Supplement to "Influence of particle size on the ice nucleating ability of mineral dusts"

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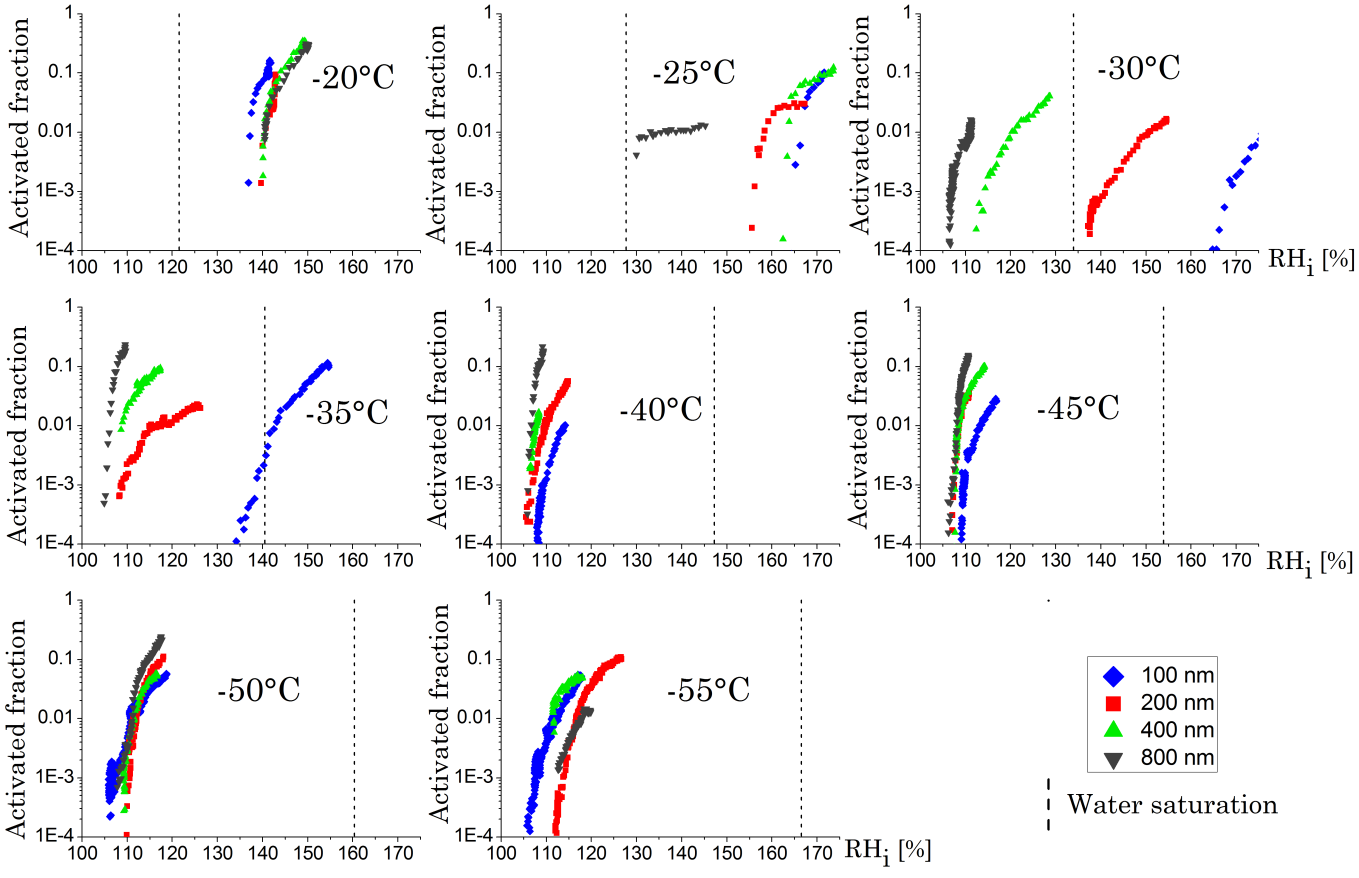

Figure 1. Activation spectra (activated fraction vs. RH_i) of montmorillonite for temperatures from -20°C to -55°C. The particle diameter is indicated in the figure and water saturation has been marked as a vertical line. The combined uncertainty associated with the activated fraction is 14%.

