ID příspěvku: **54** Typ: **Poster**

LOW ACTIVITY RADON EMANATION SOURCES FOR GREENHOUSE GAS MITIGATION STRATEGIE

středa 21. září 2022 10:10 (3 minuty)

Atmospheric measurements of radon activity concentration seem to be very useful for the assessment and improvement of atmospheric transport models (ATM). Radon can be used as a tracer to evaluate dispersal models important for identifying successful greenhouse gas (GHG) mitigation strategies. For this purpose, the "traceRadon"(Radon metrology for use in climate change observation and radiation protection at the environmental level) project will provide the necessary measurement infrastructure and use obtained outputs in the Radon Tracer Method (RTM) which is important for GHG emission estimates that support national reporting under the Paris Agreement on climate change. To increase the accuracy of GHG modelling, traceability to SI units for radon release rates from soil, its concentration in the atmosphere and validated methods for its dispersal are needed. There exists correlation between GHG and radon concentration. However, traceability to the environmental level does not exist for measurements of radon fluxes and atmospheric radon activity. Therefore, the radon data used for improvement of the ATM and estimation of the GHG emissions needs significant improvement of accuracy of both radon flux measurements and environmental radon activity concentrations in the range from 1 Bq m-3 to 100 Bq m-3 to be able to provide robust data for use in the RTM. The overall aim of this project is to develop metrological capacity to measure low level of radon in the environments, which can be used to determine remission reduction strategies of GHG. This includes the two new traceable Rn-222 emanation sources (below 100 Bq m-3) for application in climate monitoring and radiation protection networks. Such sources will be used to calibrate a transfer instrument to assure the traceability. The new low level activity emanation sources have been developed.

Hlavní autor: MAZÁNOVÁ, Monika

Přednášející: MAZÁNOVÁ, Monika

Zařazení sekce: Radón a prírodné zdroje ionizujúceho žiarenia

Tematická klasifikace: Radón a prírodné zdroje ionizujúceho žiarenia