

## Facile Preparation of Graphene Oxide Nanoparticles for Biomedical Applications

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From National Conference on Interdisciplinary Research and Innovations in Biosciences, NATCON -2018. Post Graduate & Research Department of Biochemistry, Mohamed Sathak College of Arts & Science, Sholinganallur, Chennai-600119, India. 24<sup>th</sup> & 25<sup>th</sup> January 2018.

American J of Bio-pharm Biochem and Life Sci 2018 January, Vol. 4 (Suppl 1): PP30

### ABSTRACT

Graphene oxide (GO) based biomaterials have been widely utilized for multiple applications, ranging from electronics to biomedicine. Protein Conjugated GO nanocomposites are of great importance in stimuli-responsive drug delivery and controlled release therapy. In the present study, GO was modified by carbodiimide-induced covalent cross-linking with protein by a simple two-step strategy. The prepared modified graphene oxide (GO) nanocomposites were characterized using UV-Vis spectrophotometer and particle size analyzer. The GO nanocomposites can be exploited for their use in drug delivery, tissue engineering and bio-sensing applications.