

## **Atmospheric Multiphase Chemistry and Ocean-Atmosphere Interaction**

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In the first part of this contribution an overview on tropospheric multiphase chemistry studies is given comprising laboratory experiments and model development. Aqueous phase kinetics and mechanisms are studied by laser-based methods and examples for the multiphase oxidation of isoprene will be given. The interplay with chemical mechanism development will be outlined and some recent results obtained by simulations with the CAPRAM chemical scheme will be presented.

In a second part field measurements and analytical developments for the study of compound exchange between the ocean surface and the organic sea surface layer with the atmosphere and here especially with marine particles are described.

A summary will be given identifying ways to better interlink atmospheric multiphase chemistry with real world ocean-atmosphere exchange as observed in field experiments.