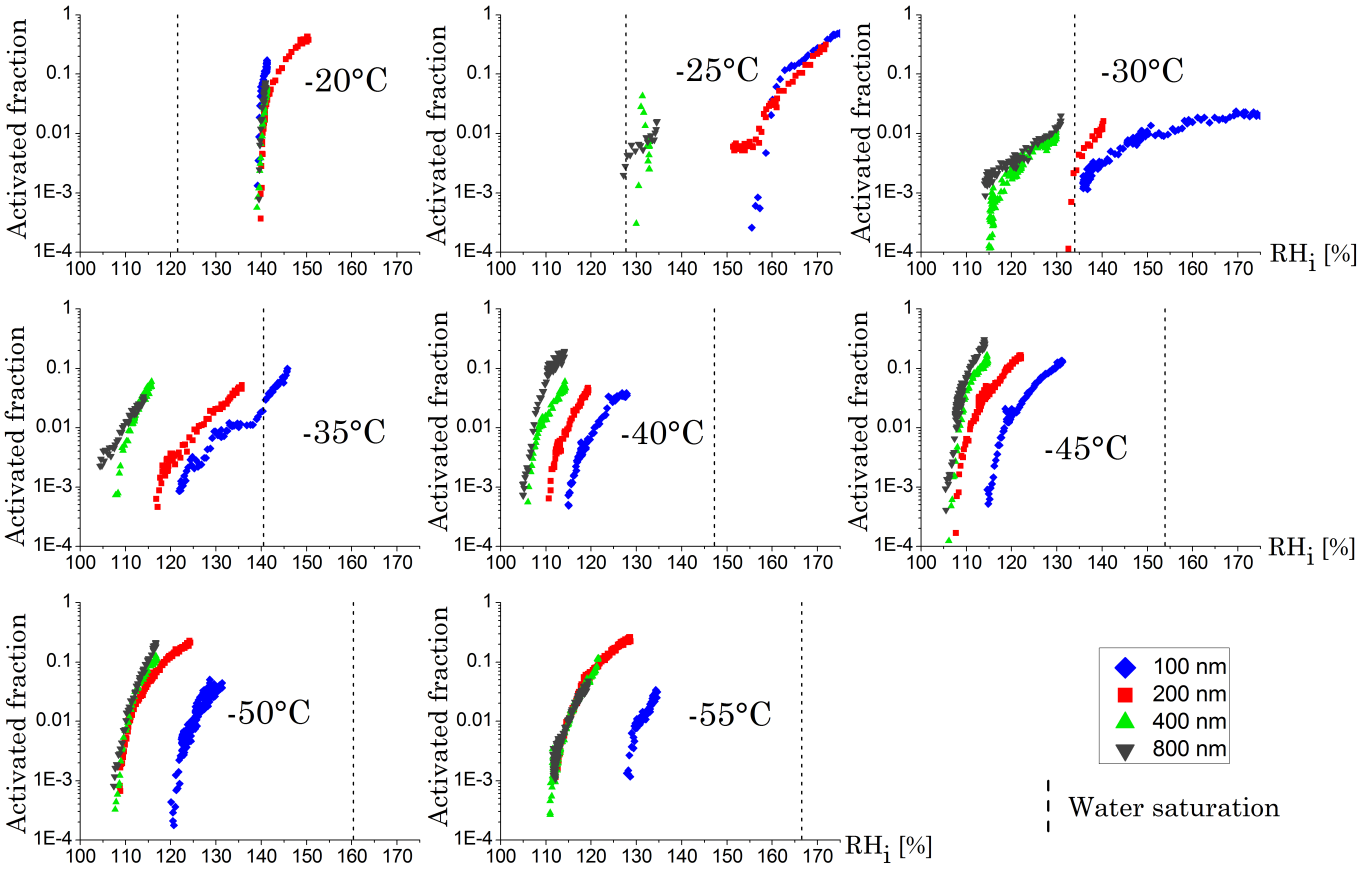

Figure 2. Activation spectra (activated fraction vs. RH$_i$) of kaolinite for temperatures from -20°C to -55°C. The particle diameter is indicated in the figure and water saturation has been marked as a vertical line. The combined uncertainty associated with the activated fraction is 14%.

