

Supporting Information

Enhanced Fluorescent Intensity of Graphene Oxide - Methyl Cellulose Hybrid in Acidic Medium : Sensing of Nitro-aromatics

Aniruddha Kundu, Rama K. Layek and Arun K. Nandi*

Polymer Science Unit, Indian Association for the Cultivation of Science,

Jadavpur, Kolkata--700 032, India

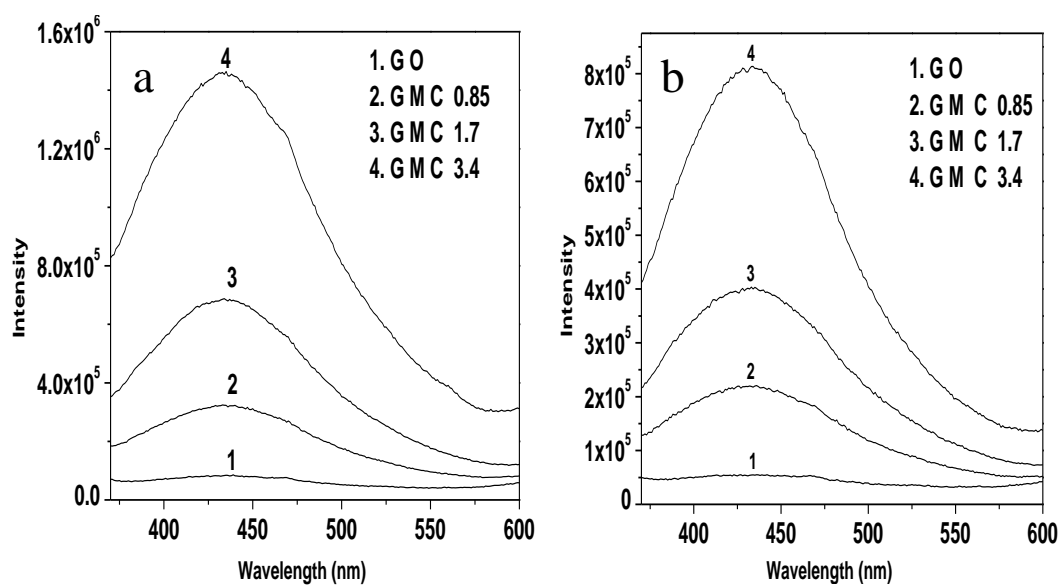


Fig S1. PL spectra of pure GO and GMC at different concentration (a)
at pH 7 (b) at 9.2

