Electronic Supplementary Material (ESI) for RSC Advances.

Synthesis and Characterization of Sulfophenyl-functionalized Reduced Graphene Oxide Sheets

Benjamin Diby Ossonon, Daniel Bélanger*

Département de chimie, Université du Québec à Montréal, Case Postale 8888, Succursale Centre-Ville, Montréal, QC, H3C 3P8, Canada.

***E-mail:** belanger.daniel@uqam.ca

Supporting Information

Table S1. *Atomic concentration and curve-fitting parameters obtained from the XPS spectra.*

Samples		**C sp^2**	**C sp^3**				**O 1s**			
		C=C/ C-C	C-OH	C-O-C	C=O	C(O)-O	C-OH	C-O-C	C=O	H_2O
GO	B.E. (eV)	284.4	285.8	286.6	287.5	288.6	532.7	531.7	530.7	534
	FWHM (eV)	1.6	1.4	1.2	1.2	1.1	1.4	1.5	1.6	1.45
	Peak area (a.u.)	8333	2652	3436	1421	662	4067	5768	2020	900
	Relative atomic concentration (%)	-	**33**	**42**	**17**	**8**	**37**	**46**	**16**	-
RGO	B.E. (eV)	284	285.4		287.4	289	532.7		530.5	nd
	FWHM (eV)	1.4	2.1		2.1	1.74	2.2		2.1	
	Peak area (a.u.)	12815	5450		2054	715	2727		1550	
	Relative atomic concentration (%)	-	**66**		**25**	**9**	**64**		**36**	
SRGO	B.E. (eV)	284	285.4		287.7		532.5		530.6	nd
	FWHM (eV)	1.4	2.1		2.3		2.1		2	
	Peak area (a.u.)	10524	4002		1108		2864		3935	
	Relative atomic concentration (%)	-	**78**		**22**		**42**		**58**	

B.E.: Binding Energy

FWHM: full width at half maximum

nd: not determined.

The relative atomic concentration (in %) for different functional groups is calculated with respect to the total area of the oxygenated carbon peaks.

Table S2. *Elemental analysis of RGO modified with sulfophenyl groups*

	% wt. N	**% wt. S**
SRGO	1.4	2.5

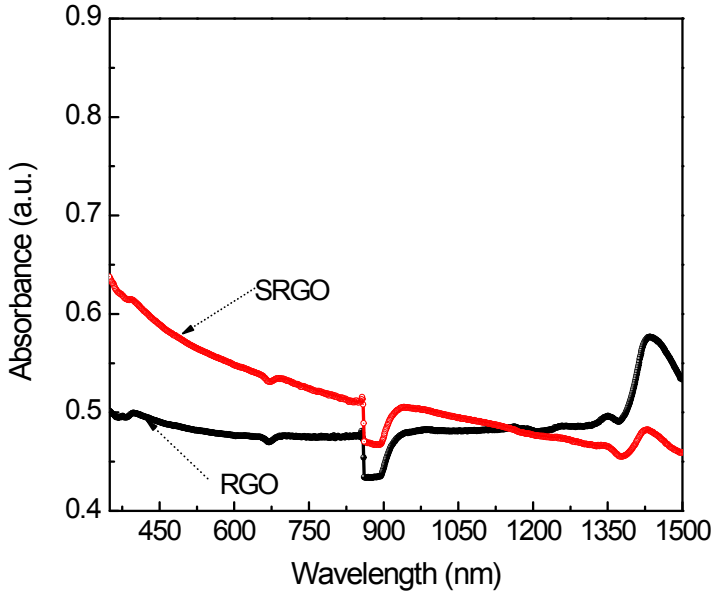

Figure S1: UV-Vis/NIR spectra of RGO and SRGO

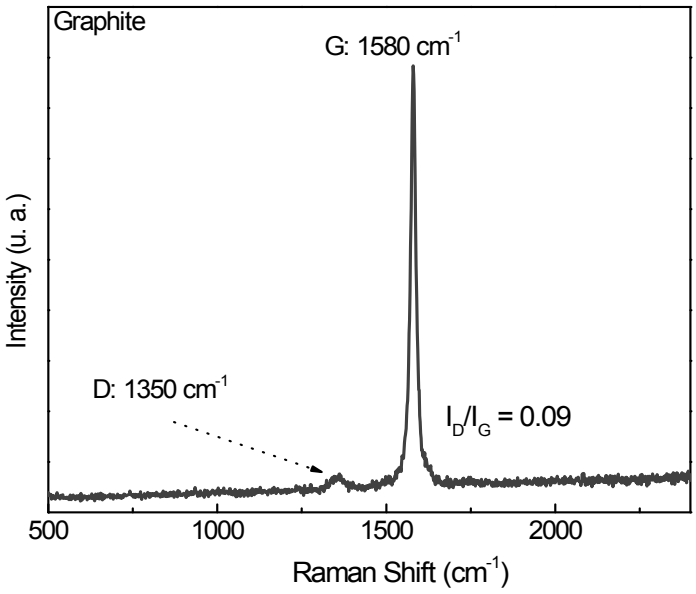

Figure S2: Raman spectrum of natural graphite powder