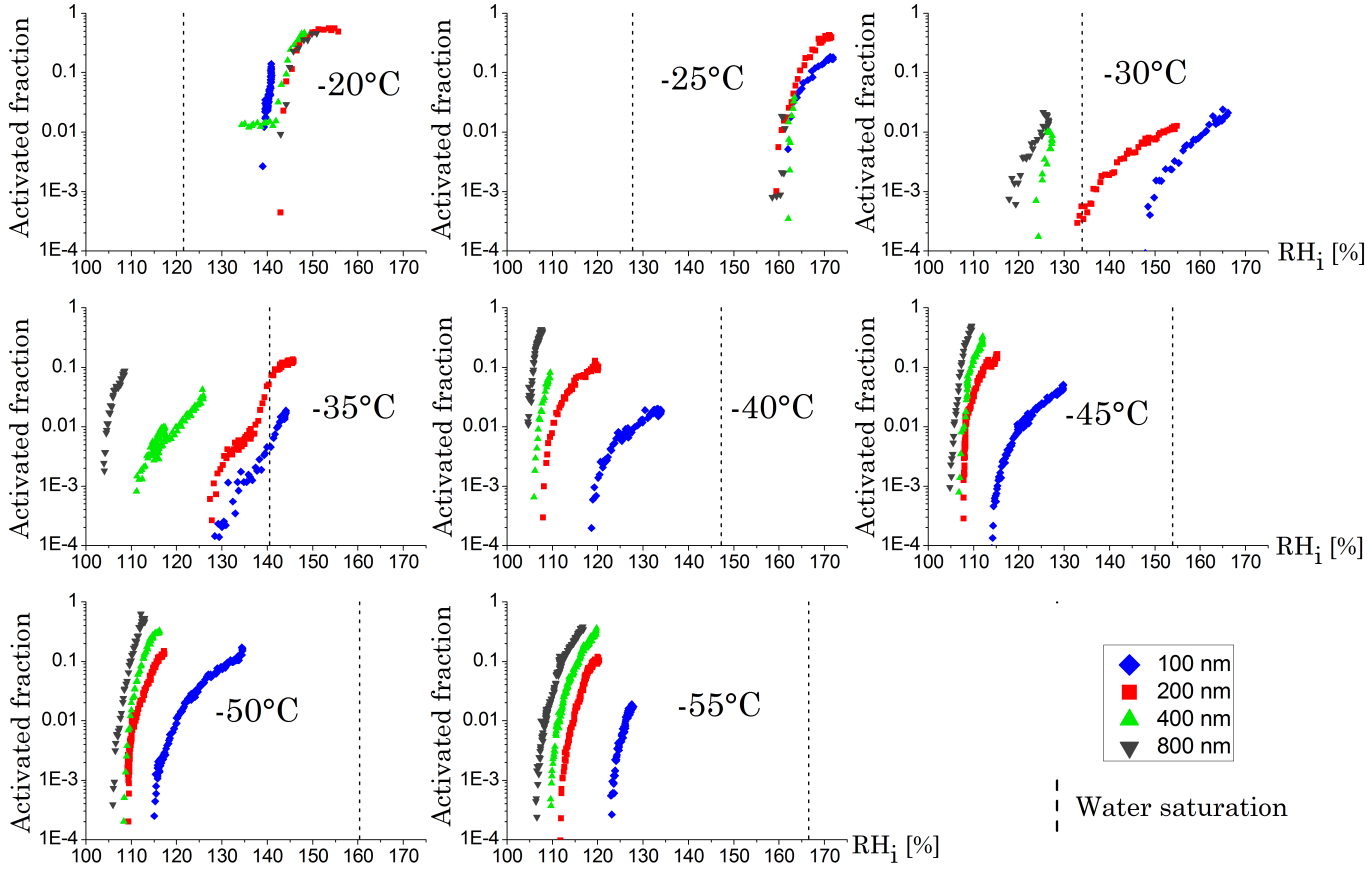

Figure 3. Activation spectra (activated fraction vs. RH$_i$) of illite for temperatures from -20°C to -55°C. The particle diameter is indicated in the figure and water saturation has been marked as a vertical line. The combined uncertainty associated with the activated fraction is 14%.

