# Graphene oxide as a carbocatalyst: the first example of a one-pot sequential dehydration-hydrothiolation of secondary aryl alcohols

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### **Supporting Information**

Comparison of FT-IR Spectral data and Scanned <sup>1</sup>H and <sup>13</sup>C NMR Spectra

- 1. FT-IR spectra of GO
- 2. <sup>1</sup>H and <sup>13</sup>C-NMR Spectra (3a 3p)

#### **Characterization:**

**1.** Characterization of GO Prepared GO was characterized by IR spectroscopy in KBr, which was comparable with literature data.<sup>1</sup>

Sl. No.	Functional group	Wave number (cm <sup>-1</sup> )		Fig.1 The FT-IR Spectra of GO
		Observe	Literature <sup>2</sup>	1.4 1.2 1.0 0.8 0.4 0.2 0.0 3359.6 3500 3000 2500 2000 1500 1000 500 Wave number (cm <sup>-1</sup> )
1	O-H	3359	3368	
2	СООН	1719	1718	
3	C=C	1618	1620	
4	C-OH	1411	1413	
5	C-O-C	1218	1227	
6	C-O-C	1052	1060	

## FT-IR spectra of GO before and after use in the reaction (First run)



#### 4. References

1. D. Han, L. Yan, W. Chen, W. Li, P.R. Bangal, *Carbohydr. Polym.*, 2011, 83, 966.











































