

Supplementary Information

Elucidating the Role of PdAgFe Charge Transfer in Ternary Aerogels for Boosting Electro-Oxidative Degradation of Recalcitrant Di-butyl Phthalate

Sammia Khurshid¹, Muzammil Anjum¹, Rab Nawaz², Sahar Saleem³, Marlia Mohd Hanafiah^{2,4},
Azeem Khalid¹, Muhammad Umair⁵

¹Department of Environmental Sciences, PMAS Arid Agriculture University, 46300-Rawalpindi,
Pakistan

²Centre for Tropical Climate Change System, Institute of Climate Change, Universiti
Kebangsaan Malaysia (UKM), 43600-Bangi, Selangor, Malaysia

³National University of Sciences and Technology (NUST), Islamabad, 44000, Pakistan

⁴Department of Earth Sciences and Environment, Faculty of Science and Technology, Universiti
Kebangsaan Malaysia (UKM), 43600-Bangi, Selangor, Malaysia

⁵Faculty of Agricultural Engineering & Technology, PMAS-Arid Agriculture University,
Rawalpindi 46000, Pakistan

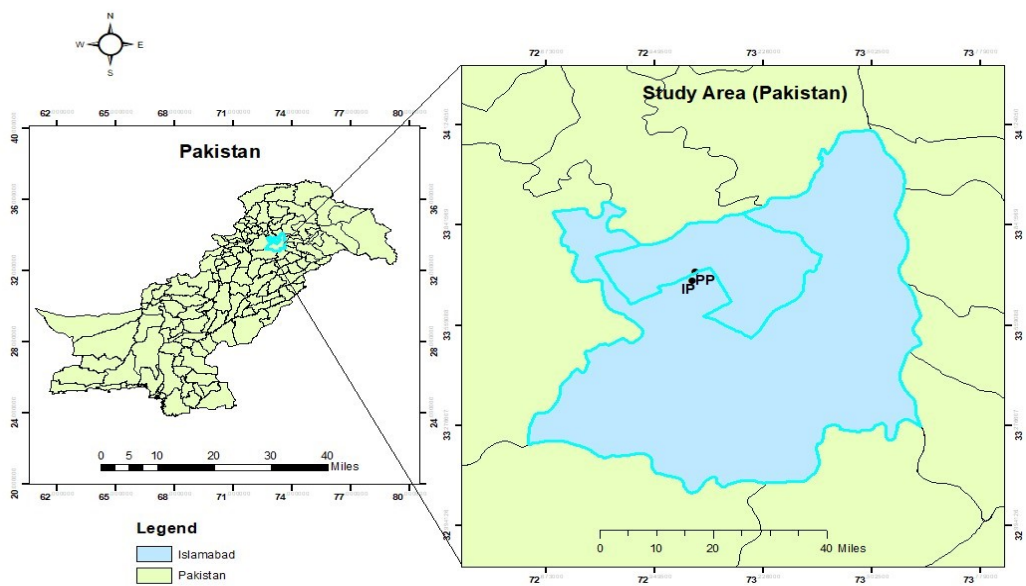


Fig. S1: Illustration of sampling points from selected industries located in Islamabad.