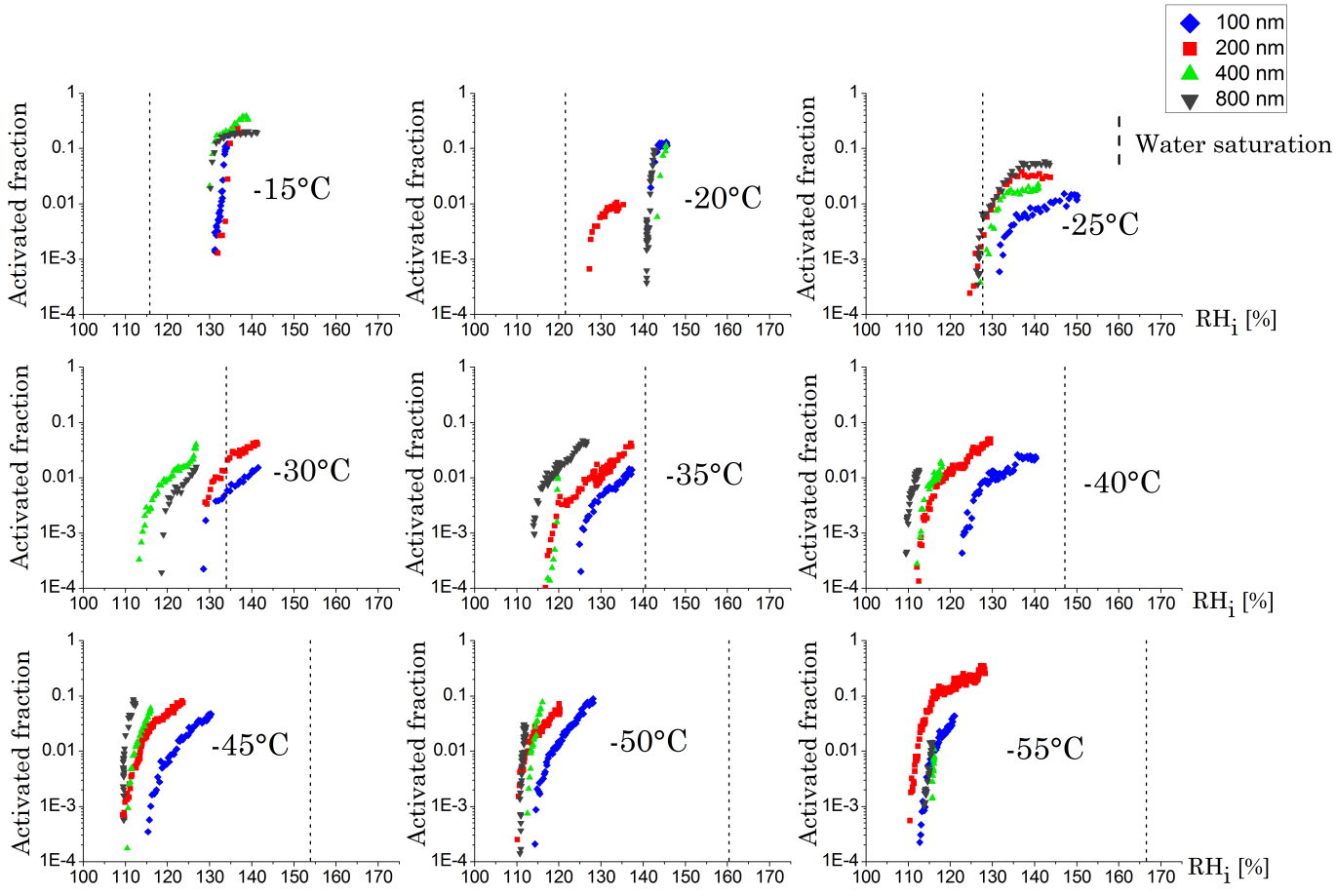

Figure 4. Activation spectra (activated fraction vs. RH$_i$) of ATD for temperatures from -15°C to -55°C. The particle diameter is indicated in the figure and water saturation has been marked as a vertical line. The combined uncertainty associated with the activated fraction is 14%.

