ASTM International Technical Committee E42 on Surface Analysis

Established: 1976
Number of Members: 55
Number of Standards: 30
The standards are available in: *Volume 03.06 in the Annual Book of ASTM Standards*
Meetings: E42 meets once each year in November

SCOPE:

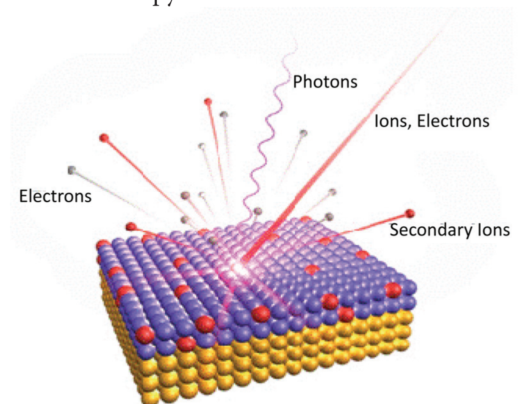
Review and coordination of the development of standards for all methods of surface analysis by photon, electron, and ion emission or reflection methods. Typical methods include: Auger electron spectroscopy (AES); X-ray photoelectron spectroscopy (XPS or ESCA); ion-scattering spectroscopy (ISS); secondary ion mass spectroscopy (SIMS); Rutherford backscattering spectroscopy (RBS); and the use of ion bombardment and other methods to obtain composition versus depth information. Preparation of standard practices for the methods included in Article 2.1.1. Establishment of standard definitions of terms relating to methods included in Article 2.1.1. Cooperation with agencies concerned with preparation and distribution of standard reference materials. Advancement of the field of surface analysis by promoting the collection of exchange of information through surveys, cooperative programs, publication of suggested methods and practices, meeting, and symposia. The formulation and evaluation of standard surface analysis methods shall be confined to those methods not included in the scope of other ASTM Committees, except by mutual agreement. Maintenance of a current appraisal of new and developing surface analysis techniques, as to their principles, applicability, and limitations. These activities will be coordinated with other ASTM Committees and other organizations having mutual interests.

TECHNICAL SUBCOMMITTEES:

E42.02 Terminology
E42.03 Auger Electron Spectroscopy and X-Ray Photoelectron Spectroscopy
E42.06 SIMS
E42.08 Ion Beam Sputtering
E42.13 Vacuum Technology
E42.14 STM/AFM
E42.15 Electron Probe Microanalysis/Electron Microscopy

KEY DOCUMENTS:

- E995 Standard Guide for Background Subtraction Techniques in Auger Electron Spectroscopy and X-ray Photoelectron Spectroscopy
- E1078 Standard Guide for Specimen Preparation and Mounting in Surface Analysis
- E1829 Standard Guide for Handling Specimens Prior to Surface Analysis



Visit the ASTM Committee E42 Webpage: www.astm.org/COMMIT/E42.htm

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