

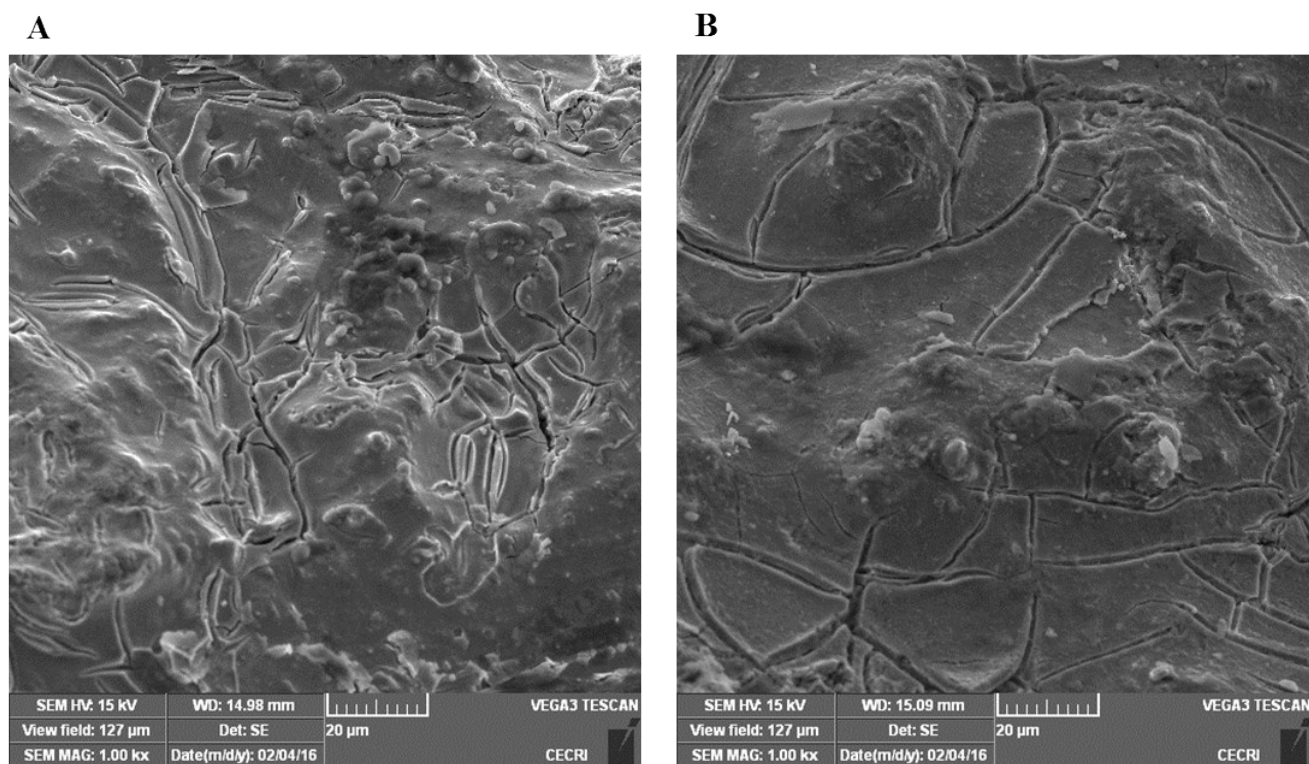


Fig. 1 SEM of TSIA electrode (A) Before Electro-oxidation, (B) After Electro-oxidation.

