

Supplementary materials

Table S1. Feed forward networks with different hidden layer neurons

Figure S1. Effect of independent variables on $\text{NH}_3\text{-N}$ removal under RSM conditions of pH (9–11), temperature (58–70 °C), and time (30–90 min)

Table S1. Feed forward networks with different hidden layer neurons

Sl. No.	Topology	Transfer function (Tan-sigmoidal)				
		MSE	R			
			Training	Validation	Test	All
1	3:01:02	13.028	0.992	0.993	0.995	0.999
2	3:02:02	13.668	0.991	0.994	1.000	0.992
3	3:03:02	12.867	0.992	0.996	0.996	0.993
4	3:04:02	8.386	0.996	0.998	0.993	0.995
5	3:05:02	7.728	0.998	0.999	0.999	0.998
6	3:06:02	11.359	0.999	0.995	0.999	0.994
7	3:07:02	10.388	0.996	0.997	0.998	0.994
8	3:08:02	8.934	0.995	0.994	0.999	0.995
9	3:09:02	10.081	1.000	0.981	0.993	0.994
10	3:10:02	8.533	0.995	0.996	0.997	0.995
11	3:11:02	8.307	0.995	0.997	0.995	0.995
12	3:12:02	7.871	0.995	0.996	0.996	0.996
13	3:13:02	12.689	0.998	0.989	0.996	0.997
14	3:14:02	12.297	0.998	0.998	0.998	0.998
15	3:15:02	18.443	0.999	0.990	0.992	0.997
16	3:16:02	9.724	0.999	0.991	0.999	0.998
17	3:17:02	8.174	0.999	0.998	0.993	0.998
18	3:18:02	10.563	0.999	0.987	0.996	0.997
19	3:19:02	12.346	0.998	0.994	0.972	0.999
20	3:20:02	19.924	0.992	0.983	0.984	0.989

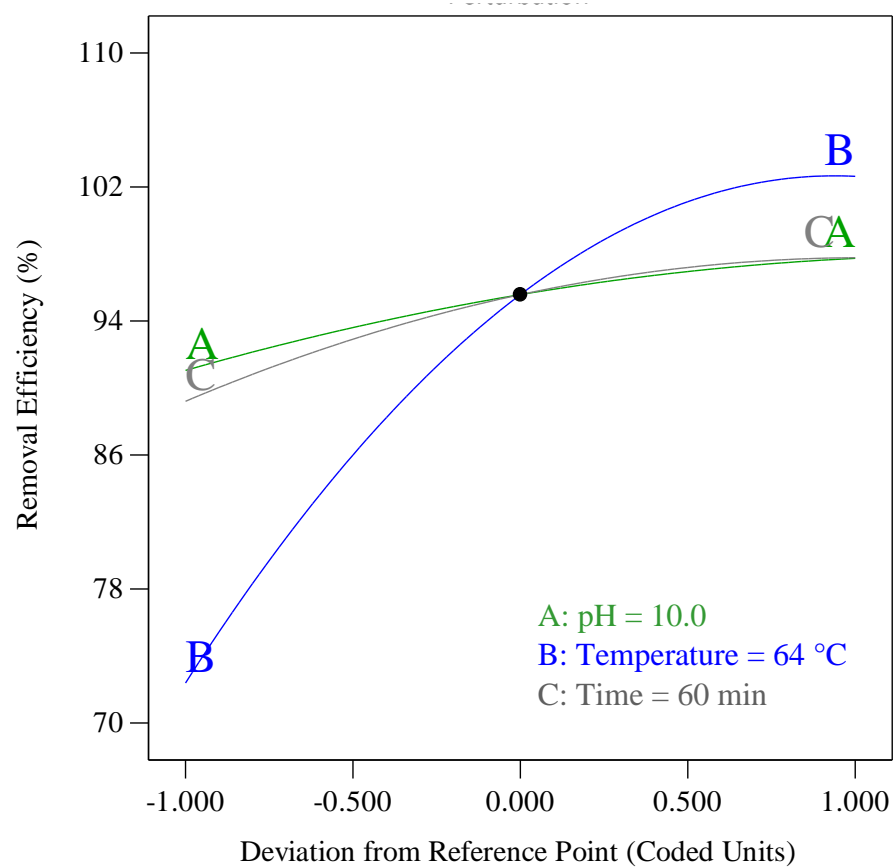


Figure S1. Effect of independent variables on $\text{NH}_3\text{-N}$ removal under RSM conditions of pH (9–11), temperature (58–70 °C), and time (30–90 min)