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Interactive comment on "On the representation of immersion and condensation freezing in cloud models using different nucleation schemes" by B. Ervens and G. Feingold

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After reading the comments by referee #2, I should clarify that my remarks about temperature and not supersaturation as the driving variable for freezing refer to immersion freezing. My assumption is that all parameterization which are fitted to Lüönd et al's data refer to immersion freezing, because the measurements are for immersion freezing. How these are extrapolated to water-subsaturated conditions needs to be explained. For cloud droplets, most previous studies have assumed that the solute content (and therefore the water total volume) have a negligible influence on freezing.

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 7167, 2012.

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