

Response Surface Optimization of Biophotocatalytic Degradation of Industrial Wastewater for Bioenergy Recovery

Emmanuel Kweinor Tetteh and Sudesh Rathilal

Table S1. Modified RSM-BBD optimized conditions of the BP system.

Number	Catalyst Load (g)	HRT (days)	Biogas (mL/d)	COD (%)	Color (%)	Turbidity (%)
1	4	16	267	97.571	97.857	98.574
2	4	31	272.75	96.982	97.286	98.288
3	4	1	278.75	94.732	95.286	97.288
4	4	16.796	266.865	97.626	97.906	98.598
5	4	27.905	270.131	97.384	97.661	98.475
6	4	18.504	266.743	97.711	97.98	98.635
7	4	14.443	267.406	97.436	97.736	98.513
8	4	9.324	270.069	96.731	97.101	98.195
9	4	10.059	269.561	96.857	97.215	98.252
10	4	12.025	268.409	97.153	97.482	98.386
11	4	25.345	268.527	97.607	97.87	98.58
12	4	25.461	268.589	97.599	97.863	98.576
13	4	15.147	267.199	97.502	97.795	98.543
14	4	18.696	266.743	97.718	97.986	98.638
15	4	17.438	266.793	97.664	97.939	98.614
16	4	20.922	266.958	97.756	98.016	98.653
17	4	17.939	266.758	97.688	97.96	98.625
18	4	23.4	267.65	97.709	97.968	98.629
19	4	5.348	273.543	95.908	96.354	97.822
20	4	23.201	267.576	97.716	97.975	98.633
21	4	27.037	269.53	97.471	97.742	98.516
22	4	25.644	268.688	97.586	97.85	98.57
23	4	22.022	267.206	97.747	98.005	98.648
24	4	5.641	273.245	95.977	96.417	97.853
25	4	4.802	274.116	95.776	96.235	97.762
26	4	3.521	275.551	95.449	95.938	97.614
27	4	21.892	267.172	97.749	98.007	98.649
28	4	11.262	268.821	97.045	97.384	98.337
29	4	15.46	267.119	97.529	97.819	98.555
30	4	16.993	266.84	97.638	97.916	98.603
31	4	13.253	267.843	97.308	97.621	98.456
32	4	19.802	266.802	97.746	98.01	98.65
33	4	19.047	266.752	97.729	97.995	98.643
34	4	19.988	266.821	97.749	98.012	98.651
35	4	11.394	268.746	97.064	97.402	98.346

36	4	20.121	266.836	97.751	98.013	98.652
37	4	22.406	267.315	97.739	97.998	98.644
38	4	17.641	266.777	97.674	97.948	98.619
39	4	23.58	267.718	97.702	97.961	98.626
40	4	14.572	267.365	97.449	97.748	98.519
41	4	5.749	273.137	96.002	96.44	97.865
42	4	20.297	266.859	97.753	98.015	98.652
43	4	6.772	272.157	96.23	96.647	97.969
44	4	21.422	267.059	97.754	98.013	98.652
45	4	14.955	267.251	97.485	97.78	98.535
46	4	26.124	268.961	97.55	97.816	98.553
47	4	19.666	266.789	97.744	98.008	98.649
48	4	13.845	267.612	97.374	97.681	98.486
49	4	17.2	266.816	97.65	97.927	98.609
50	4	7.638	271.392	96.411	96.811	98.051
51	4	24.751	268.228	97.644	97.906	98.598
52	4	14.838	267.285	97.474	97.77	98.53
53	4	4.431	274.519	95.684	96.151	97.721
54	4	3.998	275.002	95.574	96.051	97.67
55	4	16.452	266.917	97.604	97.886	98.588
56	4	12.296	268.274	97.189	97.514	98.402
57	4	3.251	275.871	95.377	95.872	97.581
58	4	19.541	266.779	97.741	98.006	98.648
59	4	19.399	266.77	97.738	98.003	98.647
60	4	8.582	270.623	96.596	96.978	98.134
61	4	14.685	267.33	97.46	97.757	98.524
62	4	29.173	271.114	97.237	97.523	98.407
63	4	23.843	267.823	97.691	97.95	98.62
64	4	2.656	276.594	95.214	95.724	97.507
65	4	12.566	268.146	97.224	97.546	98.418
66	4	27.532	269.866	97.423	97.697	98.494
67	4	27.214	269.647	97.454	97.726	98.508
68	4	7.386	271.608	96.36	96.765	98.027
69	4	10.193	269.473	96.879	97.234	98.262
70	4	17.332	266.802	97.658	97.934	98.612
71	4	22.678	267.4	97.733	97.991	98.64
72	4	11.63	268.612	97.098	97.432	98.361
73	3.9	28.75	266.849	97.257	97.523	98.404
74	3.9	18.25	262.395	97.661	97.897	98.591
75	3.9	3.25	270.908	95.324	95.76	97.522
76	4.1	28.75	274.445	97.311	97.61	98.452
77	4.1	18.25	270.849	97.732	98.036	98.666
78	4.1	3.25	280.586	95.42	95.973	97.634