

SESORS For Deep Tissue Biological Applications

A team from Duke University in the US is using Raman spectroscopy for sensing in biological tissue. Raman spectroscopy is being used for several applications in life sciences, the researchers mention cancer detection, inflammation monitoring and measurements of glucose levels as examples.

In their article they show recent progress on measuring signal from surface enhanced Raman scattering (SERS) probes using a spatially offset Raman spectroscopy technique. The combined approach is often called SESORS and is investigated by several research groups around the world. The team from Duke show that they can isolate the SERS spectra from nanoparticles deep inside tissue.

A high throughput detection system optimized for the NIR (where tissue fluorescence is low) with wide aperture and ability to resolve several spectral channels is ideal for these measurements.

Featured Paper/ Publication: [Surface-enhanced spatially offset Raman spectroscopy \(SESORS\) for biomedical applications](#), Advanced Biomedical and Clinical Diagnostic and Surgical Guidance Systems XVI, 2018

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