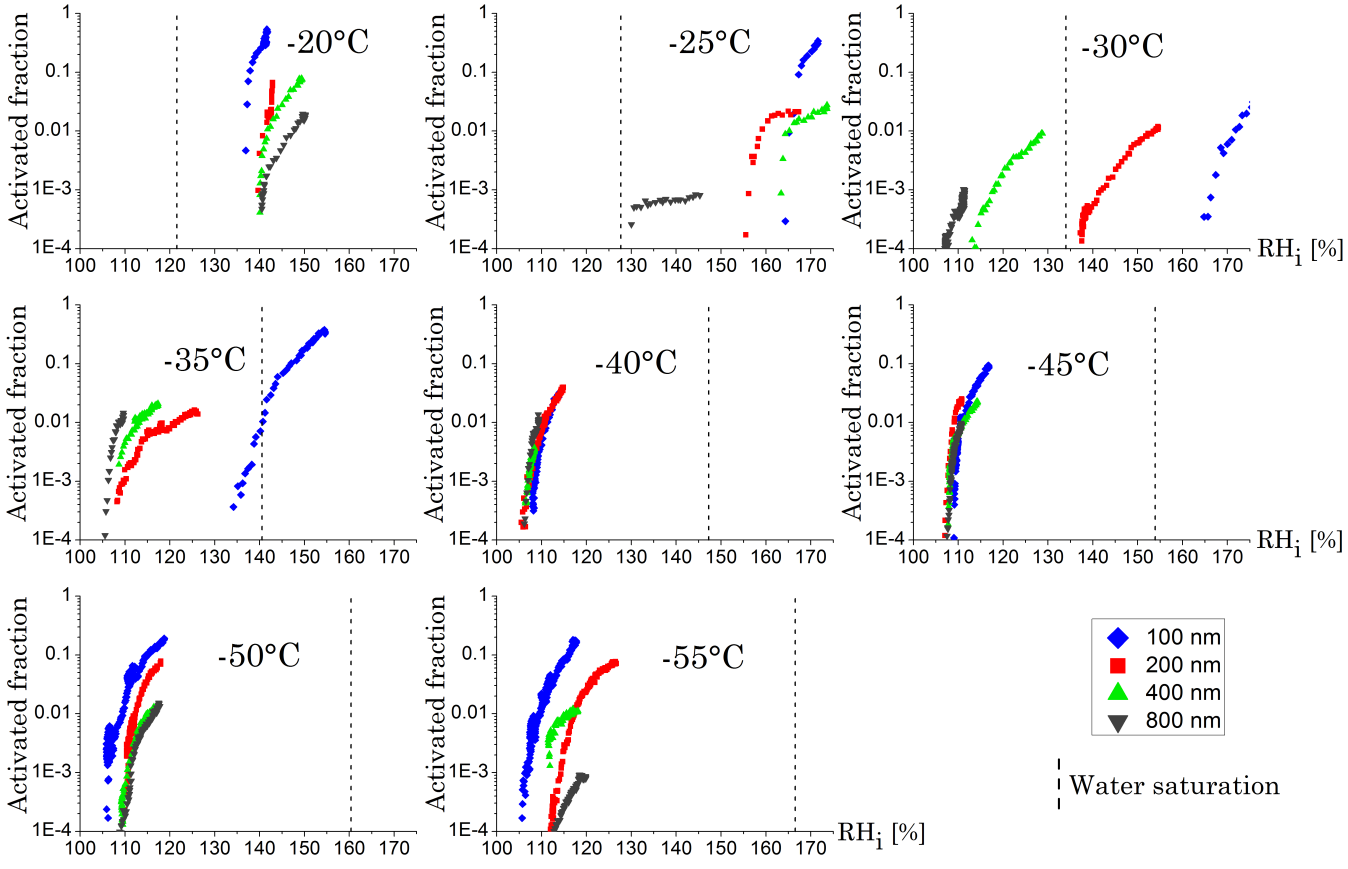

Figure 5. Surface normalized activation spectra (activated fraction vs. RH$_i$) of montmorillonite. The activated fraction of the different particle sizes has been normalized to an equivalent surface of a 200 nm particle. The combined uncertainty associated with the activated fraction is 14%.

