

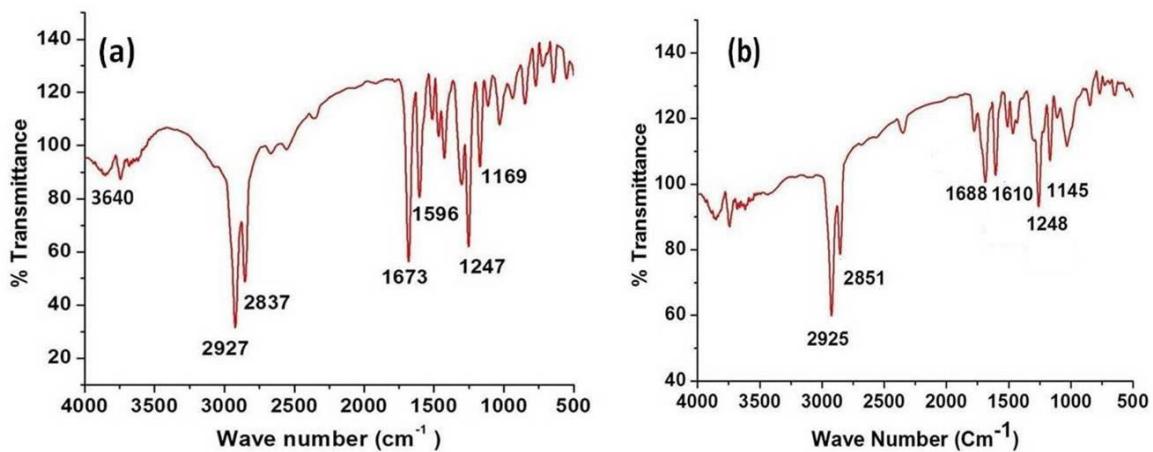
# Grafting a mesomorphic Schiff base onto gold nanoparticle via ester link – photoluminescence, mesomorphism, electrical conductivity and antioxidant activity

