Supplementary Information

Mineralization of Calcite Ribbons on an *Allium fistulosum* L. Bulb Inner Membrane in an Ethanol/Water Mixed Solvent under Control of Polyacrylic Acid by a Double Diffusion Method

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![Fig. S1](image_url)  
**Fig. S1** TGA curve of the bulb membrane after CaCO$_3$ mineralization for 7 days. The volume ratio of DIW/ethanol is $R = 1.5:1$. [CaCl$_2$] = 0.1 M, [Na$_2$CO$_3$] = 0.1 M.
Fig. S2 EDS spectrum of the as-prepared CaCO$_3$ minerals formed on the inner surface of the bulb membrane. The volume ratio of DIW/ethanol is $R = 1.5:1$. $[\text{CaCl}_2] = 0.1$ M, $[\text{Na}_2\text{CO}_3] = 0.1$ M.

Fig. S3 FT-IR spectrum of the blossom-like crystals formed on the inner surface of the bulb membrane. The volume ratio of DIW/ethanol is $R = 1.5:1$. $[\text{CaCl}_2] = 0.1$ M, $[\text{Na}_2\text{CO}_3] = 0.1$ M. The crystallization time is 7 days.
Fig. S4 SEM images of CaCO$_3$ minerals deposited on the outer surface of the bulb membrane with different concentration of PAA in CaCl$_2$ solutions: (a) 0, (b) $2 \times 10^{-3}$ g·L$^{-1}$, (c) $5 \times 10^{-3}$ g·L$^{-1}$. The volume ratio of DIW/ethanol is R=1.5:1. [CaCl$_2$] = 0.1 M, [Na$_2$CO$_3$] = 0.1 M.