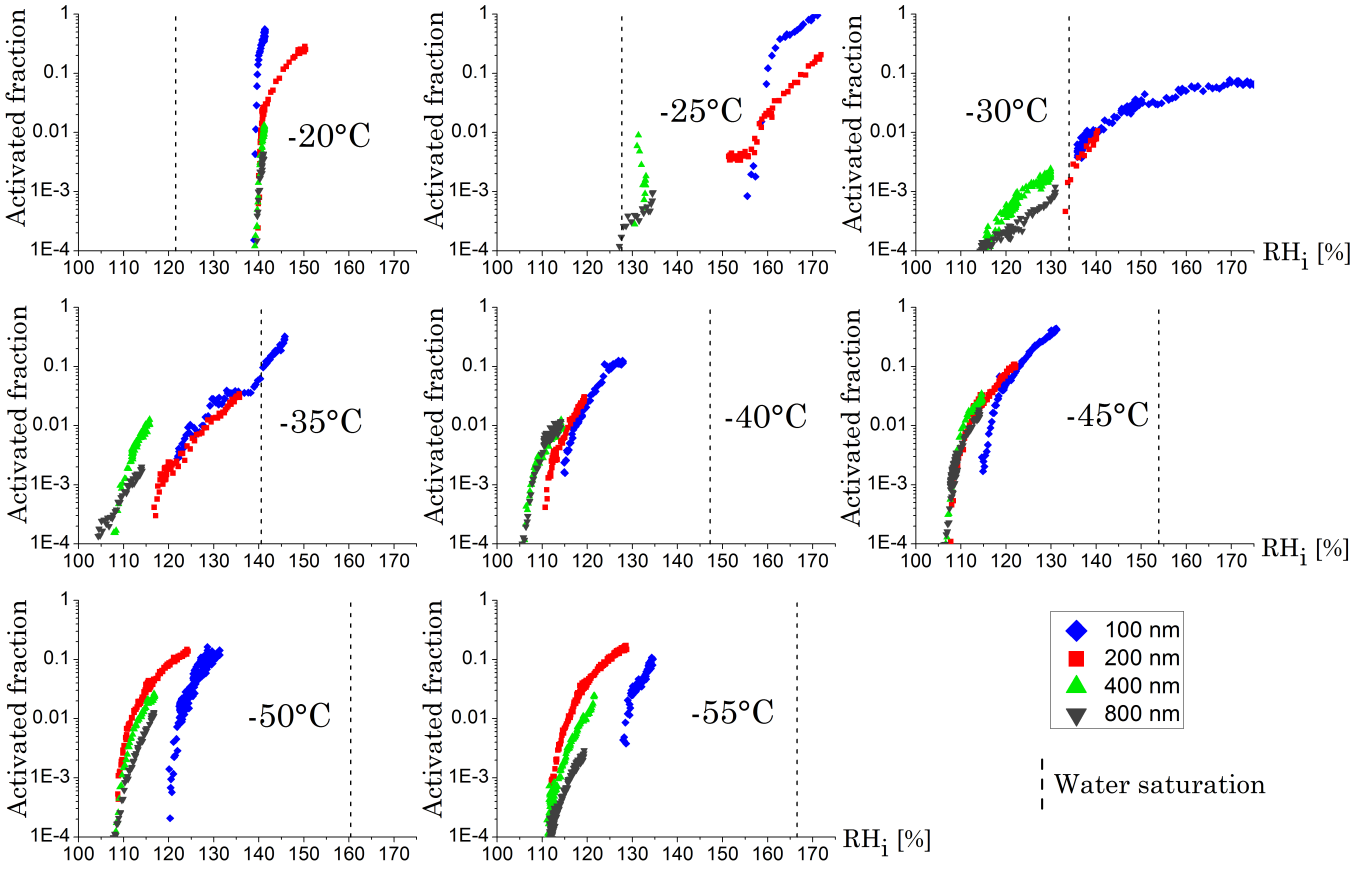

Figure 6. Surface normalized activation spectra (activated fraction vs. RH$_i$) of kaolinite. The activated fraction of the different particle sizes has been normalized to an equivalent surface of a 200 nm particle. The combined uncertainty associated with the activated fraction is 14%.

