Supporting Information

Structure-Activity Analysis of Metabolic Homeostasis in Algal-Bacterial Systems and Their Performance in Removing Refractory Pollutants

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1. BG-11 Medium Formulation

Table S1. Macro- and Micronutrient Components of BG-11 Medium

Number	Chemical	Stock Solution(g/L)	Volume(mL/L)
1	Na_2CO_3	2	10
2	Anhydrous citric acid	0.66	10
3	$K_2HPO_4{\cdot}3H_2O$	5.2	22.5
4	$MgSO_4{\cdot}7H_2O$	7.5	16
5	$CaCl_2$	2.7	10
6	EDTA	0.11	11
7	Ammonium ferric citrate	0.6	10
8	$NaHCO_3$	23.4	100
9	$NaNO_3$	15	55.3
10	A5	-	0.2

Table S2. Composition of A5 Trace Elements Solution

Number	Chemical	Concentration (g/L)
1	H_3BO_3	2.86
2	$MnCl_2 \cdot 4H_2O$	1.86
3	$ZnSO_4 \cdot 7H_2O$	0.22
4	$Na_2MoO_4 \cdot 2H_2O$	0.39
5	$Co(NO_3)_2 \cdot 6H_2O$	0.05
6	$CuSO_4 \cdot 5H_2O$	0.08

2. Printing and Dyeing Factory Process Drawing

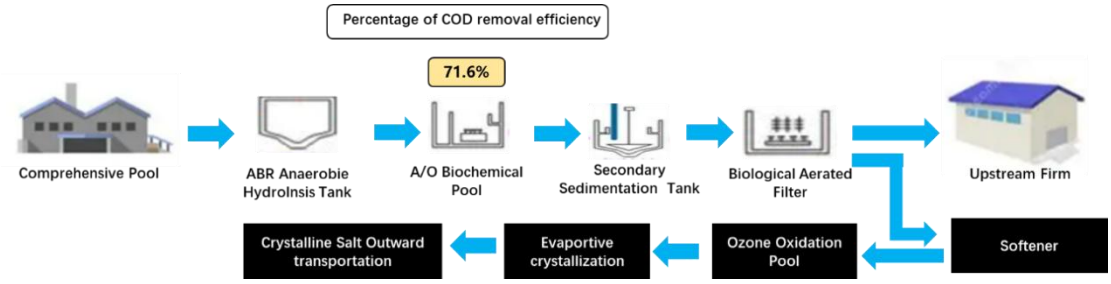

Fig.S1 Printing and Dyeing Factory Process Drawing

3. Experimental Operating Conditions

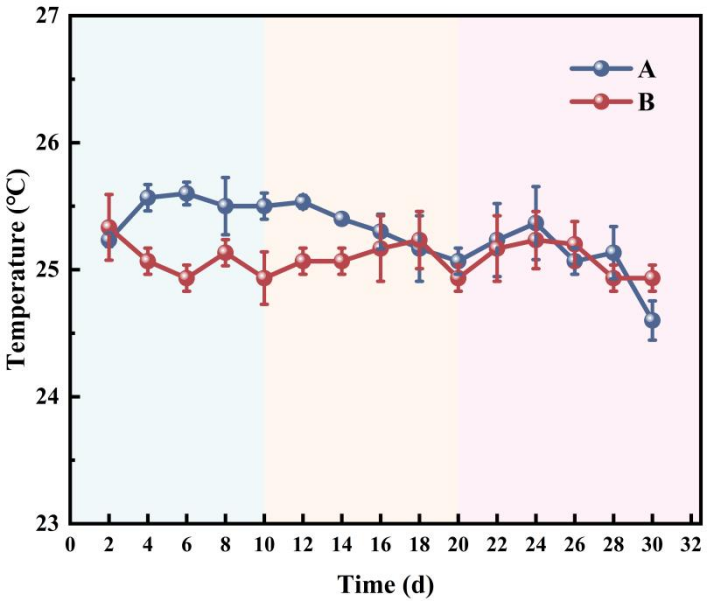

Fig.S2 Variation of temperature at different aeration in two systems

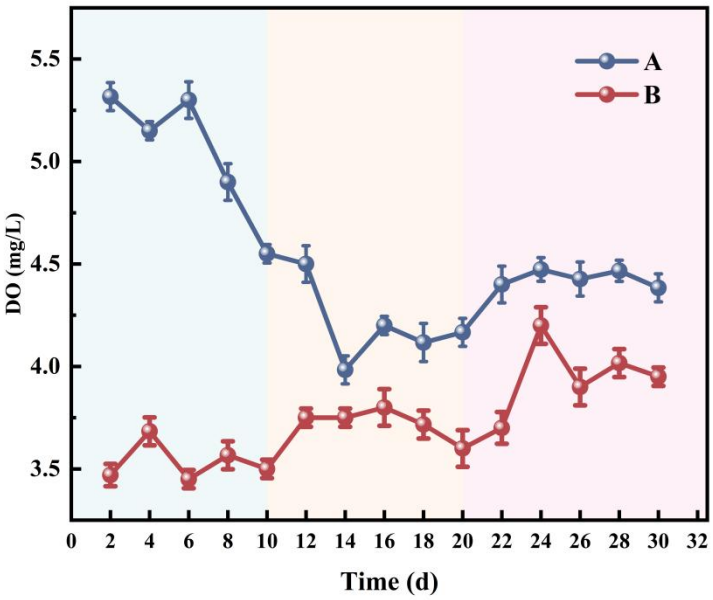

Fig.S3 Variation of DO at different aeration in two systems