

## How does NO<sub>x</sub> affect new particle formation from biogenic vapors

\*Chao Yan<sup>1</sup>

1. University of Helsinki

New particle formation (NPF) is a major source of ultrafine particles in the atmosphere. In continental boundary layer, sulfuric acid is believed to play a major role in NPF, and NO<sub>x</sub> does not have any direct influence on this process, as it does not affect the formation of sulfuric acid. However, it has been discovered that highly oxygenated organic molecules (HOMs) are also a key participator in NPF. As NO<sub>x</sub> is actively involved in the formation of HOMs, its subsequent influence can be expected. We will present detailed analysis on how NO<sub>x</sub> can alter the chemical composition of HOMs and in turn, its role on different stages of the NPF process.