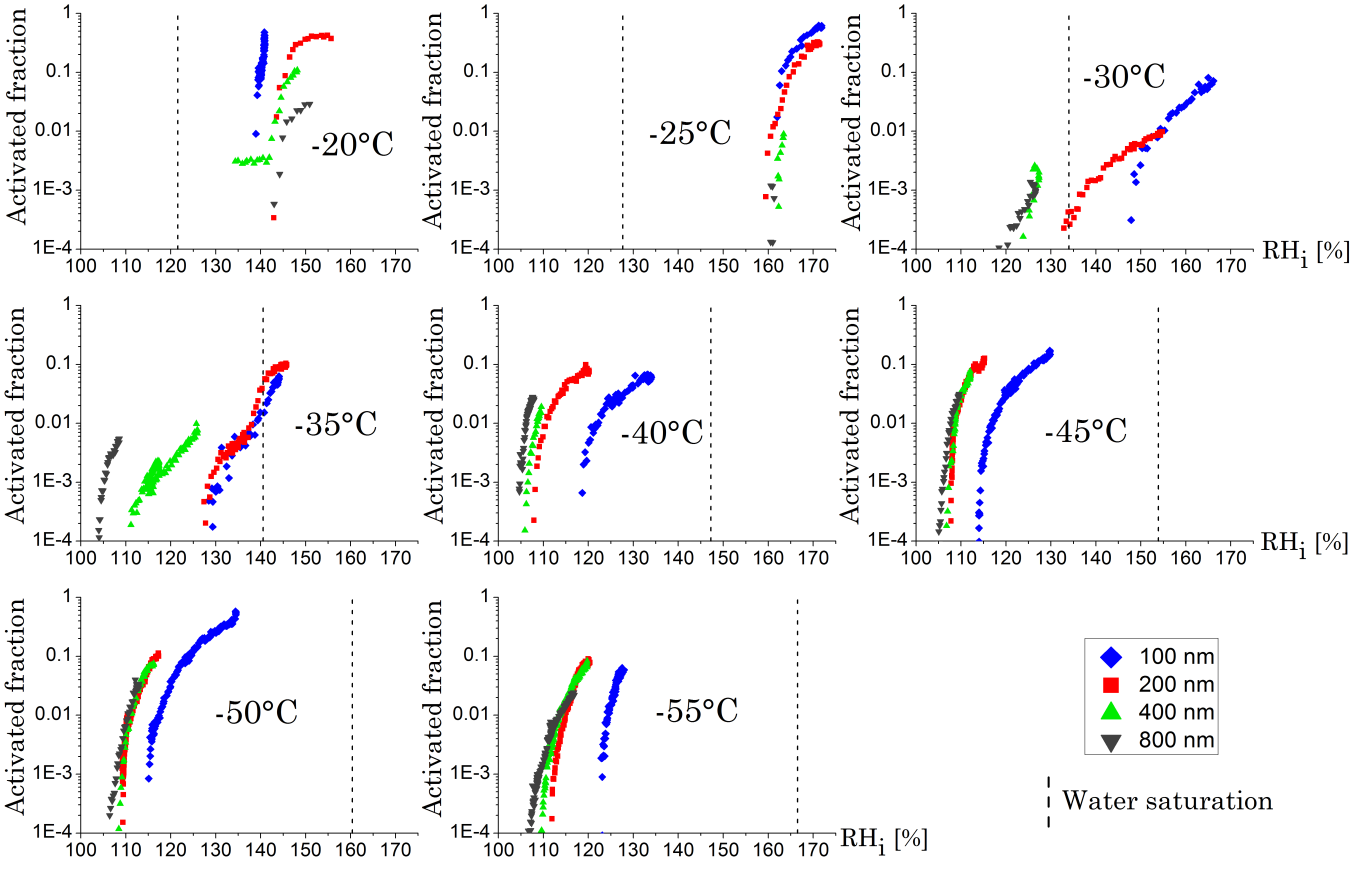

Figure 7. Surface normalized activation spectra (activated fraction vs. RH$_i$) of illite. The activated fraction of the different particle sizes has been normalized to an equivalent surface of a 200 nm particle. The combined uncertainty associated with the activated fraction is 14%.