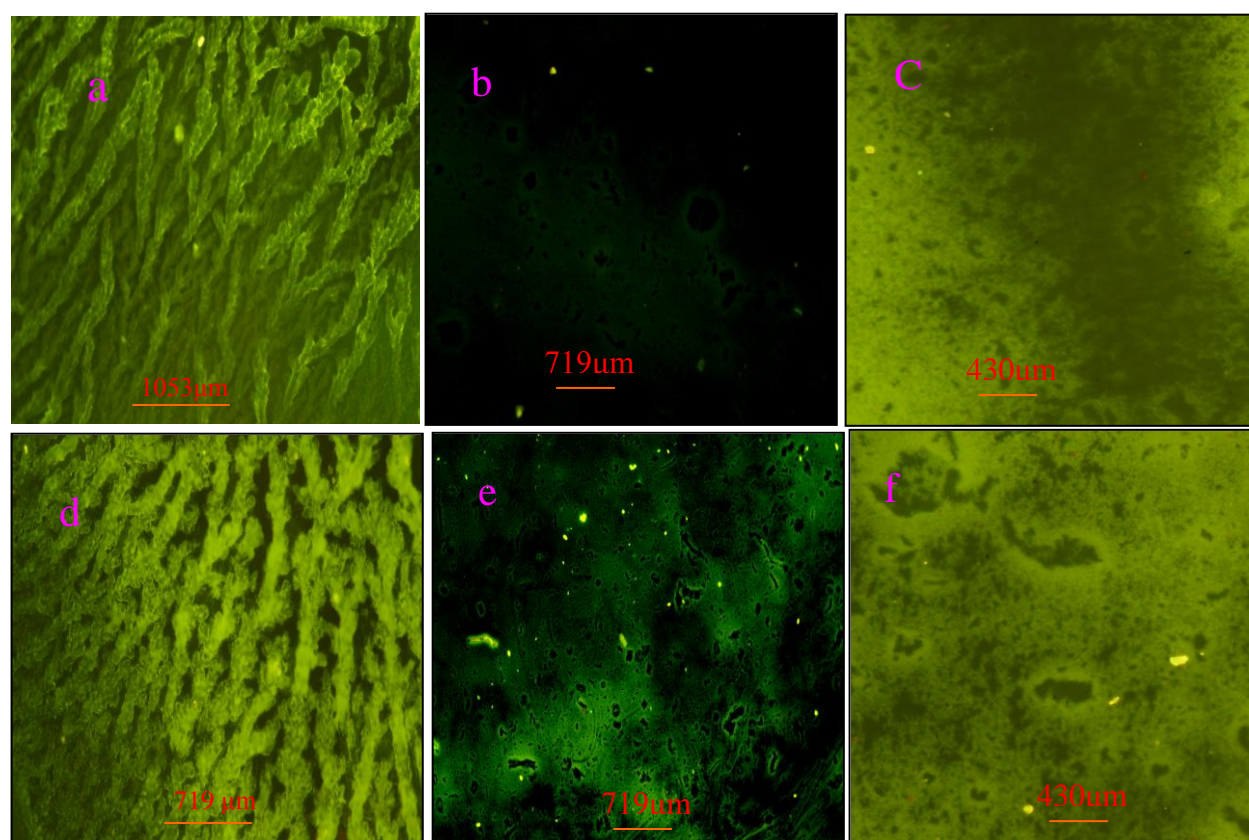


Fig S2. Fluorescence micrographs of GMC 1.7 (a, b, c) and GMC 3.4 (d, e, f) at pH 4, pH 7 and pH 9.2, respectively.

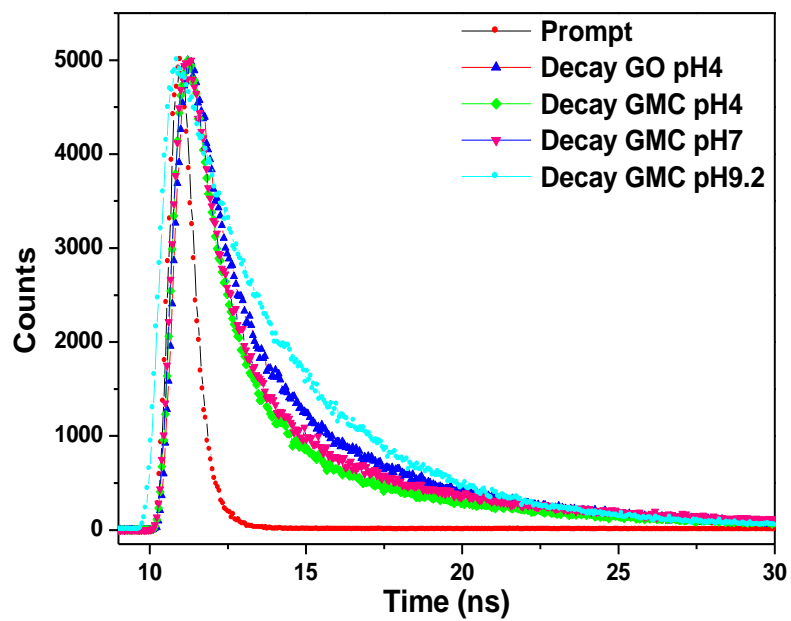


Fig S3. Time –resolved PL of GO (at pH4) and GMC3.4 at different pH.

