

Dolomite formation at low temperature

Neutralization of differentiation in gliomagenesis

Characterizing a bacteria-amoeba symbiosis

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Cover image: Pictured is an aggregate of dolomite nanocrystals on the surface of a carboxylated polystyrene sphere. The mineral dolomite is abundant in the geologic record and can be synthesized in the laboratory at high temperatures, but the mechanism of its formation at low temperatures remains unclear. Jennifer A. Roberts et al. demonstrate that carboxyl groups on the surfaces of polystyrene spheres can catalyze dolomite precipitation at 30 °C from solutions that simulate seawater. The findings suggest that natural surfaces that possess a high density of carboxyl groups, such as microbial biomass, may be key to the formation of dolomite in low temperature sedimentary systems. See the article by Roberts et al. on pages 14540–14545. Image courtesy of David S. Moore.

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