



## Workshop & NIS Colloquium

# Recent advances in biosensor technologies

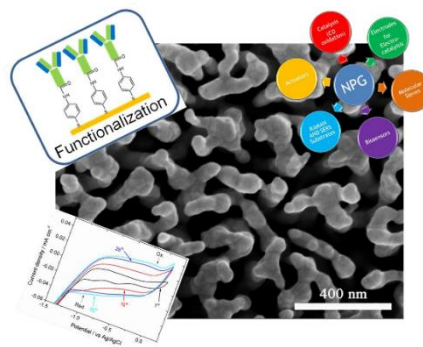
Wednesday 22 November, 2017

Department of Chemistry, University of Torino, Via Giuria 7

Room: Aula Diagonale

Discovery of biosensors has acquired utmost importance in the field of healthcare, food, environment, and security for the detection and quantification of a variety of biomolecules, hazardous chemicals and pharmaceutical products.

Technological advancements in the fields of nanomaterials, surface plasmon resonance, rational design, microfluidics and sensor printing, have radically shaped biosensor technology providing a better perspective for developing specific and sensitive devices with wide potential applications.



Within the activities of the “SERS Biosensing with Nanoporous Gold” project (Compagnia di San Paolo and University of Torino, Project Torino\_call2014\_L2\_146), the workshop is intended to highlight recent advances in various fields related to biosensing.

*Organizers: P.Rizzi, F.Turci, I.Corazzari, C.Giovannoli, S.Bordiga, A.Damin.*

Registration is free, but requested.

Please send an e-mail to: [ingrid.corazzari@unito.it](mailto:ingrid.corazzari@unito.it) within 19/11/2017



*SERS Biosensing with Nanoporous Gold*

A project funded by



## Programme

9.10	Registration
9:40	Welcome – C. Prandi (Deputy-director for Research, Department of Chemistry) and E. Carbone (President of the NIS Interdepartmental Centre)
9:50-10:00	<i>SERS Biosensing with Nanoporous Gold - a CSP funded project</i> P. Rizzi, Università di Torino
10:00-10:45	<i>Disposable biosensors based on screen-printing technology</i> L. Añorga, IK4-CIDETEC, San Sebastián, Spain
10:45-11:10	<i>Current perspectives for selective recognition in (bio)sensing</i> C. Giovannoli, Università di Torino
11:10-11:40	Coffee-break
11:40-12:05	<i>SERS (Surface-enhanced Raman Spectroscopy): an overview</i> A. Damin, Università di Torino
12:05-12:30	<i>Nanoporous Gold as a new biosensor for HSA detection</i> F. Scaglione, Università di Torino
12:30-12:55	<i>Engineered Metallic Nanostructures for the detection of food contaminants by Surface Enhanced Raman Scattering</i> A. M. Rossi, INRIM, Torino
12:55-14:10	Lunch
14:10-14:35	<i>Carbon Nanotubes and Few Layered Graphene for Biosensors applications</i> S. Bellucci – INFN, Laboratori Nazionali di Frascati, Roma
14:35-15:00	<i>Nanosensors for food and healthcare</i> P.P. Pompa, IIT, Genova
15:00-15:25	<i>Rapid label-free biosensing in foods and biological matrices by Reflective Phantom Interface</i> M. Buscaglia, ProXentia s.r.l, Milano
15.25-15:50	Coffee-break
15:50-16:15	<i>Smart nanostructured substrates for early cancer diagnostics through optical detection in different biological matrices</i> P. Rivolo, Politecnico di Torino
16:15-16:40	<i>Modelling of nanostructured sensors for magnetic particle detection</i> A. Manzin, INRIM, Torino
16:40-17:05	<i>Diamond sensors and diamond nanocrystal: innovative tool for biosensing</i> F. Picollo, Università di Torino
17:05	Closing remarks