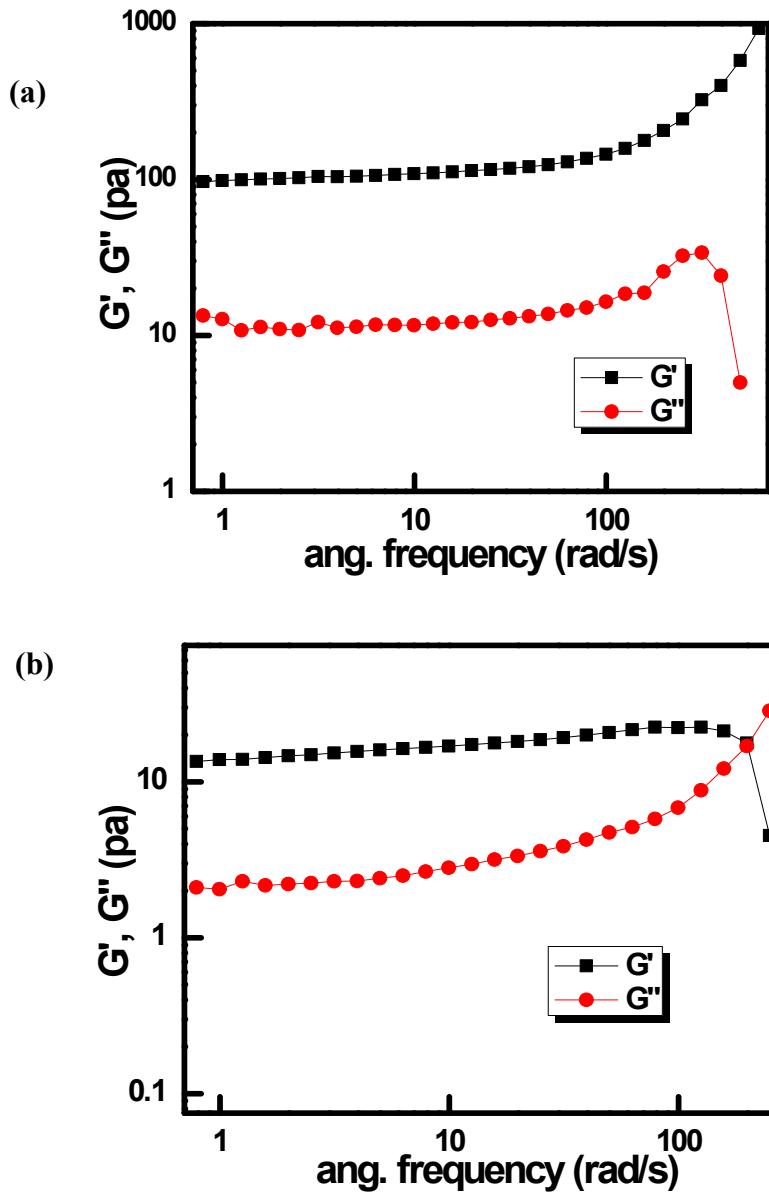


## Supporting Information

### **Rheological and Fluorescent Properties of Riboflavin - Poly (N-isopropylacrylamide) Hybrid Hydrogel with a Potentiality of Forming Ag Nanoparticle**

