



## Product Datasheet

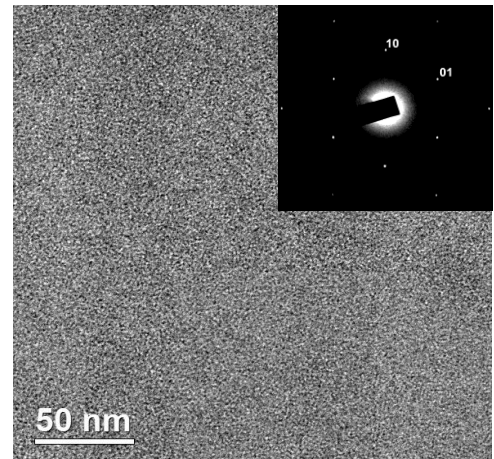
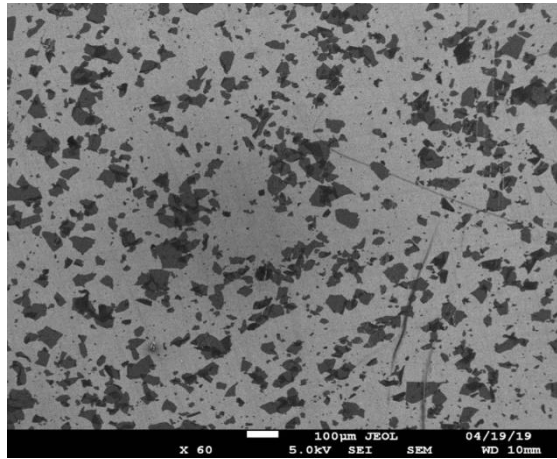
### Graphene Oxide (GO, aerogel)

#### Properties

<b>Color:</b>	Brown
<b>Density:</b>	10-14 mg/cm <sup>3</sup>
<b>Approximate dimensions:</b>	d=3-5 mm (balls) d=12mm h=20 mm (columns)
<b>Dispersibility in water:</b>	High (active >500 rpm stirring 30 min, without sonication)
<b>Dispersibility in other polar solvents:</b>	High (active >1000 rpm stirring 30 min, without sonication)
<b>Storage conditions:</b> at a temperature of 3-5 °C, without access of the light, with a tightly closed lid. Sonication of Graphene Oxide (aerogel) in any solvent decreases the initial particles size.	

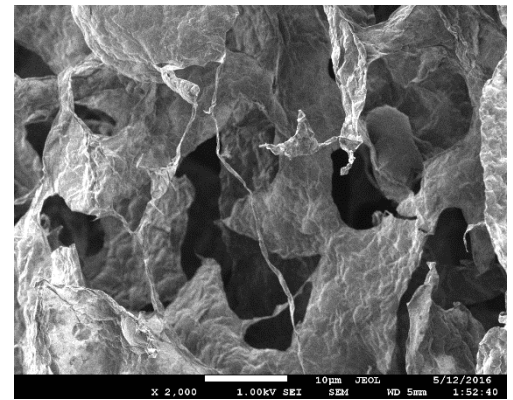
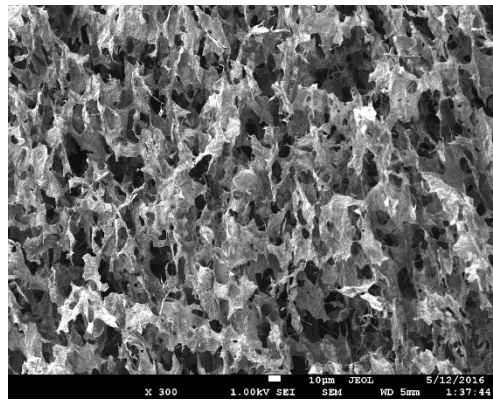
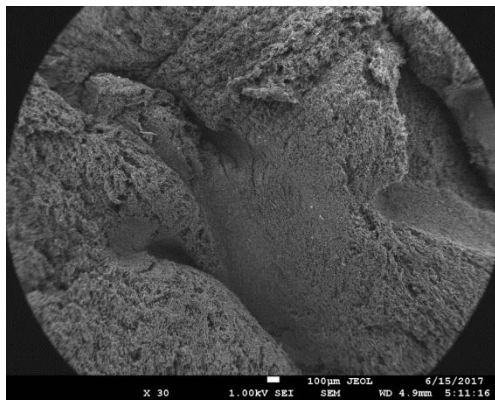
#### Chemical Composition

