Development of an Electrochemical Biosensor for Rapid Detection of Foodborne Pathogenic Bacteria

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The development of quick, sensitive and targeted approaches to detect foodborne pathogenic bacteria is very critical to the implementation of efficient practice to guarantee food security. We reported the results of research relevant to fabrication of the graphene wrapped copper (II) assisted cysteine hierarchical structure (rGO-Cu(II)) synthesised under moderate, aqueous as well as eco-friendly conditions. A super sensitive unmarked electrochemical immunosensor for quantitative assay of *Staphylococcus aureus* has been formed with the use of rGO-Cu(II) as the sensing layer..

Keywords: Pathogenic bacteria; Graphene; Nanocomposite; *Staphylococcus aureus*; Immunosensor

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