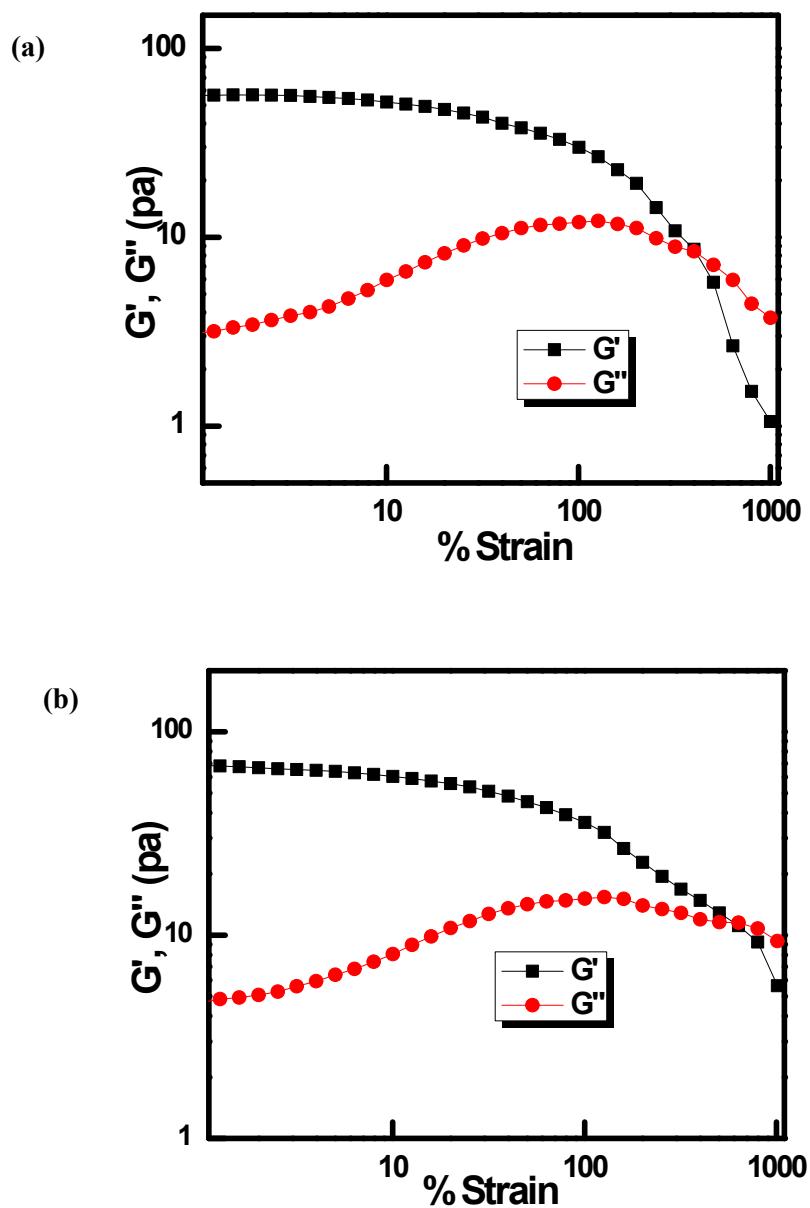
Priyadarshi Chakraborty, Partha Bairi, Bappaditya Roy and Arun K. Nandi\*

Polymer Science Unit,  
Indian Association for the cultivation of Science,  
Jadavpur, Kolkata-700 032, INDIA