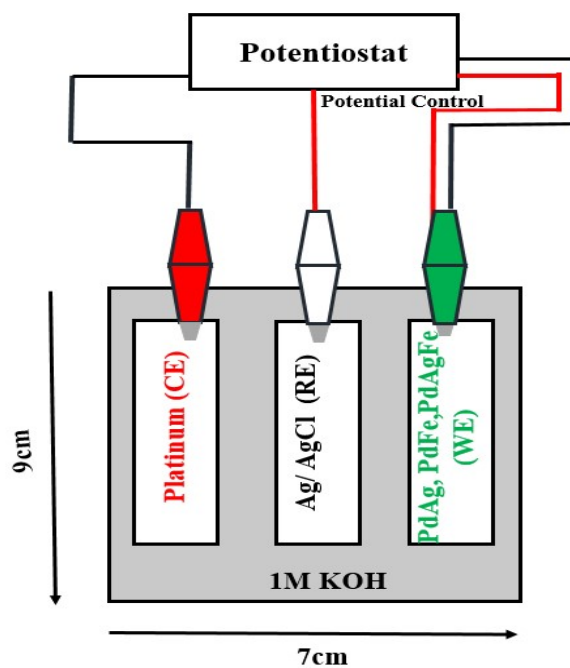


Fig. S2. Electrode Assembly in electrocatalytic cell

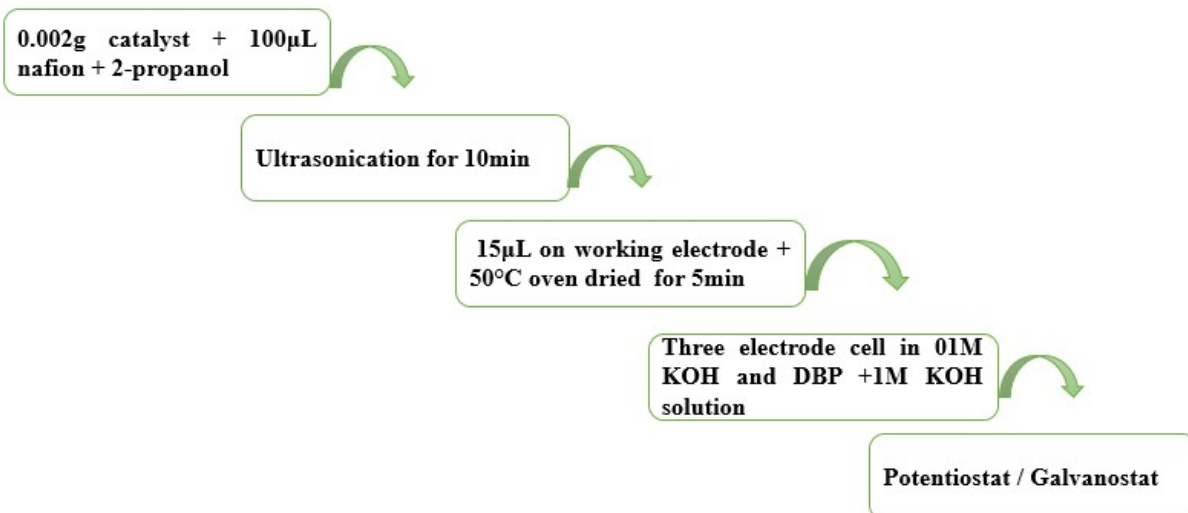


Fig. S3: Figure Schematic representation of the electrode preparation procedure

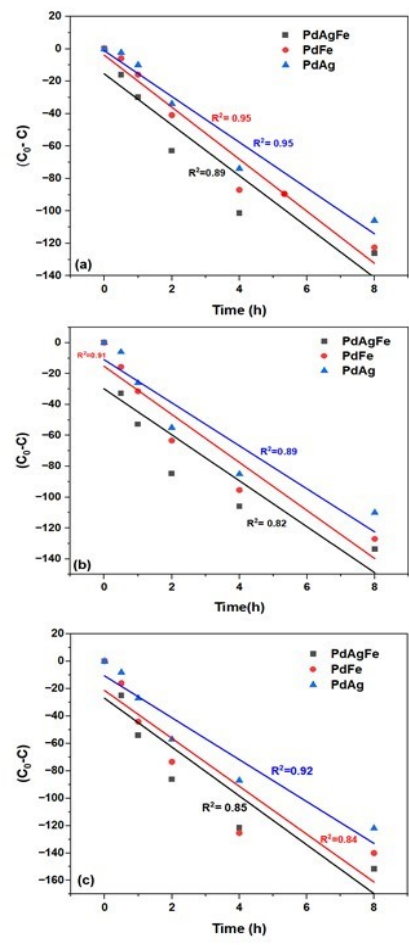


Fig. S4: Zero order Kinetic of COD removal by PdAgFe, PdFe, PdAg electrocatalyst at 30ppm (a) 60ppm (b) and 90ppm (d)

Table S1. Physicochemical characterization of industrial wastewater

Industries	pH	EC μS/cm	TDS (ppm)	TSS (%)	VS (%)	Turbidity (NTU)	COD (mg/L)
PP	6.59	1.83	143	1	60	4.05	748.8
IP	6.89	0.975	220	0.5	42	1.85	665.6
S.D	± 0.15	± 0.42	± 38.5	± 0.25	± 9	± 1.1	± 41.6

Table S2. Gas Chromatography Mass Spectrometry

Retention Time (min)	Compound Name	Match Quality	Peak Area	Relative Area (%)
PP industry sample				
2.531	Ethylbenzene	90	11,846,470	1.48
12.295	Phenol, 2,4-bis(1,1-dimethylethyl)-	97	7,059,937	0.88
22.105	Diisooctyl phthalate	91	737,329,1	92.23
IP industry sample				
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