

Internal Webinar

Sensitive detection of analytes for biomedical diagnosis: The potential of Raman Spectroscopy and Imaging

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Cancer, cardiovascular diseases, infectious, and parasitic diseases etc. are the leading causes of death across the globe. Early detection and reliable diagnosis of these deadly diseases are the keys to reduce the mortality and morbidity rate. In recent years, optical techniques especially Raman spectroscopy has shown great potential for early and accurate disease diagnosis. The in-built properties of molecular specificity, portable instrumentation, real-time diagnosis, and no specific samples preparation protocol make Raman spectroscopy a feasible substitute for the currently used conventional technologies. In this presentation, I will briefly describe that what I have done in this direction and what I can contribute for further particle imaging, structural and biochemical analysis of biomolecules using Raman spectroscopy and imaging.

Wednesday, Oct 21st 2020

2:30 PM