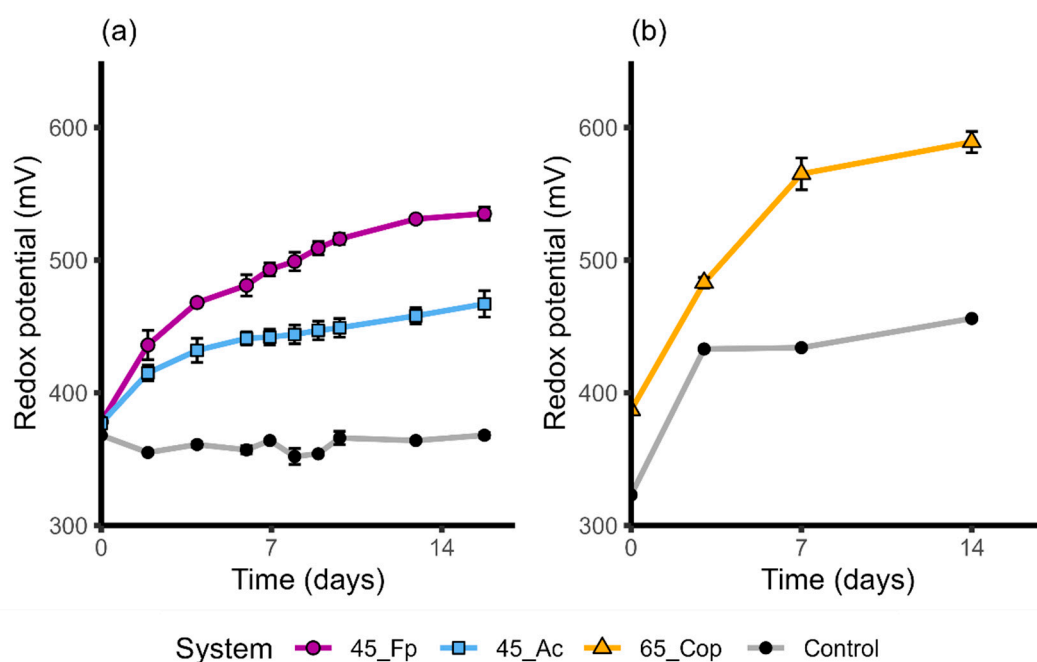
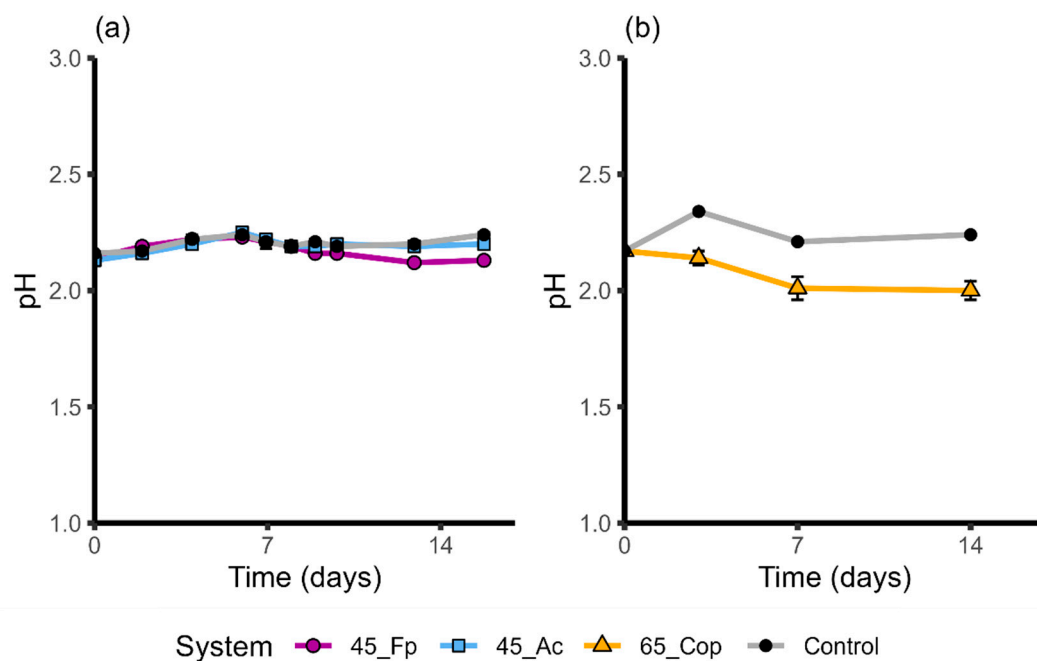


