effects and Matrix Effects in Auger Electron Spectroscopy - \(View Full Text\)](#)

[E995-04 Standard Guide for Background Subtraction Techniques in Auger Electron Spectroscopy and X-ray Photoelectron Spectroscopy - \(View Full Text\)](#)

[E996-04 Standard Practice for Reporting Data in Auger Electron Spectroscopy and X-ray Photoelectron Spectroscopy - \(View Full Text\)](#)

[E1016-07 Standard Guide for Literature Describing Properties of Electrostatic Electron Spectrometers - \(View Full Text\)](#)

[E1078-02 Standard Guide for Specimen Preparation and Mounting in Surface Analysis - \(View Full Text\)](#)

[E1127-03 Standard Guide for Depth Profiling in Auger Electron Spectroscopy - \(View Full Text\)](#)

[E1140-95\(2005\) Standard Practice for Testing Nitrogen/Phosphorus Thermionic Ionization Detectors for Use In Gas Chromatography - \(View Full Text\)](#)

[E1151-93\(2006\) Standard Practice for Ion Chromatography Terms and Relationships - \(View Full Text\)](#)

[E1162-06 Standard Practice for Reporting Sputter Depth Profile Data in Secondary Ion Mass Spectrometry \(SIMS\) - \(View Full Text\)](#)

[E1217-05 Standard Practice for Determination of the Specimen Area Contributing to the Detected Signal in Auger Electron Spectrometers and Some X-Ray Photoelectron Spectrometers - \(View Full Text\)](#)

[E1252-98\(2002\) Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis - \(View Full Text\)](#)

[E1303-95\(2005\) Practice for Refractive Index Detectors Used in Liquid Chromatography - \(View Full Text\)](#)

[E1421-99\(2004\) Standard Practice for Describing and Measuring Performance of Fourier Transform Mid-Infrared \(FT-MIR\) Spectrometers: Level Zero and Level One Tests - \(View Full Text\)](#)

[E1438-06 Standard Guide for Measuring Widths of Interfaces in Sputter Depth Profiling Using SIMS - \(View Full Text\)](#)

[E1449-92\(2006\) Standard Guide for Supercritical Fluid Chromatography Terms and Relationships - \(View Full Text\)](#)

[E1504-06 Standard Practice for Reporting Mass Spectral Data in Secondary Ion Mass Spectrometry \(SIMS\) - \(View Full Text\)](#)

[E1505-92\(2001\) Standard Guide for Determining SIMS Relative Sensitivity Factors from Ion Implanted External Standards - \(View Full Text\)](#)

[E1510-95\(2005\) Standard Practice for Installing Fused Silica Open Tubular Capillary Columns in Gas Chromatographs - \(View Full Text\)](#)

[E1511-93\(2005\) Standard Practice for Testing Conductivity Detectors Used in Liquid](#)

[and Ion Chromatography - \(View Full Text\)](#)

[E1523-03 Standard Guide to Charge Control and Charge Referencing Techniques in X-Ray Photoelectron Spectroscopy - \(View Full Text\)](#)

[E1577-04 Standard Guide for Reporting of Ion Beam Parameters Used in Surface Analysis - \(View Full Text\)](#)

[E1578-06 Standard Guide for Laboratory Information Management Systems \(LIMS\) - \(View Full Text\)](#)

[E1614-94\(2004\) Standard Guide for Procedure for Measuring Ionizing Radiation-Induced Attenuation in Silica-Based Optical Fibers and Cables for Use in Remote Fiber-Optic Spectroscopy and Broadband Systems - \(View Full Text\)](#)

[E1634-02\(2007\) Standard Guide for Performing Sputter Crater Depth Measurements - \(View Full Text\)](#)

[E1635-06 Standard Practice for Reporting Imaging Data in Secondary Ion Mass Spectrometry \(SIMS\) - \(View Full Text\)](#)

[E1636-04 Standard Practice for Analytically Describing Sputter-Depth-Profile Interface Data by an Extended Logistic Function - \(View Full Text\)](#)

[E1642-00\(2005\) Standard Practice for General Techniques of Gas Chromatography Infrared \(GC/IR\) Analysis - \(View Full Text\)](#)

[E1653-94\(2004\) Standard Guide for Specifying Dynamic Characteristics of Optical Radiation Transmitting Fiber Waveguides - \(View Full Text\)](#)

[E1654-94\(2004\) Standard Guide for Measuring Ionizing Radiation-Induced Spectral Changes in Optical Fibers and Cables for Use in Remote Raman FiberOptic Spectroscopy - \(View Full Text\)](#)

[E1655-05 Standard Practices for Infrared Multivariate Quantitative Analysis - \(View Full Text\)](#)

[E1657-98\(2006\) Standard Practice for Testing Variable-Wavelength Photometric Detectors Used in Liquid Chromatography - \(View Full Text\)](#)

[E1683-02\(2007\) Standard Practice for Testing the Performance of Scanning Raman Spectrometers - \(View Full Text\)](#)

[E1698-95\(2005\) Standard Practice for Testing Electrolytic Conductivity Detectors \(ELCD\) Used in Gas Chromatography - \(View Full Text\)](#)