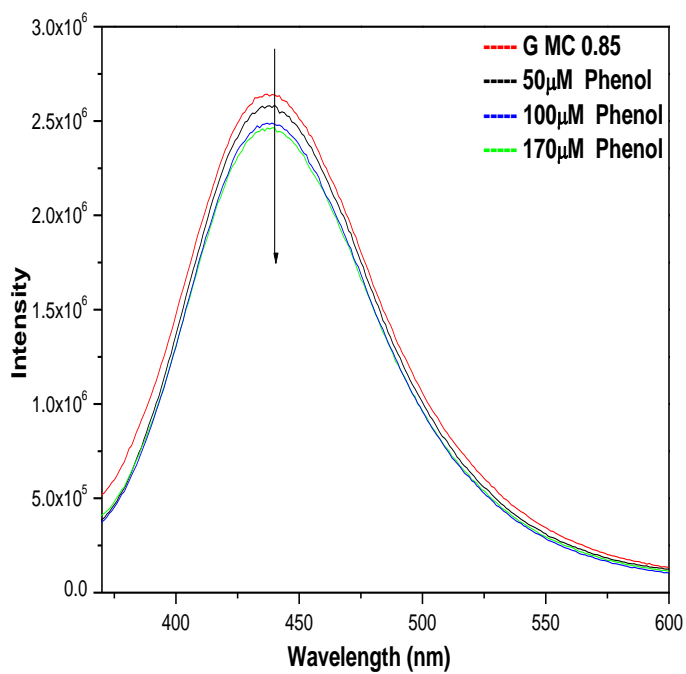


Fig S4. Fluorescence titration of GMC solution at pH=4
with different micro molar phenol solution.

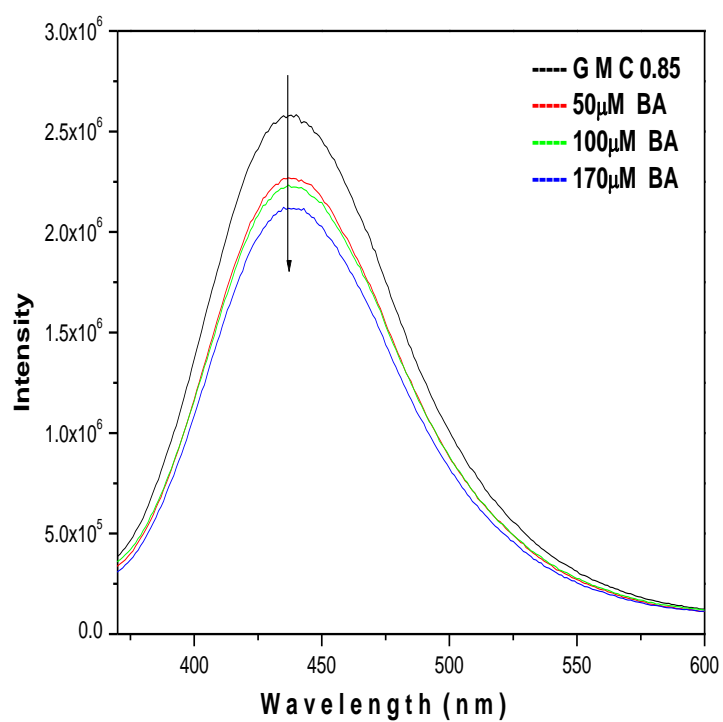


Fig S5. Fluorescence titration of GMC solution at pH=4 with different micro molar benzoic acid (BA) solution.

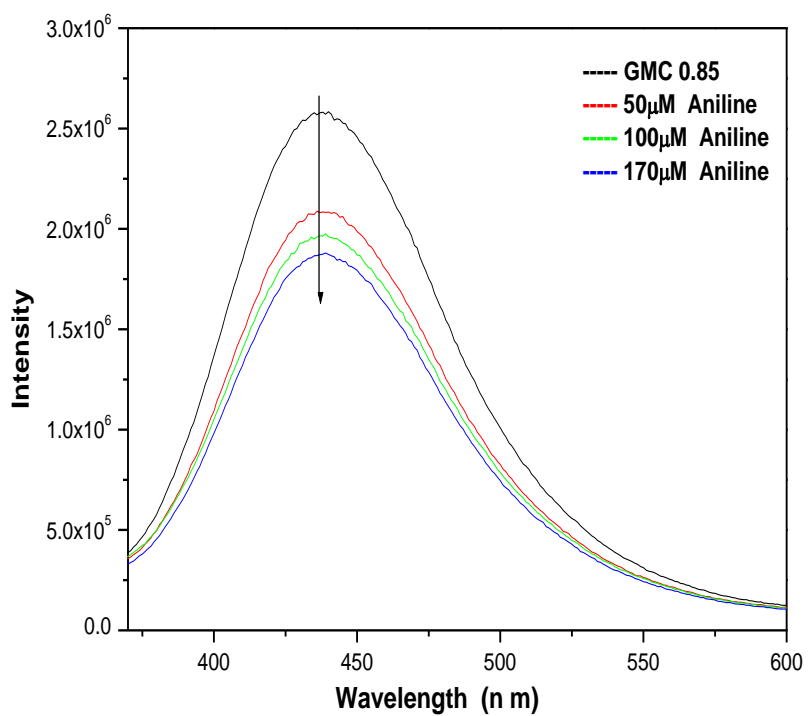


Fig S6. Fluorescence titration of GMC solution at pH=4
with different micro molar aniline solution.

