About EASVOLEE

The primary objectives of EASVOLEE are to:

i. Quantify the contributions of secondary particulate matter formation from transport engines to air quality problems in Europe.

ii. Develop and identify health-related metrics, mitigation strategies, and policies to improve air quality limiting the concentrations of aerosol (organic, inorganic, nanoparticles, primary and secondary) due to vehicle exhaust.

Consortium

FORTH INSTITUTE OF CHEMICAL ENGINEERING SCIENCES

cnrs

TNO innovation for life

WEIZMANN INSTITUTE OF SCIENCE

Meteorologisk institutt

CRMT Powertrain R&D

PAUL SCHERRER INSTITUT PSI

FH Berner Fachhochschule

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Website & Social media

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@EASVOLEE_EU

@EASVOLEE project

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EASVOLEE

Effects on air quality of semi-volatile engine emissions

EASVOLEE will:

Quantify the role of engine exhaust emissions including contributions to secondary PM and particle number in Europe.

Assess toxicity of the secondary PM from transportation.

Reduce smog episodes and population exposure to air pollution (especially PM) in Europe.

Reduce uncertainty about sources of PM especially the often dominant secondary fraction.

Develop appropriate chemical transport models for the simulation of semivolatile PM, secondary organic aerosol (SOA) and particle number.

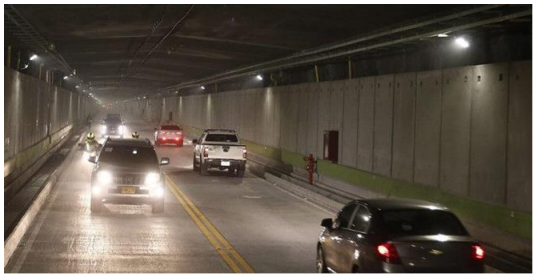
Support the Zero-Pollution Plan of EU Green Deal.

Using state-of-the-art measurement techniques

- Measurement of emissions:
  - under real driving conditions

  - under simulated driving conditions on a dynamometer
  - in a parking structure

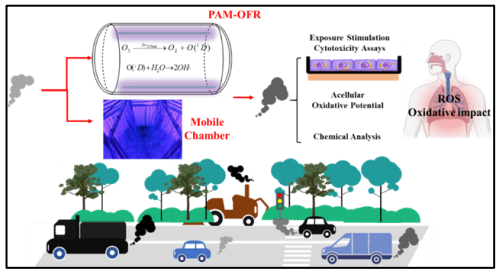
  - in a traffic tunnel



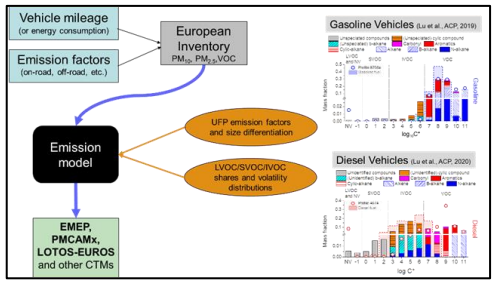
- Measurement of all organic pollutants that are relevant to aerosol formation (volatile, intermediate volatility, semivolatile, low-volatility organic compounds)

Using state-of-the-art health and modelling techniques

- Quantification of atmospheric processing using oxidation flow reactors and mobile atmospheric simulation chambers.
- Oxidative potential measurements
- Mechanistic understanding of biological effects using cells



- Development of a new state-of-the-art European emission inventory



- Creation of new emission indexes

EASVOLEE target groups

- Research/scientific communities
- Public authorities and Government
- International bodies
- Private sector/Industries
- General public and society