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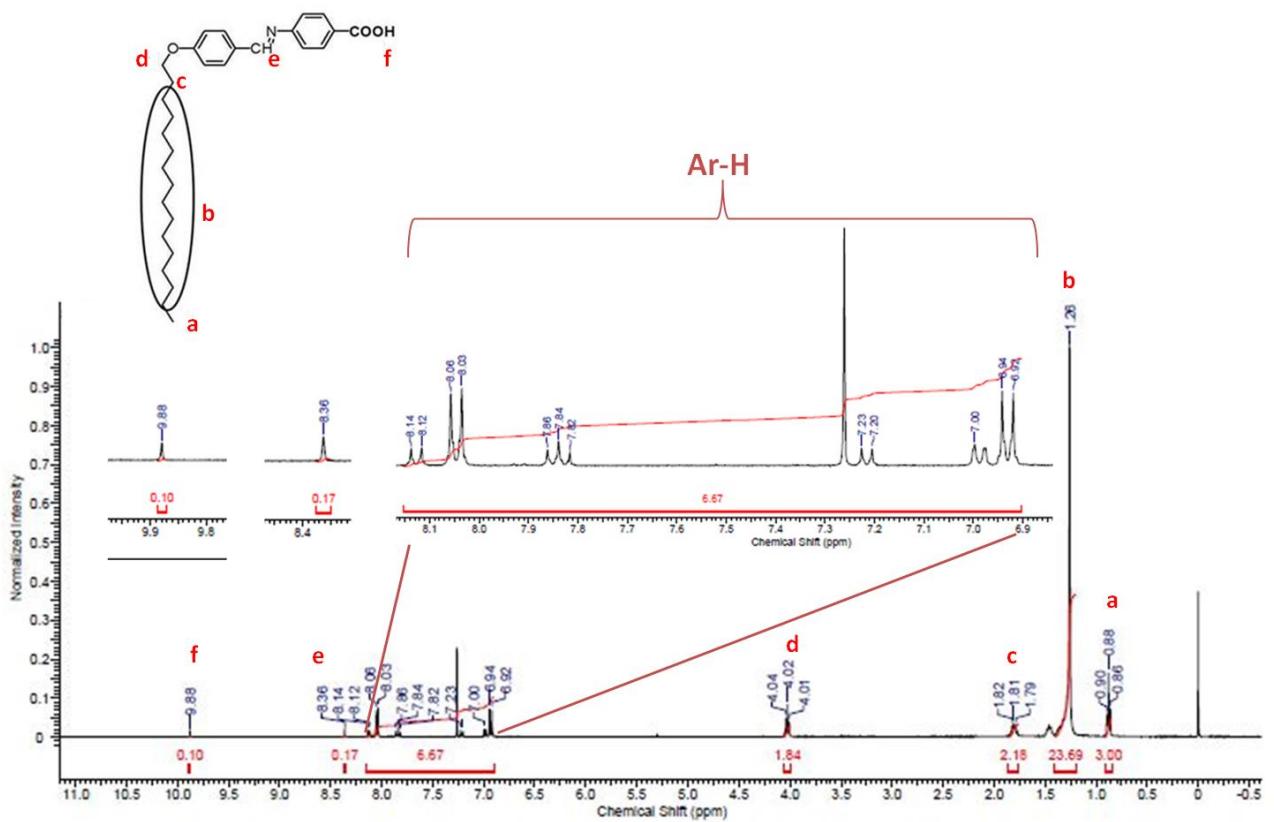
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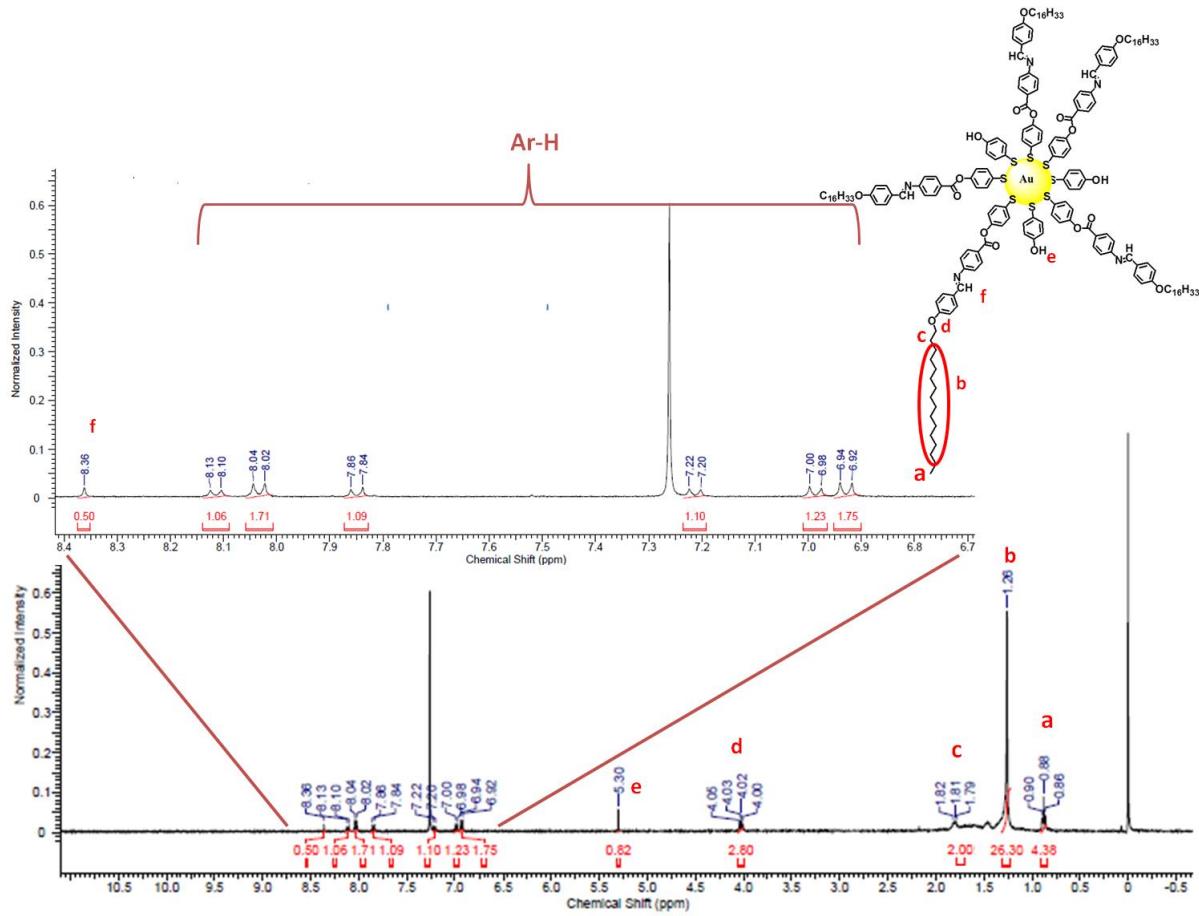
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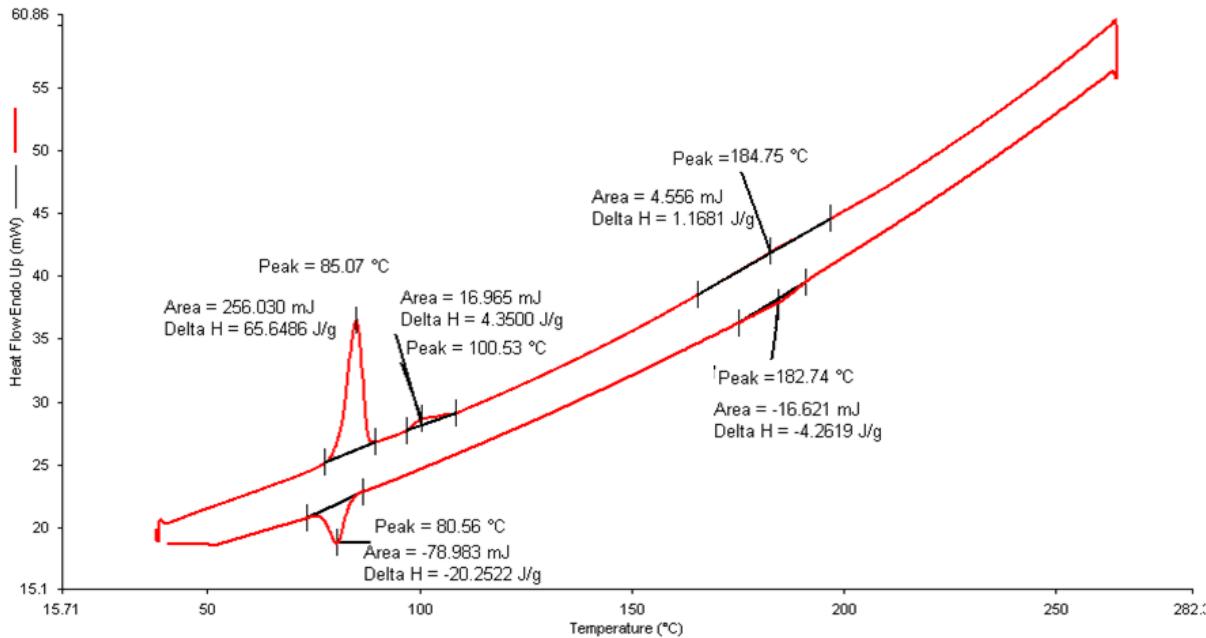
**Fig.S1.** IR spectrum of the (a) Schiff Base (b) GNP-LC composite



