

# Comparison of two methods for graphene oxide nanomaterials synthesis for the analyte signal production

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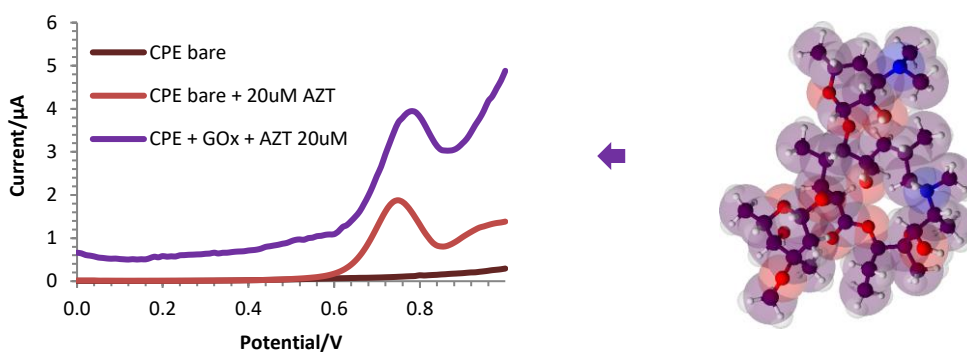
## Abstract

Carbon based materials are widely used for electrochemical sensing as well as anodes for electrochemical removal of organic pollutants from aquatic media [1,2]. Graphene has attracted a lot of attention for electrochemical applications, due to its characteristic physico-chemical properties. In this work graphene oxide nanomaterials were synthesized by electrochemical exfoliation and the modified Hummer's method [3]. The obtained nanomaterials were applied comparatively as modifiers for carbon paste working electrode for cyclic voltammetry of azithromycin (AZT) in phosphate buffer (PBS) at pH 8.5 [4]. The material was prepared in the form of paste and lodged into the teflon holder. Both materials produced improved voltammetric peaks for AZT, in comparison to carbon paste electrode.

## References

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## Figures



**Figure 1:** Voltammogram of azithromycin. [AZT] = 50 µM, Scan rate = 0.05 V/s, PBS pH = 8.5.