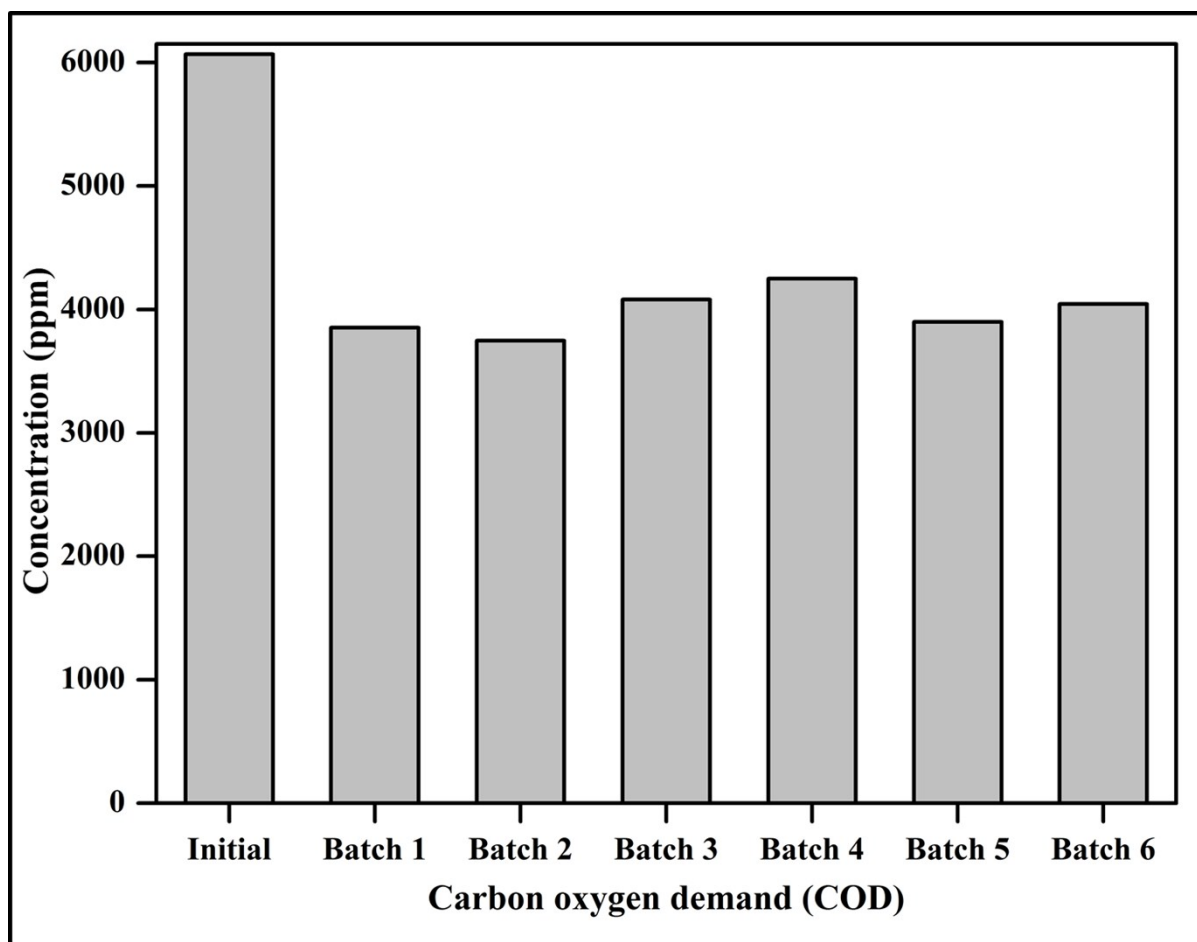


Fig. 2 COD reduction after performing electro-oxidation with the same electrode for multiple batches.