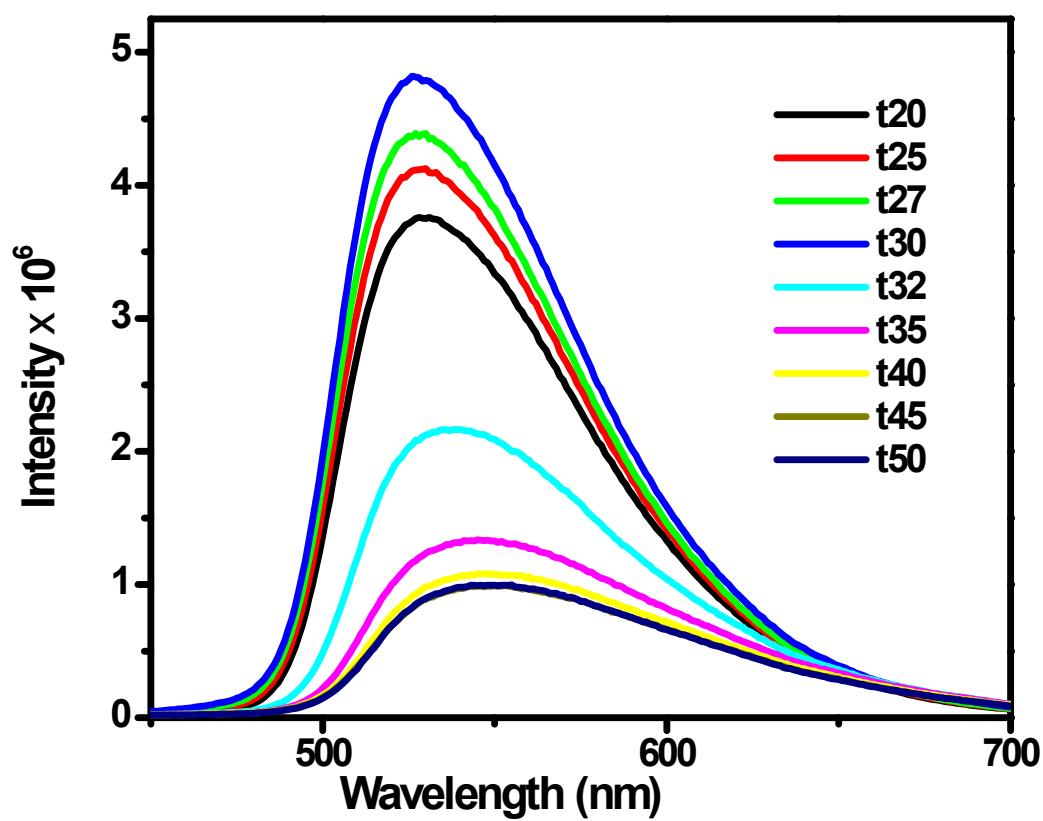


**Figure S1.** Oscillation frequency dependency of the modulus values

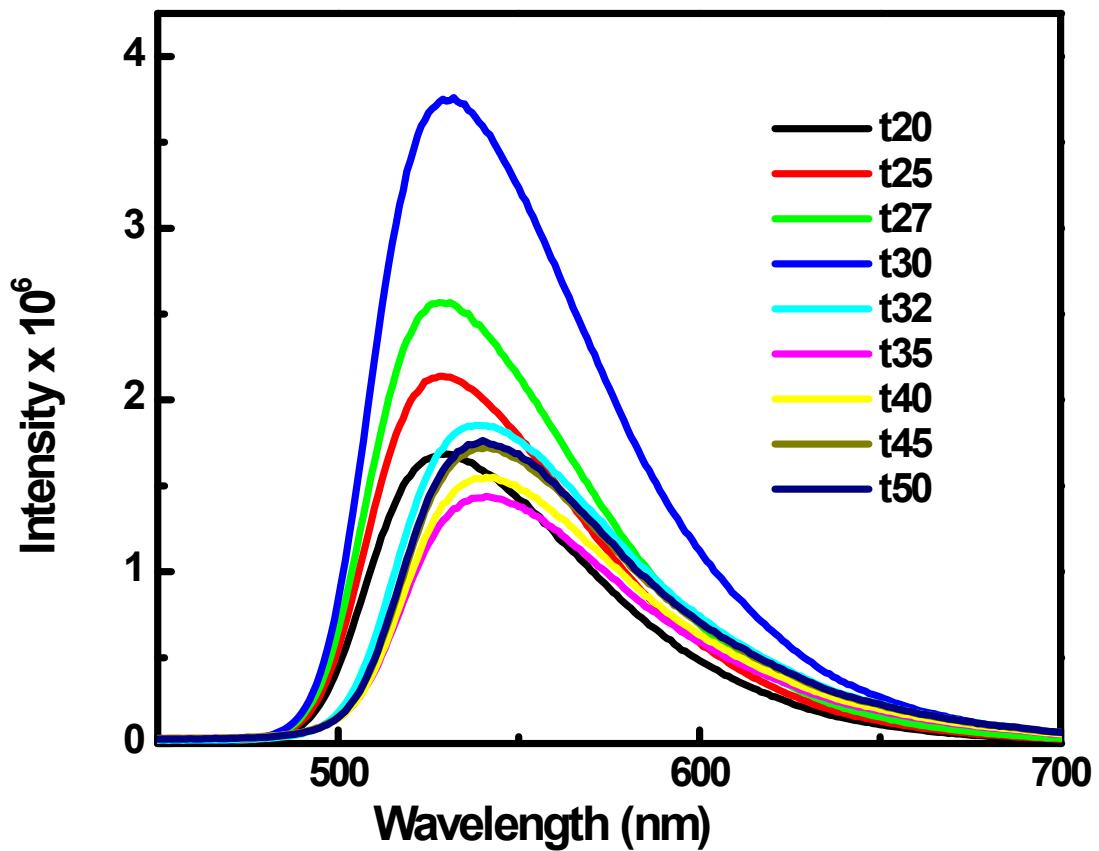
$G'$  and  $G''$  of (a) **R-PNIPAAm2** and (b) **R-PNIPAAm3** gels