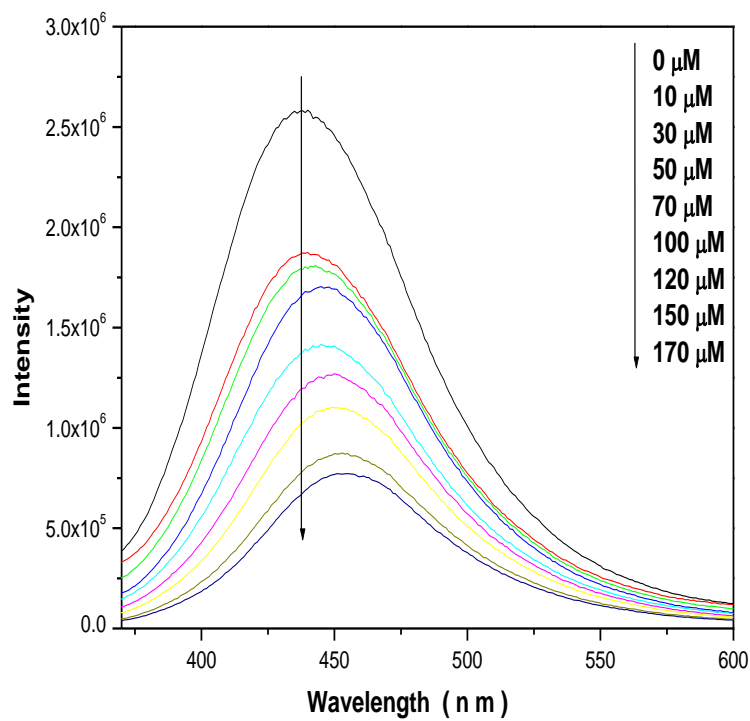


Fig S7. Fluorescence titration of GMC 0.85 solution at pH=4
with different micro molar nitrophenol solution.

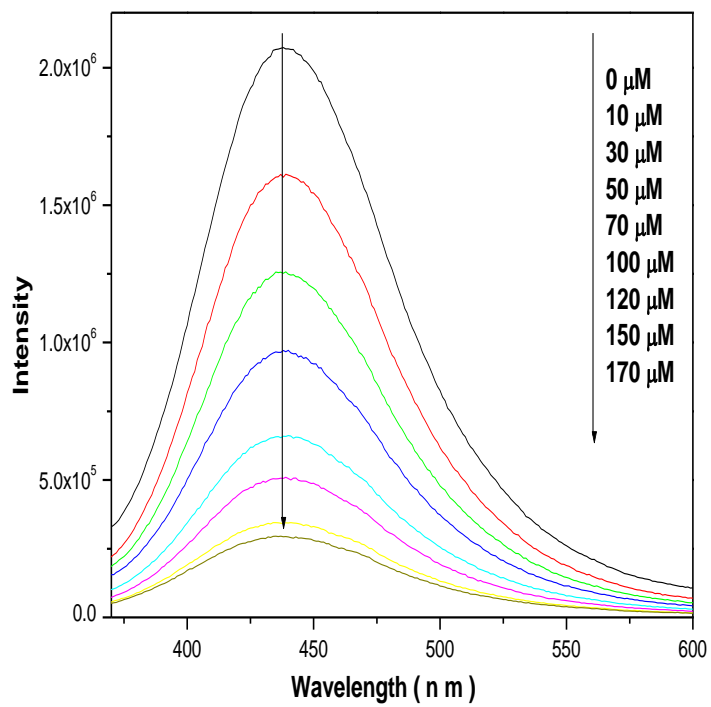


Fig S8. Fluorescence titration of GMC 0.85 solution at pH=4
with different micro molar 2,4-dinitrophenol solution.

