

ST4: Protocol for the measurement of the Oxidative Potential (OP) of PM. OP of PM can be measured with different methods. RI-URBANS is proposing one to be tested in the pilot studies. Furthermore, a large inter-laboratory comparison of OP has been carried out in the framework of the project. This field is still requiring scientific progress to suggest a single method to be harmonized. But a discussion of the different approaches and the description of the OP protocol used in RI-URBANS is supplied.

The linked resources for this ST include:

- 1) D11 (D2.3) Harmonization of oxidative potential of particulate matter monitoring for application in pilots: https://riurbans.eu/wp-content/uploads/2023/03/RI-URBANS_D11_D2_3.pdf

Scientifically this ST4 links in 't Veld et al. (2023b): <https://doi.org/10.1016/j.scitotenv.2022.159386>, which, for the first time, quantifies a yearlong dataset on OP in PM₁₀, PM_{2.5}, and PM₁, evaluates which are the drivers of OP in PM₁₀ and PM₁ in the urban station and PM₁ in the rural station, and correlates OP with source contributions to the three PM fractions. Secondly, the impact of the choice of OP protocol on the apportionment of OP and the definition of sources of health interest has been highlighted in Dominnuti et al. (2023) : <https://doi-org/10.1039/D3EA00007A>