

Supplement of Biogeosciences, 16, 811–829, 2019
<https://doi.org/10.5194/bg-16-811-2019-supplement>
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Supplement of

Mineral formation induced by cable bacteria performing long-distance electron transport in marine sediments

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Table S1. Overview of the samples used in the different figures. Samples were collected from incubated sediments from Rattekaai Salt Marsh (RSM), Marine Lake Grevelingen (MLG), and Mokbaai (MB) in the Netherlands, or the Black Sea (BS). Coating was either with carbon (C) or gold (Au), depending on the instrument used for imaging and elemental analysis. Phenom: Phenom ProX desktop scanning electron microscope, JEOL: JXA-8530F Hyperprobe Field Emission Electron probe micro-analyzer, Zeiss: Zeiss Axiovert 200M epifluorescence microscope.

Figure					
2a	RSM	C	15 kV	JEOL	FEP 1
2b	MB	Au	10 kV	Phenom	FEP 1
2c	MB	Au	10 kV	Phenom	FEP 3
3a	RSM	-	-	Zeiss	FEP 1
3bc	RSM	Si wafer	10 kV	Phenom	FEP 1
3d + 4	RSM	C	15 kV	JEOL	FEP 1
5a	MB	Au	10 kV	Phenom	FEP 1
5b	MB	Au	10 kV	Phenom	FEP 4
6	RSM	C	15 kV	JEOL	FEP 1
7	MLG	-	-	oLine D ³ HM	-
8a	MB	Au	10 kV	Phenom	FEP 3
8b	RSM	Au	10 kV	Phenom	FEP 4
8c	RSM	Au	10 kV	Phenom	FEP 1
8d	MB	Au	10 kV	Phenom	FEP 1
8e	BS	Au	10 kV	Phenom	FEP 2
8f	RSM	Au	10 kV	Phenom	FEP 1
8g	BS	Au	10 kV	Phenom	FEP 2
9a	BS	Au	10 kV	Phenom	FEP 2
9d	MB	Au	10 kV	Phenom	FEP 3
9bcef	MLG	-	-	Zeiss Auriga Crossbeam system	-
10+11	RSM	C	15 kV	JEOL	FEP 1

Supplementary information

Fig. S1 Secondary electron image showing cable bacteria and the corresponding X-ray element maps of (a) secondary electrons (b) phosphorus, (c) calcium, (d) magnesium, (e) sulfur and (f) iron. To assess the correlation between the elements, scatter plots of (g) P and Ca, (h) P and Mg, (i) P and S, (j) P and Fe are shown. All scatterplots were produced from a pixel-by-pixel analysis from the wavelength-dispersive X-ray element maps collected with the electron probe micro analyzer. The Pearson's correlation coefficient (R) values are depicted on top of the scatterplots.

