Use of Biosensors for Monitoring Pathogenic Microorganisms and Prevention of Infection in Hospital Environments

Speaker: *Dra. Gabriela Byzynski Soares*

NanoChemTech Solutions

In this talk, we explore the crucial role of biosensors in detecting and monitoring pathogenic microorganisms in hospital environments. Biosensors represent an innovative technology that offers fast, sensitive and accurate methods to identify the presence of bacteria, viruses and other infectious agents. Throughout the presentation, we discuss the advantages of biosensors compared to traditional pathogen detection methods, highlighting their ability to provide real-time results, allowing rapid and effective intervention to prevent the spread of hospital-acquired infections. Furthermore, we address the practical applications of biosensors in the hospital context, from monitoring surfaces and equipment to monitoring water and air quality. We also highlight strategies to efficiently integrate these technologies into infection prevention protocols, aiming to ensure the safety of patients, healthcare professionals and visitors. Finally, we emphasize the importance of collaboration between healthcare professionals, engineers, scientists and manufacturers in the continuous research and development of biosensors, in order to constantly improve the tools available for monitoring and preventing infections in hospital environments