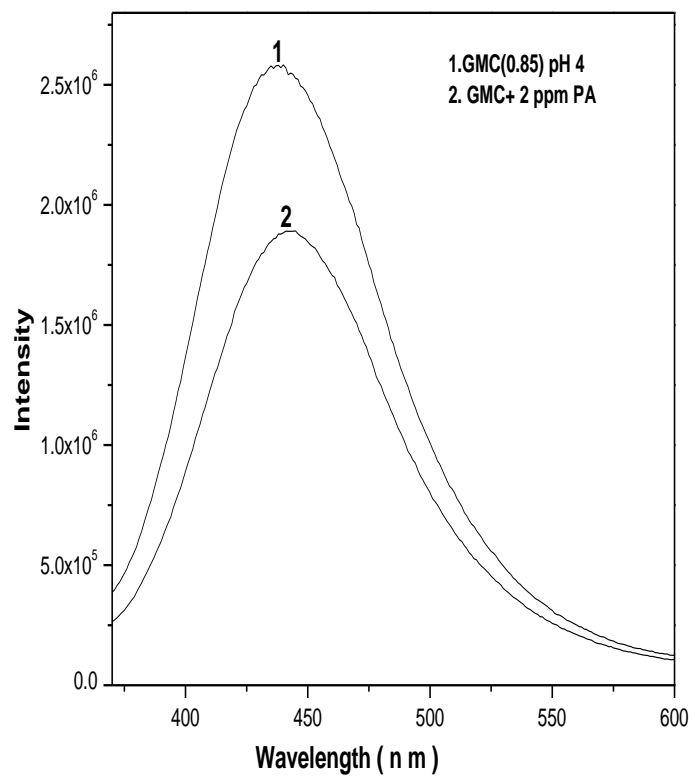


Fig S9. Sensing efficiency (in ppm level) of GMC sensor at pH4.

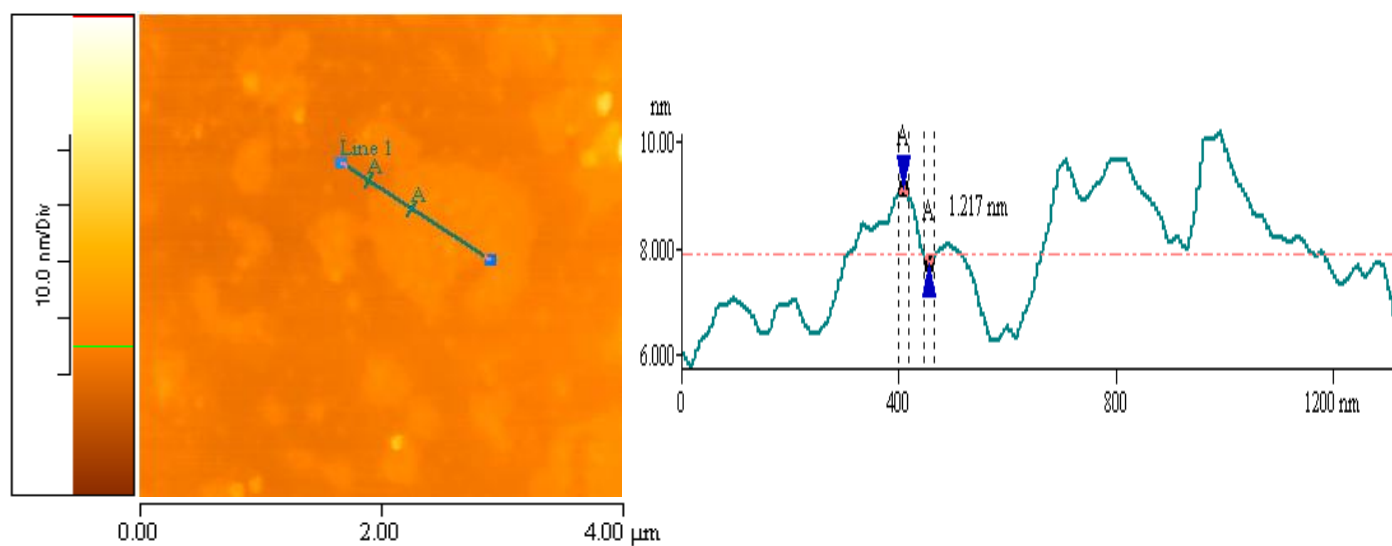


Fig S10. AFM image and height profile of GO.