

## NIS colloquium

# "Biomolecules on surfaces: from abiotic polymerization to biosensors"

Torino, 14<sup>th</sup> January 2014

Aula Magna del Dipartimento di Scienze della Vita e Biologia dei Sistemi  
via Accademia Albertina 13, Torino

Scientific and Local Organizing Committee: **F. Rua, C. Deiana, Y. Sakhno**

Dipartimento di Chimica, Dipartimento di Scienze della Vita e Biologia dei Sistemi and NIS,  
Università degli Studi di Torino

The attendance to the Colloquium is free, but registration is requested: please, send an e-mail to  
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### Program

09:00-9:15	Registration
9:15-9:30	<b>Gianfranco Gilardi</b> - Head of the Department of DBios and NIS, University of Torino <i>Welcome message</i>
9:30-10:15	<b>Mike Hughes</b> - Director of Centre for Biomedical Engineering, University of Surrey, UK <i>Electrophysiology is everywhere</i>
10:15-10:40	<b>Francesca Valetti</b> - DBios and NIS, University of Torino <i>Hydrogenase on nano-structured TiO<sub>2</sub> semi conductors for hydrogen production</i>
10:40-11:05	<b>Diego Millo</b> - Faculty of Science, Vrije Universiteit, Amsterdam, The Netherlands <i>Electron transfer in bacterial cells gathering electricity from wastewater</i>
11:05-11:35	<i>Coffee Break</i>
11:35-12:00	<b>Andrea Rossi</b> - Istituto Nazionale di Ricerca Metrologica (I.N.R.I.M.), Torino <i>P450-based porous silicon biosensor for arachidonic acid detection</i>
12:00-12:25	<b>Silvia Castrignano'</b> - DBios, University of Torino <i>Coating human flavin-containing monooxygenase 3 on nanostructured electrodes</i>
12:25-13:00	<b>Francesco Rua</b> - DBios, University of Torino <i>Enhanced activity of engineered CYP2C20 in the presence of AuNPs</i>
	<i>Lunch</i>
Chair:	<b>Piero Ugliengo</b> - Department of Chemistry and NIS, University of Torino
14:30-14:50	<b>Gianmario Martra</b> - Department of Chemistry and NIS, University of Torino <i>Introduction to the Colloquium and dedication to Luca Daveggio</i>
14:50-15:40	<b>Raffaele Saladino</b> - Department of Agrobiologia and Agrochimica, Università della Tuscia, Viterbo <i>Preobiotic synthesis models based on minerals/formamide system</i>
15:40-16:05	<b>Albert Rimola</b> - Department of Chemistry, Universitat Autònoma de Barcelona - <b>Mariona Sodupe, Piero Ugliengo</b> <i>Theoretical studies on the abiotic formation of biomolecules on inorganic surfaces</i>
16:05-16:35	<i>Coffee break</i>
16:35-17:00	<b>Thomas Georgelin</b> - Laboratoire de Réactivité de Surface, Université Pierre et Marie Curie, Paris - <b>Houssein Bazzi, Maguy Jaber, Jean-François Lambert</b> <i>Prebiotic activation of amino-acids and nucleotides on silica surface</i>
17:00-17:25	<b>Bice Fubini</b> - Department of Chemistry, NIS and Interdepartmental Centre Scansetti, University of Torino - <b>Ingrid Corazzari, Ivana Fenoglio, Cristina Pavan, Maura Tomatis, Francesco Turci</b> <i>Depletion of antioxidant defenses - ascorbic acid and glutathione- at the nanoparticle surface contributes to oxidative stress</i>
17:25-17:50	<b>Yuriy Sakhno</b> - Department of Chemistry and NIS, University of Torino - <b>Ilvis Barberis, Chiara Deiana, Marco Fabbiani, Gianmario Martra</b> <i>Formation and self-assembly of long prebiotic oligomers produced by the condensation of unactivated amino acids on oxide surfaces</i>
17:50-18:00	<b>Conclusion</b>