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Raman Spectroscopy from Optical Trapped Nano Coated Microsphere Complexes EMANUELA ENE, CHUCK BLACKLEDGE, JAMES WICKSTED, Oklahoma State University — The Raman measurements from optically trapped gold nanowires and from nanoparticles coated on microspheres, under various visible laser excitation wavelengths, are being studied. Changes in the Raman spectra for the trapped coated microspheres when they were positioned at different distances from an immersed photonic crystal (PC) are being investigated. We are also developing a method which has the potential of detecting certain molecules present in biological environments.

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