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Tropospheric Multiphase Chemistry: Current Foci

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In this contribution important aspects of tropospheric multiphase chemistry shall be reviewed in the three fields of (1) laboratory investigations covering the matrix in question and chemical conversions occurring. In the second part, (2) recent field work and, finally, (3) recent model developments will be discussed.

In the first part a discussion will be led on the actual occurrence of the aqueous reaction medium, especially under aerosol particle conditions. Some recent kinetic investigations on radical and non-radical reactions of interest for aqueous chemistry are discussed.

Secondly a report on the hill-cap cloud experiment HCCT-2010 is given.

In the third part a report on current work on CAPRAM is given. A mechanism generator has been put to work, there is a new model version for marine chemistry and an activity-based mechanism version for aerosol particle chemistry.

An outlook on future directions will conclude the contribution.