

Supporting information

Biomass-Derived N-Doped Activated Carbon from Eucalyptus Leaves as an Efficient Supercapacitor Electrode Material

Dinesh Bejjanki ¹, Praveen Banothu ¹ and P. Sampath Kumar ^{1,*} Vijay Bhooshan Kumar

¹ Department of Chemical Engineering, National Institute of Technology Warangal, Telangana, 506004, India

² The Shmunis School of Biomedicine and Cancer Research, George S. Wise Faculty of Life Sciences, Tel Aviv University, 6997801, Tel Aviv, Israel

* Correspondence: pskr@nitw.ac.in

EDS (energy dispersive spectroscopy) was used to determine the chemical composition of ACs at different carbonization temperatures as well as the composition of NAC. The chemical composition of the different samples is shown in Table S1. According to Figure S1 and Table S1, as the carbonization temperature increases, the weight and atomic percentage of carbon increase. Carbon content increased from 80.2 to 97.5 wt.% in the AC; however, oxygen content decreased from 15.0 to 0 wt.%.

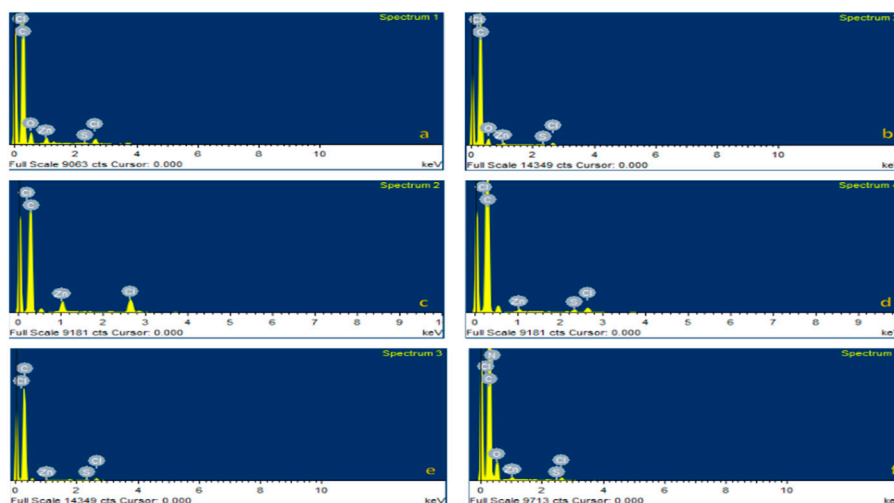


Figure S1: EDS analysis of (a) AC-400°C, (b) AC-500°C, (c) AC-600°C, (d) AC-700°C, (e) AC-800°C, and (f) NAC-700°C.

Table S1: EDS analysis of AC at various carbonization temperatures and NAC-700°C

Elements	Samples											
	AC-400		AC-500		AC-600		AC-700		AC-800		NAC-700	
	Weight (%)	Atom (%)	Weight (%)	Atom (%)	Weight (%)	Atom (%)	Weight (%)	Atom (%)	Weight (%)	Atom (%)	Weight (%)	Atom (%)
Carbon (C)	80.62	86.69	84.86	89.15	90.15	97.22	96.57	98.95	97.52	99.2	66.04	71.26
Nitrogen (N)	-	-	-	-	-	-	-	-	-	-	15.78	14.6
Oxygen (O)	15.06	12.15	13.01	10.26	-	-	-	-	-	-	17.08	13.83
Sulfur (S)	0.14	0.06	0.1	0.04	-	-	0.66	0.25	0.26	0.1	0.07	0.03
Chlorine (Cl)	1.66	0.61	1	0.35	4.95	1.81	1.74	0.6	1.81	0.62	0.45	0.16
Zinc (Zn)	2.52	0.5	1.03	0.2	4.9	0.97	1.03	0.19	0.41	0.08	0.58	0.12