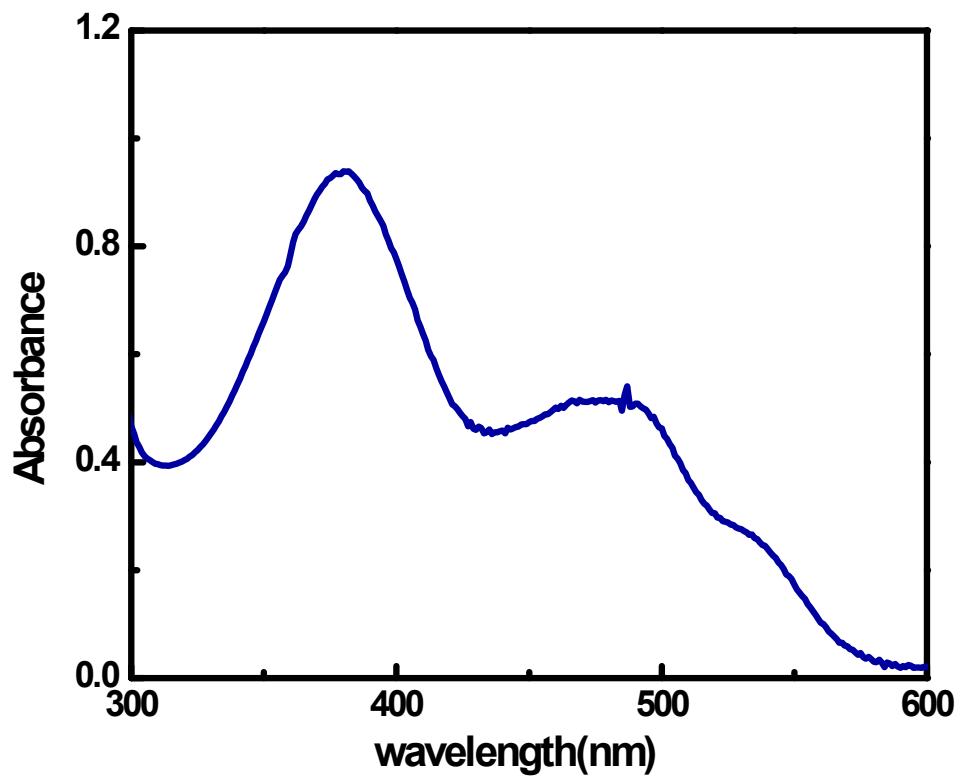
**Figure S2** (a)  $G'$  and  $G''$  vs % strain plot of **R-PNIPAAm2** gel and  
(b) **R-PNIPAAm3** gel at a constant frequency of 1 Hz.



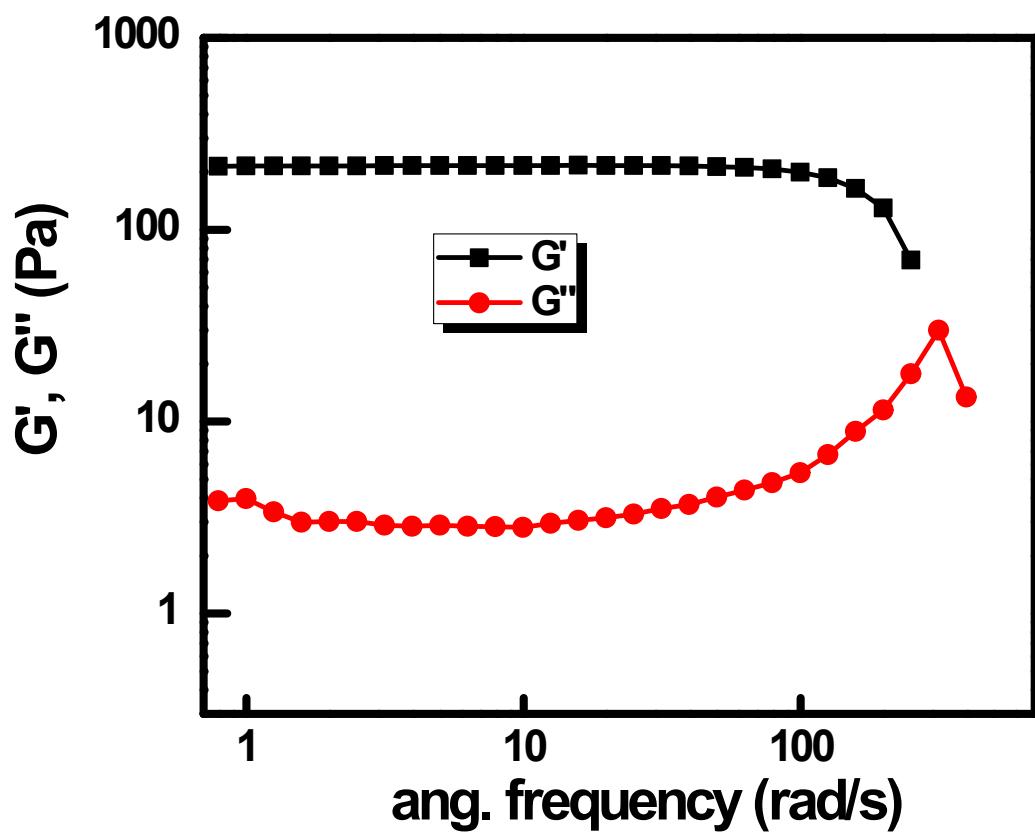
**Figure S3.** Temperature dependent fluorescence spectra of R-PNIPAAm gel at pH 4.