<b>Elemental composition: (Elemental analysis &amp; XPS)</b>	C: _____ 61.9-62.2%
	O: _____ 34.5-34.8%
	N: _____ 1.8-2%
	S: _____ 0.7-1.1%
	Other Impurities: _____ <0.5%
<b>C/O ratio: (XPS)</b>	1.824
<b>Functional composition: (XPS &amp; FTIR)</b>	C(sp <sup>2</sup> ): _____ 47.9 at.%
	C-OH&C-O-C: _____ 44.6 at.%
	C=O: _____ 7.2 at.%
	COOH: _____ 0.3 at.%

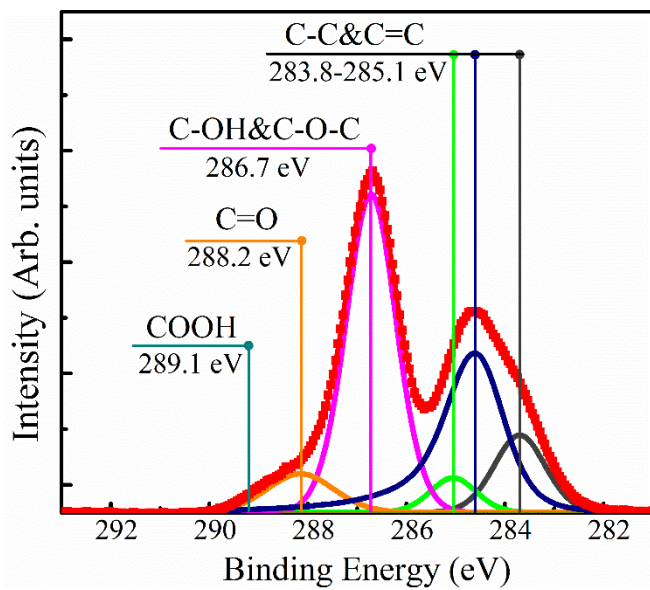


SEM Image of single sheets

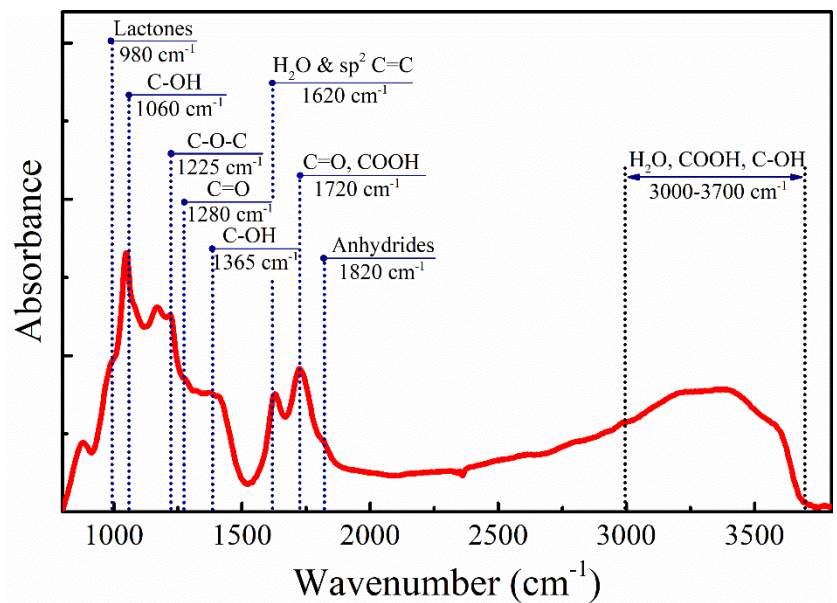
TEM image and SAED



SEM Images of aerogel



C1s XPS



ATR-FTIR