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$MEMO_2$ MEthane goes MObile – MEasurements and Modelling

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As mitigation of climate change is a key scientific and societal challenge, the 2015 United Nations Climate Change Conference in Paris (COP21) agreed to limit global warming "well below" 2°C and, if possible, below 1.5°C. Reaching this target requires massive reductions of greenhouse gas emissions, and achieving significant reduction of greenhouse gas emissions is a logical headline targets of the EU climate action and of the H2020 strategy. CH4 emissions are a major contributor to Europe's global warming impact and emissions are not well quantified yet. There are significant discrepancies between official inventories of emissions and estimates derived from direct atmospheric measurement. Effective emission reduction can only be achieved if sources are properly quantified, and mitigation efforts are verified. New advanced combinations of measurement and modelling are needed to archive such quantification.
$MEMO_2$ is a H2020 European Training Network with more than 20 collaborators from 7 countries. It is a 4-years project and will contribute to the targets of the EU with a focus on methane (CH4). The project will bridge the gap between large-scale scientific estimates from in situ monitoring programs and the 'bottom-up' estimates of emissions from local sources that are used in the national reporting by I) developing new and advanced mobile methane (CH4) measurements tools and networks, II) isotopic source identification, and III) modelling at different scales. Within the project qualified scientists will be educated in the use and implementation of interdisciplinary knowledge and techniques that are essential to meet and verify emission reduction goals. $MEMO_2$ will facilitate intensive collaboration between the largely academic greenhouse gas monitoring community and non-academic partners who are responsible for evaluating and reporting greenhouse gas emissions to policy makers.
We will present the project and its objectives to the scientific community to foster collaboration and scientific exchange.