

Supporting Information

Nanocomposite based on functionalized gold nanoparticles and sulfonated poly(ether ether ketone) membranes: synthesis and characterization

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Figure SI-1: FTIR spectra of the sPEEK membrane (green line), Au-3MPS NPs (blue line), nanocomposite Au-3MPS@sPEEK (red line); and free 3MPS thiol (brown line).

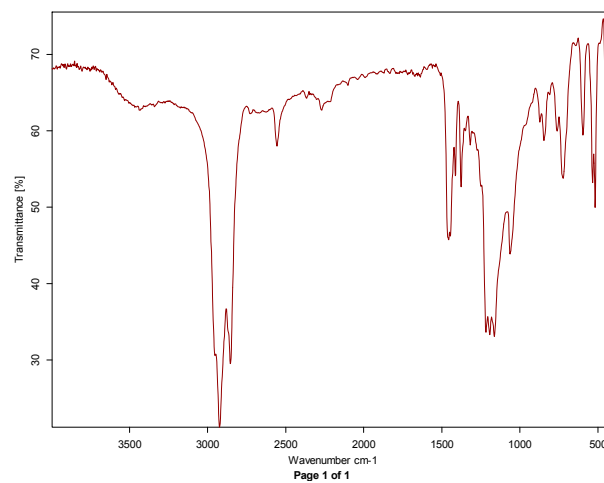
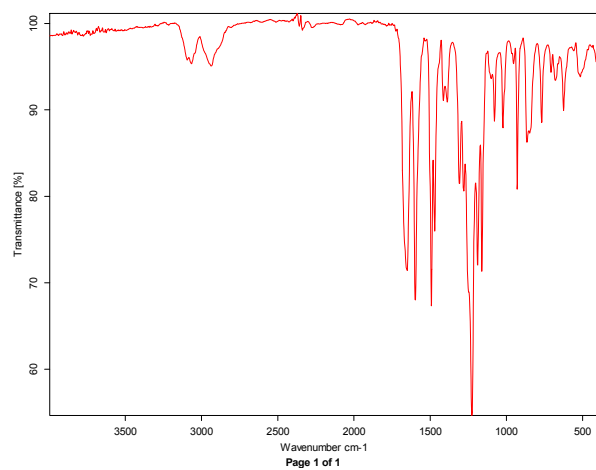
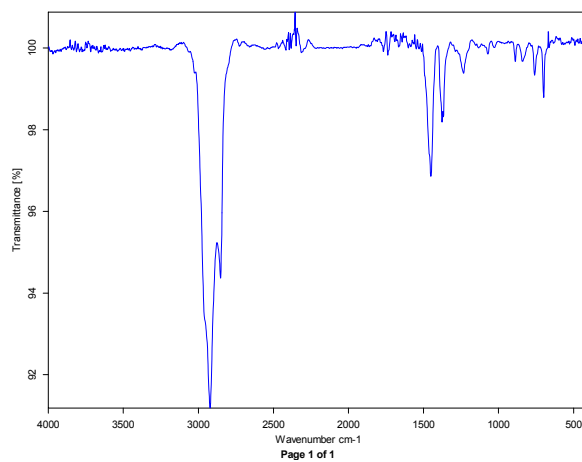
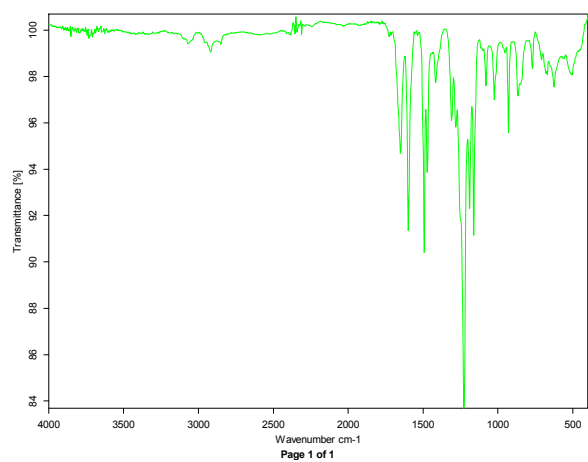


Table 1: XPS data.

sPEEK	Signal	BE (eV)	FWHM (eV)	Relative Intensity (I_{signal}/σ)	Assignment
	C1s	285.00	1.68	7364.1	C-C
		286.56	1.68	1883.9	C-S, C-O
		288.12	1.68	884.3	C=O
		289.32	1.68	489.2	COOH
	S2p _{3/2}	163.13	1.93	22.2	-SR
		167.24	1.93	30.2	-SO ₃ ⁻
	Au4f _{7/2}	83.98	0.98	0.6	Au (0)
		84.82	0.98	0.35	Au (δ^+)
	B1s	190.43	3.25	153.8	BO ₃ ³⁻
	Cl2p _{3/2}	198.27	2.72	71.2	NaCl
	O1s	530.06	1.97	791.3	Inorganic O
		532.09	1.97	2338.4	Organic O
		533.54	1.97	659.7	Physisorbed H ₂ O