SUPPLEMENTARY MATERIAL TO

Treatment of sugar industry effluent using an electrocoagulation process: Process optimization using the response surface methodology

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TABLE S-I. Parameters of sugar industry wastewater

No.	Parameter	Sahu *et al.*[8]	Kolhe *et al.*[3]	Present study
1	pH	5.5	6.5-8.8	4.85
2	*BOD*, mg dm^{-3}	-	300-2500	-
3	*COD*, mg dm^{-3}	3682	1500-2800	3200
4	Dissolved Oxygen (*DO*), mg dm^{-3}	-	0-2.0	-
5	Total Solid (*TS*), mg dm^{-3}	1987	870-2000	2240
6	*TDS*, mg dm^{-3}	1447	400-1650	1436
7	Suspended Solid (*SS*), mg dm^{-3}	540	220-800	804
8	Content of Cl, mg dm^{-3}	50	18-40	225
9	Content of S, mg dm^{-3}	-	40-70	37.5
10	Content of oil and grease, mg dm^{-3}	-	60-100	-
11	Content of phosphate, mg dm^{-3}	5.9	-	0.73
12	Content of protein, mg dm^{-3}	43	-	-

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TABLE S-II. Reactor and electrode specification

| No.	Reactor	Specification
1	The material from which is made	perspex glass
2	Volume, dm^3	1.72
3	Electrode gap, mm	25
4	No. of electrode	4
5	Mode of operation	batch
6	Stirring mechanism (length × diameter, mm)	magnetic bar (25×5)
7	Mixing/reaction time, min	50-100
	Electrodes	
8	Anode and cathode material	iron
9	Shape	rectangular
10	Size of each plate, mm	85×120
11	Thickness, mm	2
12	Effective size (L×H, mm)	85×80
13	Plate arrangement	parallel

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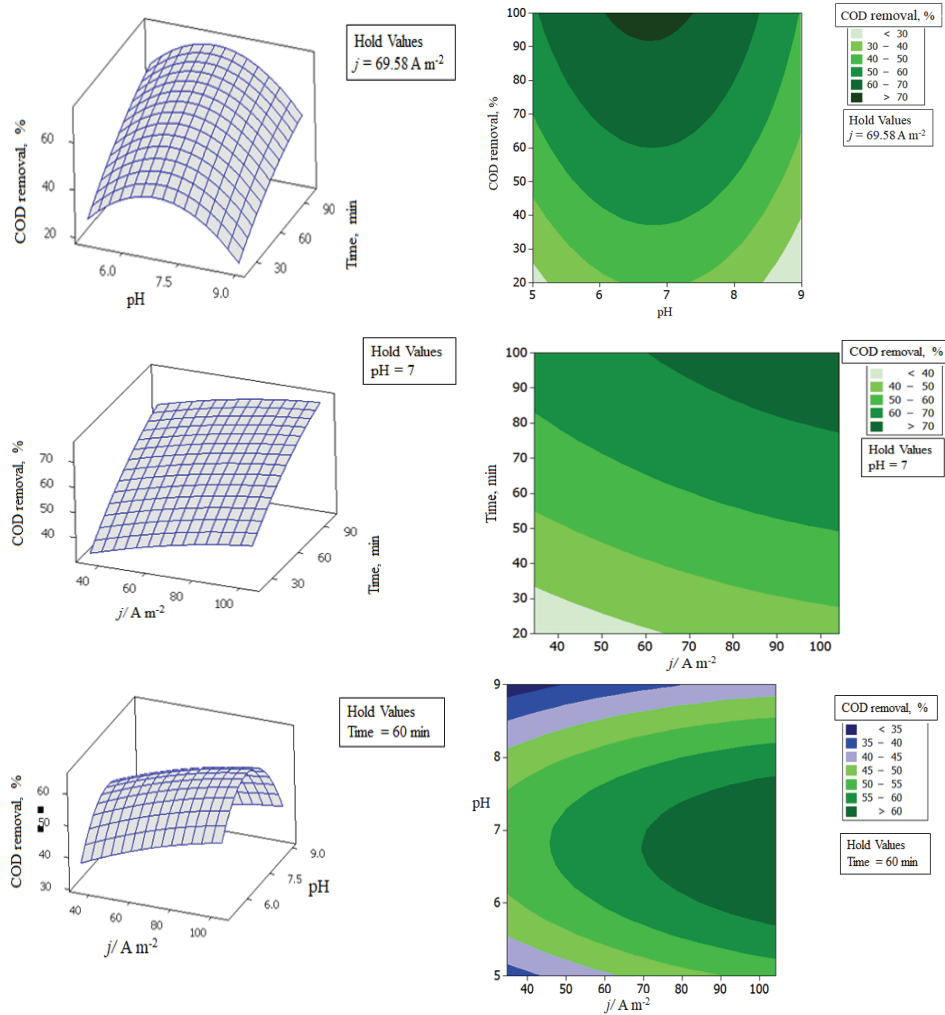
Fig. S-1. Three dimensional response surface graphs for *COD* removal
in the EC treatment of SIE.