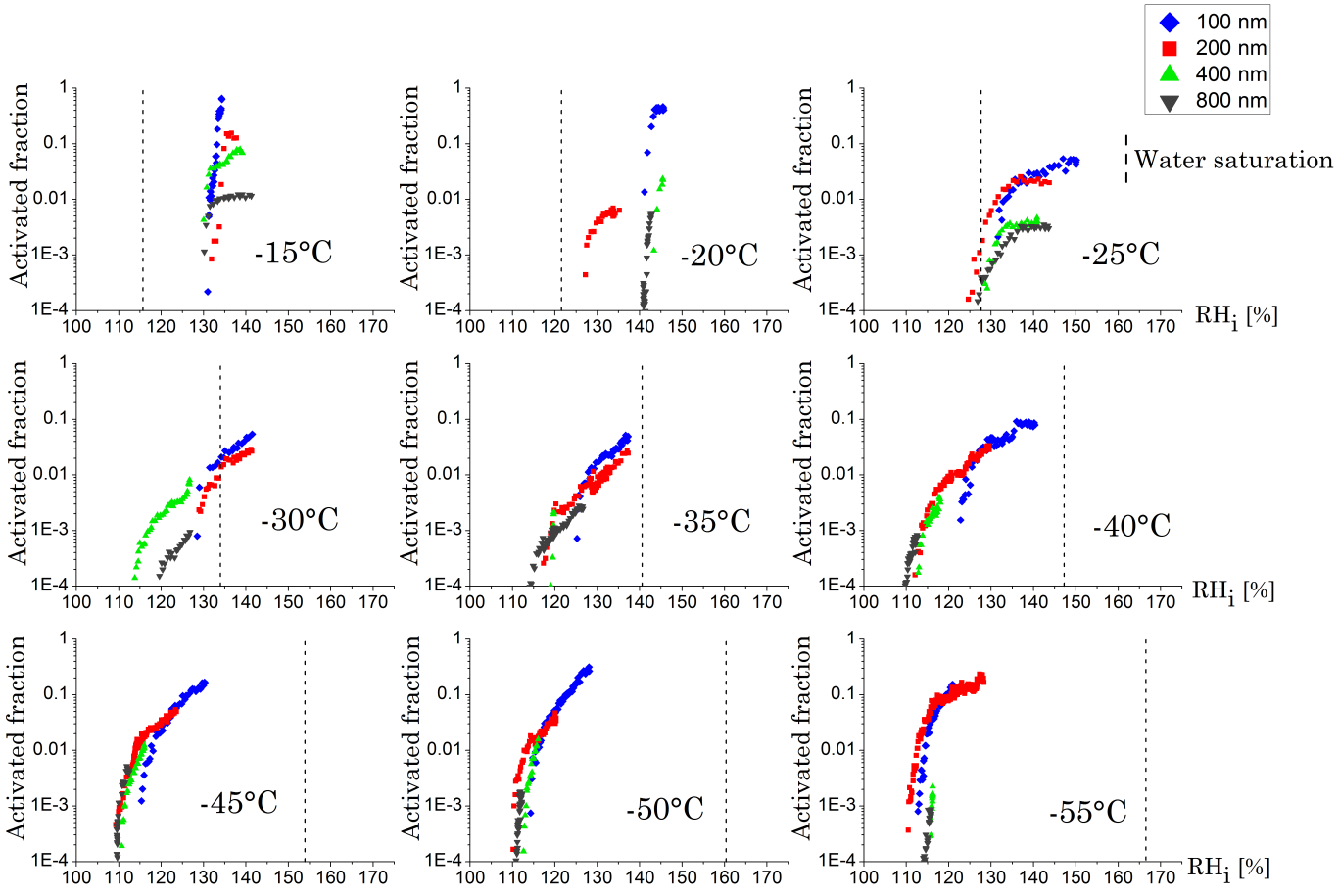

Figure 8. Surface normalized activation spectra (activated fraction vs. RH$_i$) of ATD. The activated fraction of the different particle sizes has been normalized to an equivalent surface of a 200 nm particle. The combined uncertainty associated with the activated fraction is 14%.