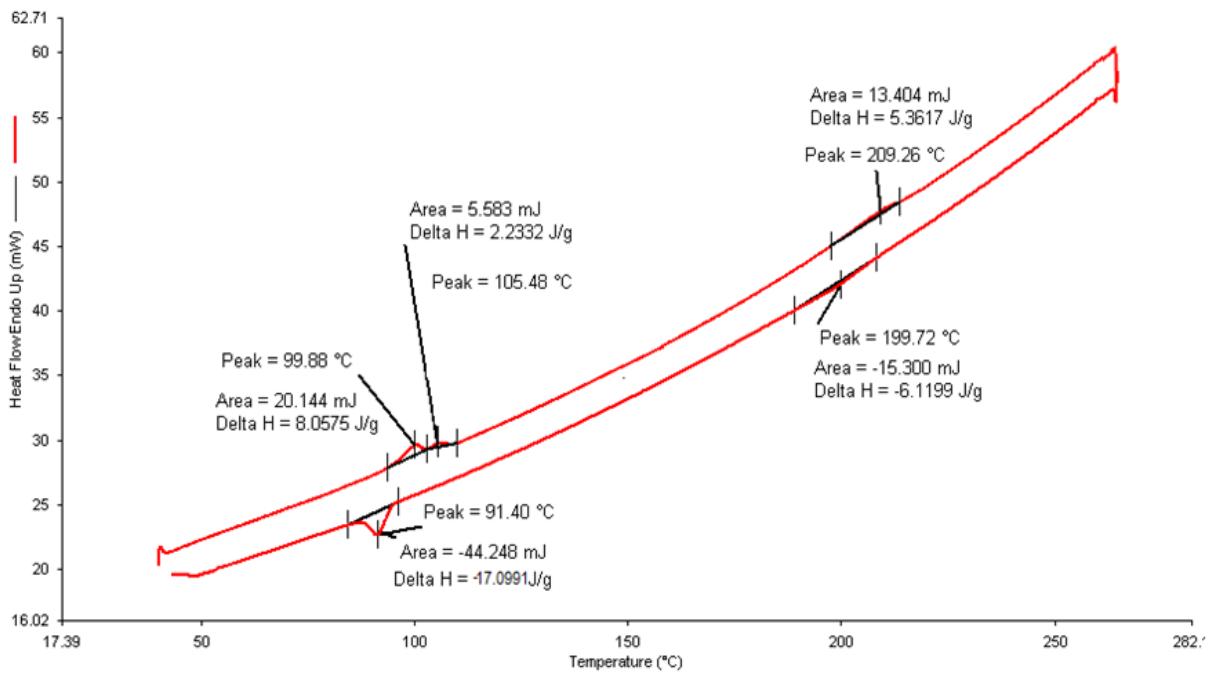
### **Fig.S2(a) $^1\text{H}$ NMR spectrum of Schiff base**



**Fig.S2(b).**  $^1\text{H}$  NMR spectrum of GNP-LC composite



**Fig.S3(a)** DSC thermogram for Schiff base LC



**Fig.S3(b)** DSC thermogram for GNP-LC hybrid