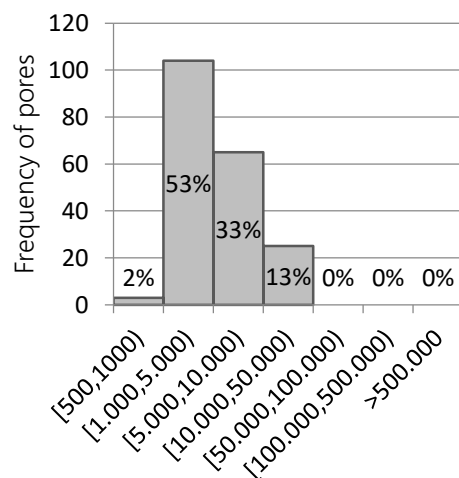
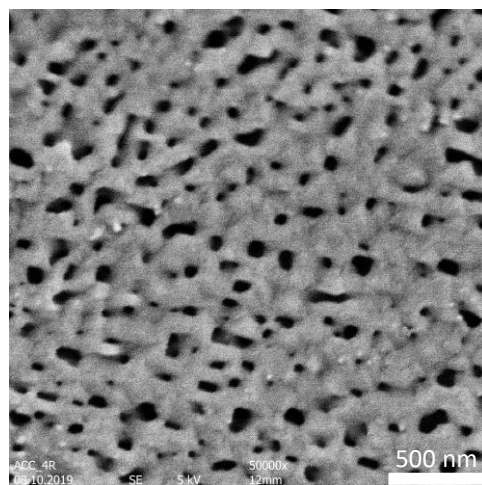


Transformation of Amorphous Calcium Carbonate in Air

- The Role of Additives and Humidity

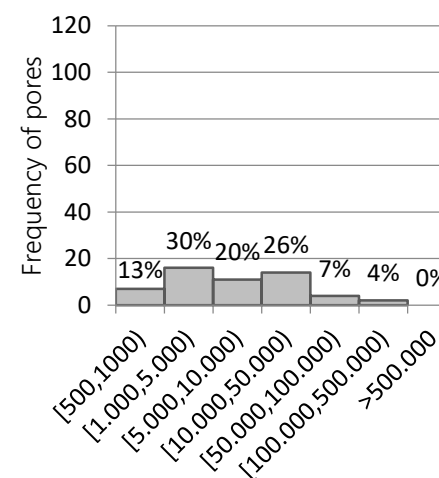
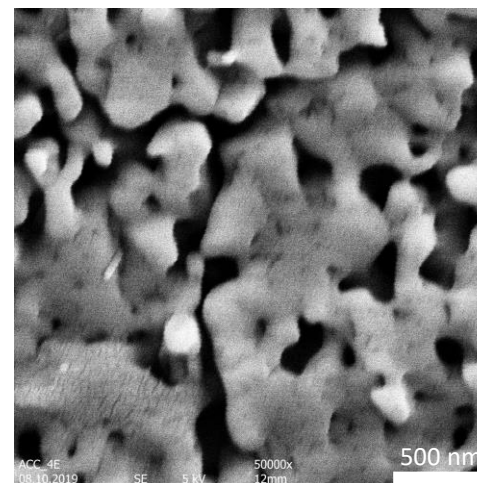
Katja Goetschl, Tina Spirk, Bettina Purgstaller, and Martin Dietzel

ACC pellet transformed into calcite at ~40 % RH (ambient humidity)



Classes of pore area [nm²]

ACC pellet transformed into calcite at 75 % RH (adjusted in desiccator)



Classes of pore area [nm²]

Conclusion

Enhanced humidity increased the pore size but decreased the pore frequency of calcite formed via amorphous calcium carbonate (ACC).

ACC Synthesis Protocol: Konrad et al. (2016) *Cryst. Growth Des.* (<http://doi.org/10.1021/acs.cgd.6b00906>)
 Pore Size Analysis: 2D-(SEM)Image Analysis by ImageJ (open source software; <https://doi.org/10.1038/nmeth.2089>)