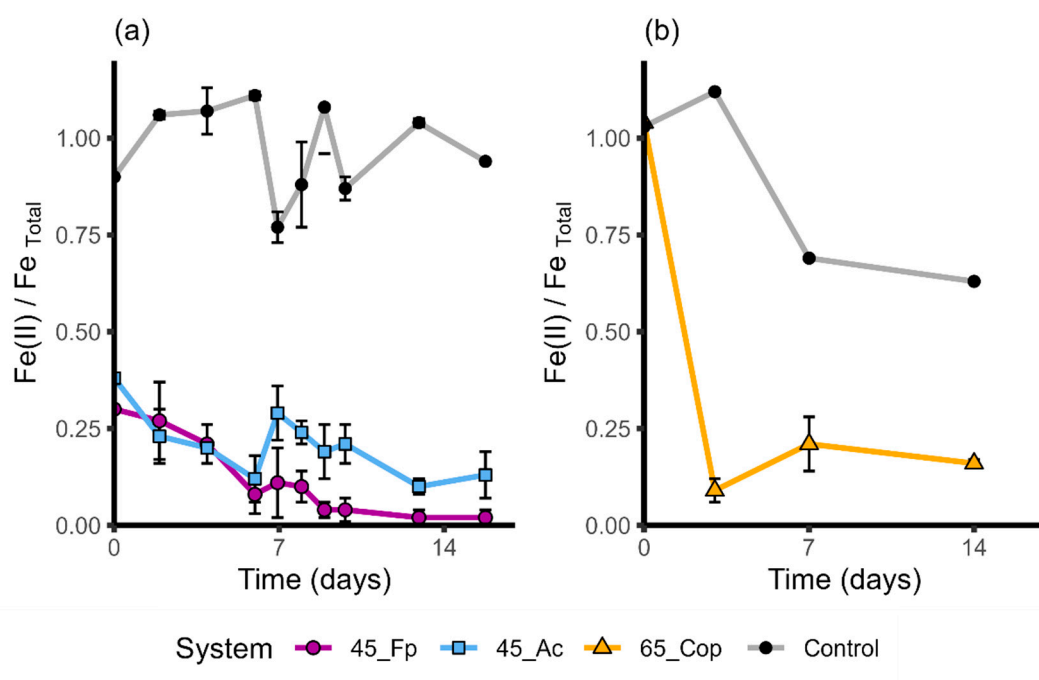
## Supplementary material



**Figure S1.** Evolution of ORP values during bioleaching assays at 45 °C (a) and 65 °C (b). Sterile controls performed in MAC medium using a sterilized mineral and paraformaldehyde were included at both temperatures.



**Figure S2.** Evolution of pH values during bioleaching assays at 45 °C (a) and 65 °C (b). Sterile controls performed in MAC medium using a sterilized mineral and paraformaldehyde were included at both temperatures.



**Figure S3.** Evolution of Fe(II)/Fe<sub>Total</sub> ratio during bioleaching assays at 45 °C (a) and 65 °C (b). Sterile controls performed in MAC medium using a sterilized mineral and paraformaldehyde were included at both temperatures.

Statistical analyses of copper recovery by the indigenous community were performed. Table S1 shows the solubilized copper (in mg/L) and its standard deviation (SD) after 14 and 21 days by each of the systems prepared. An analysis of variances (ANOVA) was performed, and significant differences were observed at both times with p-values of  $1.11 \times 10^{-6}$  and  $1.30 \times 10^{-6}$ , respectively. A Tukey post-hoc test was later performed to group the samples according to their copper recovery. The compact letter display (cld) is shown to signal the groups defined using a level of significance of 0.01.

System	14 days			21 days		
	Cu (mg/L)	SD	cld	Cu (mg/L)	SD	cld
A	108.45	4.31	a	112.2	1.13	a
B	109.30	1.70	a	108.8	2.83	a
C	103.60	3.11	a	107.25	2.33	a
D	102.10	4.67	a	106.7	3.39	a
E	61.13	0.28	b	71.405	3.46	bc
F	81.44	2.45	c	83.785	2.96	c
G	57.04	0.73	b	61.375	2.40	b

**Table S1.** Analysis of variance of copper recovery by the indigenous community

Tables S2 and S3 show the results of the Tukey post-hoc test for the copper recovery after 14 and 21 days, respectively. The pairwise significance matrix shows the adjusted p-value of each sample comparison used to define the compact letter display shown in table S1.

	A	B	C	D	E	F	G
A		>0.1	>0.1	>0.1	<0.005	<0.005	<0.005
B			>0.1	>0.1	<0.005	<0.005	<0.005
C				>0.1	<0.005	<0.005	<0.005
D					<0.005	<0.005	<0.005
E						<0.005	>0.1
F							<0.005

**Table S2.** Tukey matrix of pairwise comparison for copper recovery after 14 days.

	A	B	C	D	E	F	G
A		>0.1	>0.1	>0.1	<0.005	<0.005	<0.005
B			>0.1	>0.1	<0.005	<0.005	<0.005
C				>0.1	<0.005	<0.005	<0.005
D					<0.005	<0.005	<0.005
E						0.02	0.07
F							<0.005

**Table S3.** Pairwise comparison of copper recovery after 21 days in Tukey test.