Electronic Supplementary Material (ESI) for RSC Advances.

A sample numerical details of products and their selectivity are presented in table S1. The operating and design parameters in which the experiment was performed is presented in table S2.

Table S1: A sample numerical details of products and their selectivity

Products	Mole percentage	Selectivity	Selectivity (%)
Benzene	8.10	0.12	11.91
cyclohexane	0.00	0.00	0.00
Toluene	0.10	0.00	0.15
P-xylene	3.05	0.04	4.49
O-xylene	0.10	0.00	0.15
Cyclohexanol	0.00	0.00	0.00
Anisole	32.00	0.47	47.06
Phenole	32.20	0.47	47.35
2-methylanisole	0.00	0.00	0.00
4-methylanisole	0.50	0.01	0.74
2-methylphenol (o-cresole)	10.30	0.15	15.15
4-methylphenol (p-cresole)	4.05	0.06	5.96
Guaiacol	0.00	0.00	0.00
2,6-dimethylphenol	2.04	0.03	3.00
2,4-dimethylphenol	3.20	0.05	4.71
3,5-dimethylphenol	0.50	0.01	0.74
2,3-dimethylphenol	0.00	0.00	0.00
3,4-dimethylphenol	0.30	0.00	0.44
catechol	0.00	0.00	0.00
2,3,6trimethylphenol	0.50	0.01	0.74
2,4,5trimethylphenol	1.00	0.01	1.47
2,4,6trimethylphenol	0.00	0.00	0.00
3,4,5trimethylphenol	0.40	0.01	0.59
2,3,5,6tetramethylphenol	1.10	0.02	1.62
2,3,4,6tetramethylphenol	0.50	0.01	0.74
Summation	**100.00**		
Summary			
mehylanisole	0.50	0.01	0.74
methylphenol	14.35	0.21	21.10
dimethylphenol	6.04	0.09	8.88
trimethylphenol	1.90	0.03	2.79
tetramethylphenol	1.60	0.02	2.35
BTX	11.35	0.17	16.69

Table S2: Operating and design parameters

Applied voltage (kV)	PRF (kHz)	Pin number	Gap distance (mm)	Ar Flow rate (ml/min)	Plate electrode diameter (mm)
10	20	6	5	500	20-35