[E1747-95\(2005\) Standard Guide for Purity of Carbon Dioxide Used in Supercritical Fluid Applications - \(View Full Text\)](#)

[E1790-04 Standard Practice for Near Infrared Qualitative Analysis - \(View Full Text\)](#)

[E1791-96\(2000\) Standard Practice for Transfer Standards for Reflectance Factor for Near-Infrared Instruments Using Hemispherical Geometry - \(View Full Text\)](#)

[E1813-96\(2007\) Standard Practice for Measuring and Reporting Probe Tip Shape in Scanning Probe Microscopy - \(View Full Text\)](#)

[E1829-02 Standard Guide for Handling Specimens Prior to Surface Analysis - \(View Full Text\)](#)

[E1840-96\(2007\) Standard Guide for Raman Shift Standards for Spectrometer Calibration - \(View Full Text\)](#)

[E1865-97\(2002\) Standard Guide for Open-Path Fourier Transform Infrared \(OP/FT-IR\) Monitoring of Gases and Vapors in Air - \(View Full Text\)](#)

[E1866-97\(2002\) Standard Guide for Establishing Spectrophotometer Performance Tests - \(View Full Text\)](#)

[E1880-06 Standard Practice for Tissue Cryosection Analysis with SIMS - \(View Full Text\)](#)

[E1881-06 Standard Guide for Cell Culture Analysis with SIMS - \(View Full Text\)](#)

[E1944-98\(2002\) Standard Practice for Describing and Measuring Performance of](#)

[Laboratory Fourier Transform Near-Infrared \(FT-NIR\) Spectrometers: Level Zero and Level One Tests - \(View Full Text\)](#)  
[E1947-98\(2004\) Standard Specification for Analytical Data Interchange Protocol for Chromatographic Data - \(View Full Text\)](#)  
[E1948-98\(2004\) Standard Guide for Analytical Data Interchange Protocol for Chromatographic Data - \(View Full Text\)](#)  
[E1982-98\(2002\) Standard Practice for Open-Path Fourier Transform Infrared \(OP/FT-IR\) Monitoring of Gases and Vapors in Air - \(View Full Text\)](#)  
[E1989-98\(2004\) Standard Specification for Laboratory Equipment Control Interface \(LECIS\) - \(View Full Text\)](#)  
[E2056-04 Standard Practice for Qualifying Spectrometers and Spectrophotometers for Use in Multivariate Analyses, Calibrated Using Surrogate Mixtures - \(View Full Text\)](#)  
[E2066-00\(2007\) Standard Guide for Validation of Laboratory Information Management Systems - \(View Full Text\)](#)  
[E2077-00\(2005\) Standard Specification for Analytical Data Interchange Protocol for Mass Spectrometric Data - \(View Full Text\)](#)  
[E2078-00\(2005\) Standard Guide for Analytical Data Interchange Protocol for Mass Spectrometric Data - \(View Full Text\)](#)  
[E2105-00\(2005\) Standard Practice for General Techniques of Thermogravimetric Analysis \(TGA\) Coupled With Infrared Analysis \(TGA/IR\) - \(View Full Text\)](#)  
[E2106-00\(2006\) Standard Practice for General Techniques of Liquid Chromatography-Infrared \(LC/IR\) and Size Exclusion Chromatography-Infrared \(SEC/IR\) Analyses - \(View Full Text\)](#)  
[E2108-05 Standard Practice for Calibration of the Electron Binding-Energy Scale of an X-Ray Photoelectron Spectrometer - \(View Full Text\)](#)  
[E2143-01\(2006\)e1 Standard Practice for Using Field-Portable Fiber Optics Synchronous Fluorescence Spectrometer for Quantification of Field Samples for Aromatic and Polycyclic Aromatic Hydrocarbons - \(View Full Text\)](#)  
[E2310-04 Standard Guide for Use of Spectral Searching by Curve Matching Algorithms with Data Recorded Using Mid-infrared Spectroscopy - \(View Full Text\)](#)  
[E2382-04 Guide to Scanner and Tip Related Artifacts in Scanning Tunneling Microscopy and Atomic Force Microscopy - \(View Full Text\)](#)  
[E2412-04 Standard Practice for Condition Monitoring of Used Lubricants by Trend Analysis Using Fourier Transform Infrared \(FT-IR\) Spectrometry - \(View Full Text\)](#)  
[E2426-05 Standard Practice for Pulse Counting System Dead Time Determination by Measuring Isotopic Ratios with SIMS - \(View Full Text\)](#)  
[E2529-06 Standard Guide for Testing the Resolution of a Raman Spectrometer - \(View Full Text\)](#)  
[E2530-06 Standard Practice for Calibrating the Z-Magnification of an Atomic Force Microscope at Subnanometer Displacement Levels Using Si\(111\) Monatomic Steps - \(View Full Text\)](#)

[SI Quick Reference Guide: International System of Units \(SI\) - \*The Modern Metric System\* - \(View Full Text\)](#)

### **Withdrawn Standards**

E924 Standard Guide for Quality Assurance of Laboratories Using Molecular Spectroscopy (Withdrawn 2003) No Replacement

