Record Nr. UNINA9910780560603321 **Titolo** Biogenic trace gases [[electronic resource]]: measuring emissions from soil and water / / edited by P.A. Matson, R.C. Harriss Pubbl/distr/stampa Oxford [England];; Cambridge, MA, USA,: Blackwell Science, 1995 **ISBN** 1-282-18904-2 9786612189043 1-4443-1381-9 Descrizione fisica 1 online resource (408 p.) Collana Methods in ecology Altri autori (Persone) MatsonP. A (Pamela A.) HarrissRobert C Disciplina 574.5 574.5/222 574.5222 Soggetti Atmospheric chemistry - Technique Bioclimatology - Technique Biogeochemistry - Technique Agricultural ecology - Technique Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto ""Biogenic Trace Gases: Measuring Emissions from Soil and Water""; ""Contents""; ""List of contributors""; ""The Methods in Ecology Series""; ""Preface""; ""CHAPTER 1: Trace gas exchange in an ecosystem context: multiple approaches to measurement and analysis""; ""CHAPTER 2: Enclosure-based measurement of trace gas exchange: applications and sources of error""; ""CHAPTER 3: Trace gas exchange across the airwater interface in freshwater and coastal marine environments"": ""CHAPTER 4: Trace gas exchange in freshwater and coastal marine environments: ebullition and transport by plants"" ""CHAPTER 5: Micrometeorological techniques for measuring biosphere-atmosphere trace gas exchange"""CHAPTER 6: Standard analytical methods for measuring trace gases in the environment"": ""CHAPTER 7: Measurement of chemically reactive trace gases at ambient concentrations""; ""CHAPTER 8: Recent advances in

spectroscopic instrumentation for measuring stable gases in the

natural environment""; ""CHAPTER 9: Use of isotopes and tracers in the study of emission and consumption of trace gases in terrestrial environments""

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Sommario/riassunto

Trace gases are those that are present in the atmosphere at relatively low concentrations. Small changes in their concentrations can have profound implications for major atmospheric fluxes, and thereore, can be used as indicators in studies of global change, global biogeochemical cycling and global warming. This new how-to guide will detail the concepts and techniques involved in the detection and measurement of trace gases, and the impact they have on ecological studies. Introductory chapters look at the role of trace gases in global cycles, while later chapters go on to consider techniques f