1. Record Nr. UNINA9910473451503321 Autore Zaman Mohammad Titolo Measuring Emission of Agricultural Greenhouse Gases and Developing Mitigation Options using Nuclear and Related Techniques: Applications of Nuclear Techniques for GHGs / / edited by Mohammad Zaman, Lee Heng, Christoph Müller Springer Nature, 2021 Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2021 **ISBN** 3-030-55396-5 Edizione [1st ed. 2021.] 1 online resource (XLVI, 337 p. 109 illus., 83 illus. in color.) Descrizione fisica 577.27 Disciplina Soggetti Climate change Agriculture Physical measurements Measurement Applied ecology Soil science Soil conservation Climate Change Climate Change/Climate Change Impacts Measurement Science and Instrumentation Applied Ecology Soil Science & Conservation Lingua di pubblicazione Inglese **Formato** Materiale a stampa

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This open access book is an outcome of the collaboration between the Soil and Water Management & Crop Nutrition Section, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Department of Nuclear Sciences and Applications, International Atomic Energy Agency (IAEA), Vienna, Austria, and the German Science Foundation research unit DASIM (Denitrification in Agricultural Soils: Integrated control and Modelling at various scales) and other institutes. It presents protocols, methodologies and standard operating procedures (SOPs) for measuring GHGs from different agroecosystems and animals using isotopic and related techniques that can also be used to validate climate-smart agricultural practices to mitigate GHGs. The material featured is useful for beginners in the field wanting an overview of the current methodologies, but also for experts who need hands-on descriptions of said methodologies. The book is written in form of a monograph and consists of eight chapters.