



### Il Dipartimento di Scienze Chimiche accoglie il

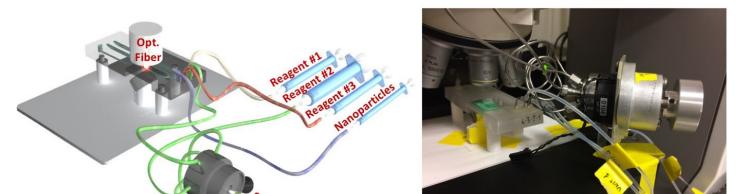
## dott. Lucio Litti

# che terrà un seminario dal titolo: Toward practical applications of Surface Enhanced Raman Spectroscopy

Venerdì 23 Aprile 2021, h. 15:00, https://unipd.zoom.us/j/763282419 Dipartimento di Scienze Chimiche, Via Marzolo, 1.

### Abstract

Surface Enhanced Raman Scattering (SERS) arises from chemical and electromagnetic effects related to excitation of the Surface Plasmons supported on nanostructured, mostly metallic, surfaces. Molecules that lying on such substrates experience orders of magnitude more intense electromagnetic near-fields. It is widely recognized as the main source for the extraordinary intensity gain observed on their Raman signals. SERS is nowadays an established ultrasensitive technique, able to reach single-molecule detection. Nanotextured surface composition and morphology, molecule/surface interactions, dielectric environment, and the effects that the laser manifests during the Raman measure, are all aspects that strongly influence the overall spectral shape and intensity. For these reasons, the potentialities of SERS in real-life applications are still largely undeveloped. Through a multidisciplinary approach, this seminar would present the efforts dedicated to implement practical SERS-based sensing techniques.





















#### La presenza della S. V. sarà molto gradita.

#### Il Direttore del Dipartimento Michele Maggini

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