

# Formation of organic aerosols

Supervisor: Ali Hoshyaripour, Corinna Hoose

Collaborators: University Patras, Max Planck Institute of Chemistry

## Introduction

Organic aerosol is a significant, if not the most important, component of submicron particles on the global scale. Organic matter can exist in the particle phase from the moment it is emitted as primary organic aerosol and as secondary organic aerosol arising from oxidation of organic compounds in the atmosphere. The gas-phase chemistry and aerosol processes can be described by condensed VBS (volatility basis set)-Scheme.

## Research topic

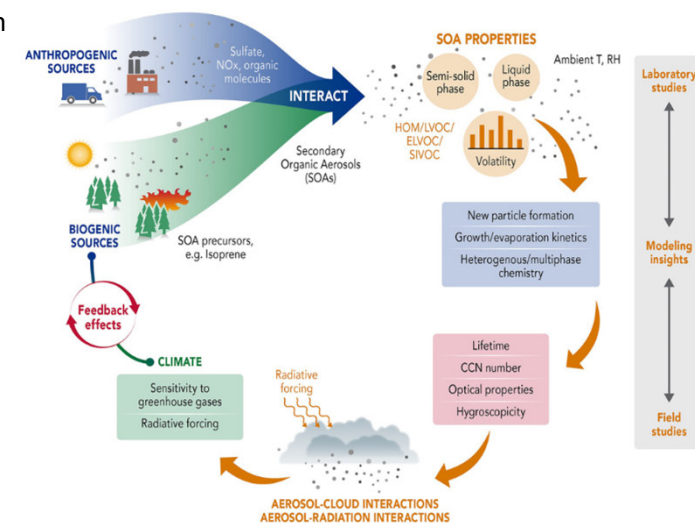
Implementation of organic aerosol (VBS-Scheme) and numerical solution into ICON-ART

## Working plan

- Step 1: Literature review, learning ICON-ART
- Step 2: Preparation and performing numerical experiments
- Step 3: Validation of the results, writing of thesis

## Requirements

- Motivation, self-organization and team work
- Programming: Fortran & Python (basic), shell & unix (basic)



Wang et al. 2019