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Nota di contenuto	Handbook of Stable Isotope Analytical Techniques; Copyright Page; Contents; Dedication; Introduction; List of Contributors; Part 1: Review and Discussion on Developments in Stable Isotope Analytical Technologies; Chapter 1. Stable Isotope Analysis of Water and Aqueous Solutions by Conventional Dual-Inlet Mass Spectrometry; Chapter 2. Conventional and Less Conventional Techniques for Hydrogen and Oxygen Isotope Analysis of Clays, Associated Minerals and Pore Waters in Sediments and Soils; Chapter 3. Techniques for Stable Isotope Analysis of Fluid and Gaseous Inclusions Chapter 4. Selected Ion Flow Tube Mass Spectrometry (SIFT-MS) and Flowing Afterglow Mass Spectrometry (FA-MS) for the Determination of the Deuterium Abundance in Water Vapour Chapter 5. Natural Abundance ² H-NMR Spectroscopy. Application to Food Analysis; Chapter 6. Mass Spectrometric Techniques for the Determination of Lithium Isotopic Composition in Geological Material; Chapter 7. Thermal Ionization Mass Spectrometry Techniques for Boron Isotopic Analysis: A Review; Chapter 8. GC and IRMS Technology for ¹³ C and ¹⁵ N Analysis on Organic Compounds and Related Gases

Chapter 9. Preparation of Ecological and Biochemical Samples for Isotope Analysis
Chapter 10. Extraction of Dissolved Inorganic Carbon (DIC) in Natural Waters for Isotopic Analyses; Chapter 11. Compound Specific Isotope Analysis of the Organic Constituents in the Murchison Meteorite; Chapter 12. A New Method for the Isotopic Examination of Sub-Milligram Carbonate Samples, Using Sulphamic Acid ($\text{NH}_2\text{SO}_3\text{H}$) at Elevated Temperatures
Chapter 13. Determination of the Abundance and Stable Isotopic Composition of Trace Quantities of C and N in Geological Samples: The Practice and Principles of Stepped-Heating at High Temperature Resolution
Chapter 14. Stable isotope measurements of atmospheric CO_2 and CH_4 ; Chapter 15. Preparation and Analysis of Nitrogen-bearing Compounds in Water for Stable Isotope Ratio Measurement; Chapter 16. $\delta^{15}\text{N}$ Analyses of Ammonium-Rich Silicate Minerals by Sealed-Tube Extractions and Dual Inlet, Viscous-Flow Mass Spectrometry
Chapter 17. Nitrogen Isotopic Analyses at the Sub-Picomole Level Using an Ultra-low Blank Laser Extraction Technique
Chapter 18. Mass Independently Fractionated Ozone in the Earth's Atmosphere and in the Laboratory; Chapter 19. Site-specific Nitrogen Isotope Analysis in N_2O by Mass Spectrometry; Chapter 20. Fluorination Methods in Stable Isotope Analysis; Chapter 21. Oxygen Isotope Analysis of Plant Water Without Extraction Procedure; Chapter 22. Oxygen Isotope Analysis of Phosphate; Chapter 23. Pyrolysis Techniques for Oxygen Isotope Analysis of Cellulose
Chapter 24. Sample Homogeneity and Cellulose Extraction from Plant Tissue for Stable Isotope Analyses

Sommario/riassunto

(Parent with price) Volume I contains subjective reviews, specialized and novel technique descriptions by guest authors. Part 1 includes contributions on purely analytical techniques and Part 2 includes matters such as development of mass spectrometers, stability of ion sources, standards and calibration, correction procedures and experimental methods to obtain isotopic fractionation factors. Volume II will be available in 2005.