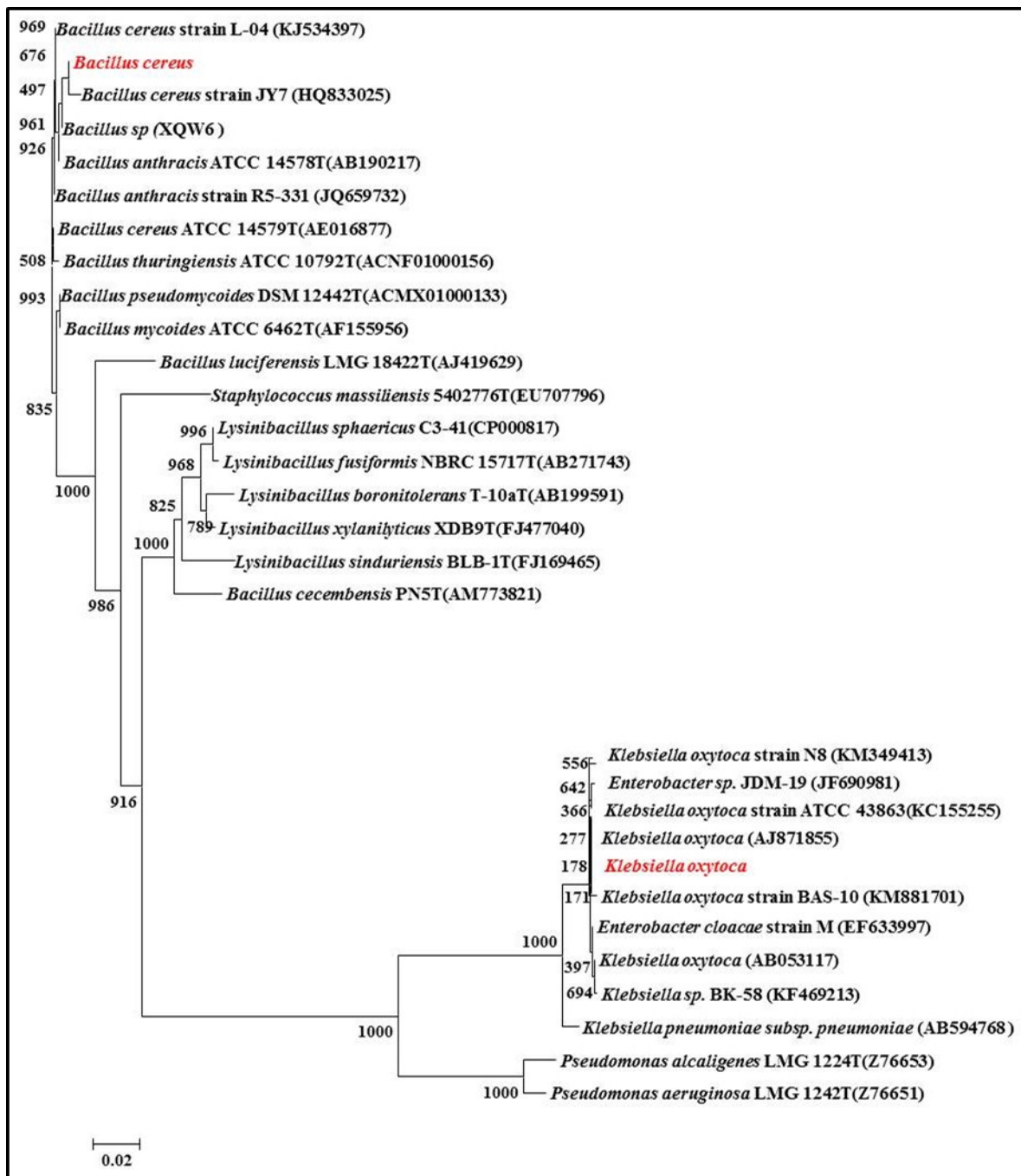


Fig. 3 Phylogenetic tree; Identification of bacterial isolates from soak liquor (The identified strains are marked in red).

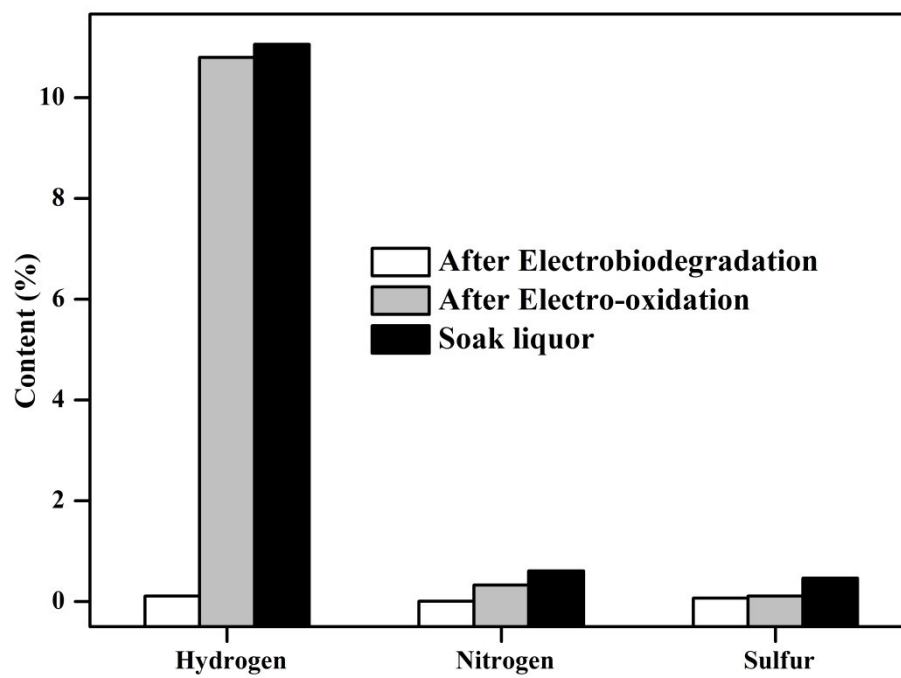


Fig. 4 Estimation of Hydrogen, Nitrogen and sulphur content in soak liquor

Table 1

Nominal composition of TSIA electrode before electro-oxidation

	[WT.%]	[WT.%]	[AT.%]	[WT.%]			
Ti 22 K-series							
1.021	35.18	40.24	27.04	1.06	0.265	1.487	1.000
O 8 K-series							
1.000	24.90	28.48	57.28	3.59	0.395	0.721	1.000
Ru 44 L-series							
1.016	21.88	25.03	7.97	0.76	0.230	1.071	1.000
C 6 K-series							
1.000	1.97	2.26	6.05	0.43	0.048	0.474	1.000
Ir 77 M-series							
1.030	1.79	2.05	0.34	0.11	0.025	0.803	1.000
Fe 26 K-series							
1.048	1.32	1.51	0.87	0.09	0.011	1.338	1.000
P 15 K-series							
1.025	0.37	0.43	0.45	0.05	0.003	1.522	1.000
Total	87.42	100.00	100.00				