

## Supporting Information (SI)

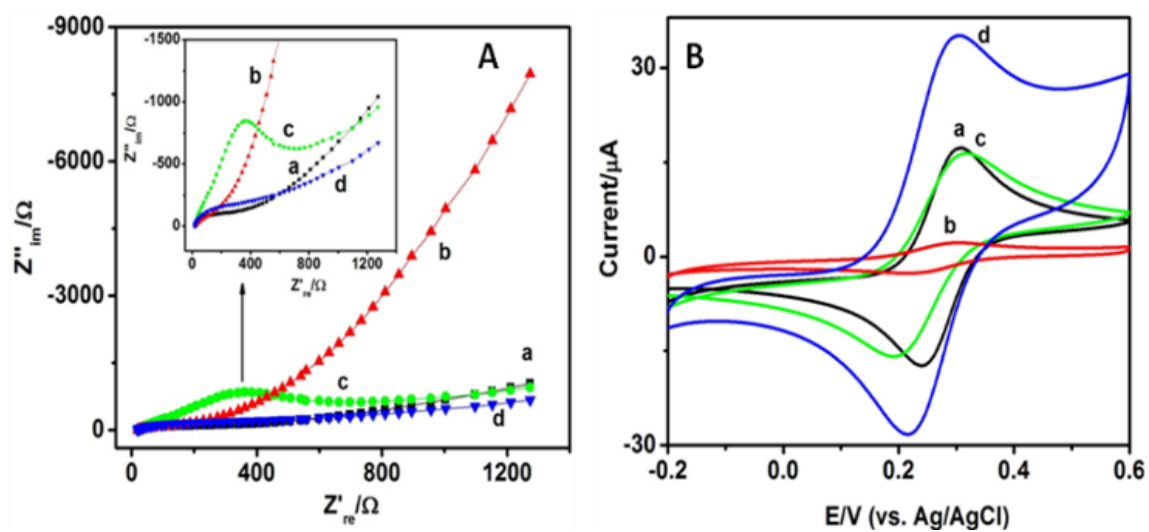
**A new strategy for simultaneous determination of 4-aminophenol, uric acid and nitrite based on graphene/hydroxyapatite composite modified glassy carbon electrode**

**N. Lavanya<sup>a</sup>, N. Sudhan<sup>a</sup>, P. Kanchana<sup>a</sup>, S. Radhakrishnan<sup>b</sup> and C. Sekar<sup>a\*</sup>**

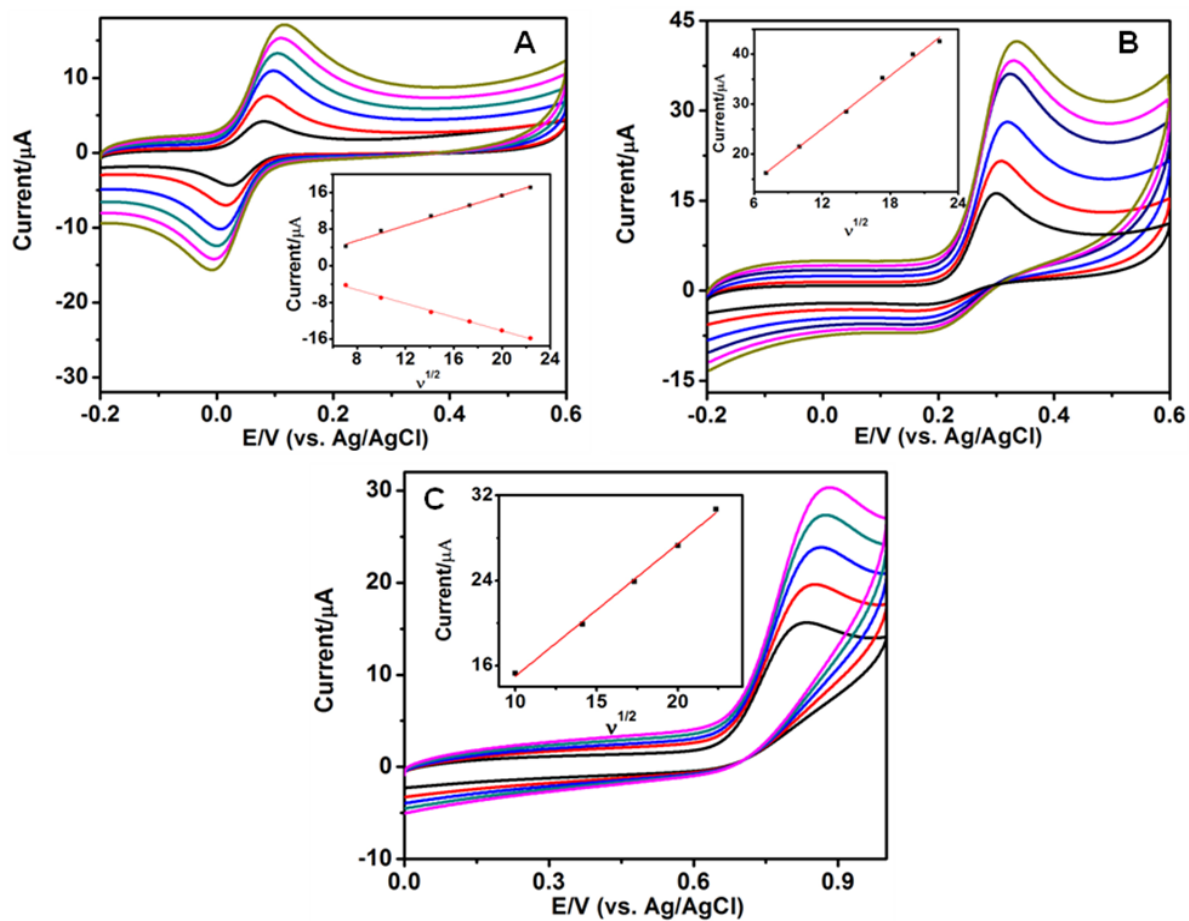
*<sup>a</sup>Department of Bioelectronics and Biosensors, Alagappa University, Karaikudi  
630003, Tamilnadu, India.*

*<sup>b</sup>Nanomaterials and System Lab, Department of Mechanical System Engineering, Jeju  
National University, Jeju 690-756, Republic of Korea*

*\*E-mail: Sekar2025@gmail.com Phone: +91 9442563637.*



**Figure S1** (A) Electrochemical impedance spectra of (a) bare GC, (b) GO, (c) HAP, and (d) graphene/HAP recorded at the DC potential 200 mV, AC potential  $\pm 5$  mV in presence of 0.1 M KCl solution containing 1 mM  $[\text{Fe}(\text{CN})_6]^{3-/4-}$  and (B) CVs of (a) bare GCE, (b) GO, (c) HAP and (d) graphene/HAP modified GC electrodes in 0.1 M KCl containing 1 mM  $[\text{Fe}(\text{CN})_6]^{3-/4-}$  measured at a scan rate of 50 mV/s.



**Figure S2** CVs obtained for (A) 0.1 mM 4-AP, (B) 0.5 mM UA, and (C) 0.5 mM NO<sub>2</sub><sup>-</sup> in 0.1 M PBS (pH 7.0) at the graphene/HAP/GCE at different scan rates (50–500 mV s<sup>-1</sup>). Inset shows plot of the peak current vs. square root of scan rate.