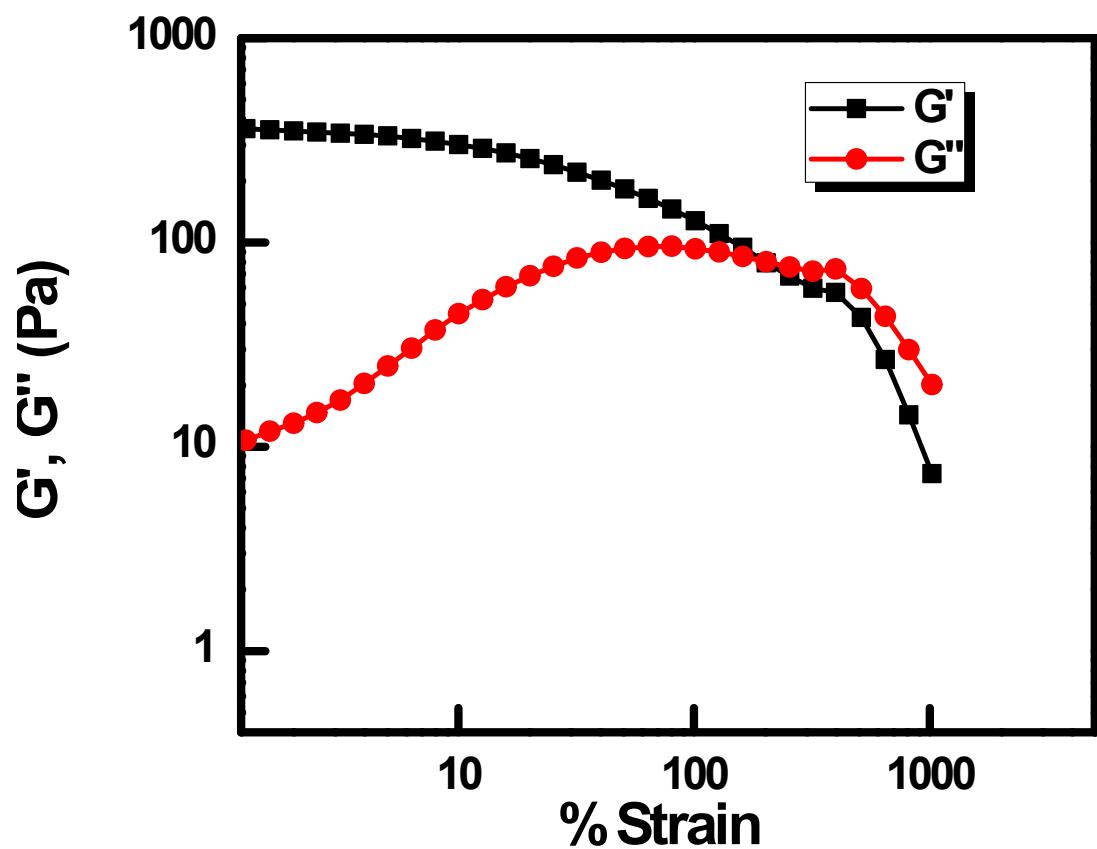
**Figure S4.** Temperature dependent fluorescence spectra of R-PNIPAAm gel at pH 9.2



**Figure S5.** UV-vis spectra of Ag nanoparticle embedded **R-PNIPAAm** hydrogel



**Figure S6.** Oscillation frequency dependency of the modulus values  $G'$  and  $G''$  of Ag nanoparticle embedded **R-PNIPAAm** gels.



**Figure S7.**  $G'$  and  $G''$  vs % strain plot of nanoparticle embedded R-PNIPAAm

gel at a constant frequency of 1 Hz.