Interactive comment on "Calcium carbonates: Induced biomineralization vs. controlled macromorphology?" *by* Aileen Meier et al.

Anonymous Referee #2

As a main result of our investigation of 140 isolates of two lithotypes of limestone in Germany, the authors conclude that (magnesium) calcite and vaterite production can be induced through medium alkalinity, through direct surface interation for nucleation visible in close associations, but also in acidified media and a distance apart from the growing bacteria. This manuscript complements the baseline for the understanding of microbially induced calcium carbonate precipitation, its use and exploitation in environmental technologies.

I have only a few comments noted in the pdf attached. Also the title is not fully convincing. There is not much doubt that the mechanism is induced.

Please also note the supplement to this comment:

https://www.biogeosciences-discuss.net/bg-2017-251/bg-2017-251-RC2-supplement.pdf

---