Laboratory and Modelling Studies on atmospheric aqueous phase chemistry: Focus on organics

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In the first part results from the the aqueous phase chemistry laboratory in the Atmospheric Chemistry Department (ACD) at TROPOS Leipzig will be given. Recent studies deal with radical reactions with biomass burning aerosol constituents and the reactivity of acids. Recent studies related to isoprene oxidation products will also be covered.

In the second part recent development of modules for the Chemical Aqueous Phase Radical Mechanism (CAPRAM) are given which do connect to the laboratory work. Here, a new aromatics chemistry module will be introduced and modelling for the multiphase chemistry following the gas–phase oxidation of isoprene will be given.

Finally, a summary addressing possible impacts and an outlook will be given.