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Standard Error; 1.3.4 ISO Suggestion; 1.3.5 Modified Savitzky-Golay Method; 1.3.6 Variance, Covariance, and Correlation Coefficient; 1.3.7 Weighted Average, Variance, and Covariance; 1.3.8 The Least-Squares Method; Chapter 2 Basics and Principles of Sample Digestion; 2.1 Clean Technologies, Powdering, and Weighing of Sample Powder; 2.1.1 Clean Room Technologies; 2.1.1.1 Clean Rooms; 2.1.1.2 Two Types of Clean Rooms; 2.1.1.3 Draft Chamber; 2.1.1.4 Clean Evaporator; 2.1.1.5 Protection to Acids; 2.1.1.6 Levels of Cleanness; 2.1.1.7 Clean Benches and so on 2.1.2 Powdering of the Sample; 2.1.3 Weighing the Sample Powder; 2.2 Materials Used in Laboratory; 2.2.1 Glassware; 2.2.2 Plastics; 2.2.3 Water; 2.2.4 Azeotrope; 2.2.5 Physical and Chemical Properties of Acids; 2.2.5.1 Hydrofluoric Acid; 2.2.5.2 Hydrochloric Acid; 2.2.5.3 Hydrobromic Acid; 2.2.5.4 Nitric Acid; 2.2.5.5 Perchloric Acid; 2.2.6 Sub-Boiling Purification; 2.2.7 Alkali Reagents; 2.2.7.1 Ammonia Water; 2.2.7.2 TMS[®]; 2.3 Characterization of Elements; 2.3.1 Characterization of Elements by Their Behavior in HF Solution; 2.3.2 Characterization of Elements by Melting Temperature of Oxides; 2.3.3 Characterization of Elements by Volatility of Fluorides and Chlorides; 2.4 Sample Digestion Techniques; 2.4.1 HF+HClO₄ Digestion in Ambient Pressure (an "Ultrasonic Method"); 2.4.2 HF Digestion in High Pressure and Temperature (a "Bomb Method"); 2.4.3 Microwave Digestion Method; 2.4.4 Carius Tube Digestion for Os Separation; 2.4.5 HPA (High-Pressure Asher) Digestion Method; 2.4.6 Fusion; 2.4.6.1 Alkali Fusion; 2.4.6.2 Lithium Borate Fusion; 2.4.6.3 Sodium Peroxide Fusion; 2.4.6.4 V₂O₅ Fusion; 2.4.6.5 NiS Fire Assay; 2.4.7 A Digestion Method Using NH₄F
