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4.4 Scanning Electron Microscopy (SEM); 4.5 Rutherford Backscattering Theory; 4.6 Energy Dispersive X-Ray Spectroscopy (EDS); 4.7 Transmission Electron Microscopy (TEM); 4.8 Electron Spectroscopy for Chemical Analysis (ESCA); 4.9 Auger Electron Spectroscopy (AES); 4.10 Ion Scattering Spectroscopy (ISS); 4.11 Secondary Ion Mass Spectroscopy (SIMS); 4.12 Mass Spectroscopy (MS) or spectrometry; 4.13 Gas Chromatography (GC); 4.14 Nuclear Magnetic Resonance (NMR); 4.15 Differential Scanning Calorimetry (DSC); 4.16 Differential Thermal Analysis (DTA); 4.17 Dynamic Mechanical Analysis (DMA); 4.18 Thermogravimetric Analysis (TGA) References; Chapter 5 Material Surface Preparation Techniques; 5.1 Introduction; 5.2 General Considerations; 5.3 Surface Treatment of Metals; 5.4 Cleaning (Degreasing) Metals; 5.5 Priming; 5.6 Surface Treatment of Plastics; 5.7 Methods for Evaluating Effectiveness of Surface Preparation; 5.8 Surface Exposure Time (SET); References; Chapter 6 Surface Preparation of Metals; 6.1 Introduction; 6.2 Aluminum; 6.3 Beryllium; 6.4 Brass; 6.5 Bronze; 6.6 Cadmium; 6.7 Copper and Copper Alloys; 6.8 Gold; 6.9 Magnesium and Magnesium Alloys; 6.10 Nickel and Nickel Alloys; 6.11 Platinum; 6.12 Silver; 6.13 Steel; 6.14 Stainless Steel; 6.15 Tin; 6.16 Titanium; 6.17 Tungsten and Alloys; 6.18 Uranium; 6.19 Zinc and Alloys; 6.20 Weldbonding Metals; 6.21 Conclusions; References; Chapter 7 Surface Preparation of Thermoplastics, Thermosets, and Elastomers; 7.1 Introduction; 7.2 Thermoplastics; 7.3 Thermosets; 7.4 Reinforced Plastics/Thermosets; 7.5 Reinforced Thermoplastics (Glass-Reinforced); 7.6 Plastic Foams; 7.7 Surface Preparation of Rubbers; 7.8 Thermoplastic Elastomer; 7.9 Painted Surfaces; 7.10 Conclusions; References; Part III: Adhesive Characteristics
Chapter 8 Characteristics of Adhesive Materials

Sommario/riassunto

The Applied Handbook of Adhesives provides a thoroughly practical survey of all aspects of adhesives technology from selection and surface preparation to industrial applications and health and environmental factors. The resulting handbook is a hard-working reference for a wide range of engineers and technicians working in the adhesives industry and a variety of industry sectors that make considerable use of adhesives. Particular attention is given to adhesives applications in the automotive, aerospace, medical, dental and electronics sectors.