

Programme of the workshop NANO23@uniVR

Thursday, 8 June 2023 Room E, Ca' Vignal 1		
11:00-13:45	Registration	
13:45-14:00	Introduction (Franco Tagliaro, University of Verona)	
14:00-15:15	Session Nano@Biomedicine I (Chairperson: Manuela Malatesta)	
14:00-14:30	Elisabetta Esposito, University of Ferrara	<i>Nanotechnology for phytocompound administration (invited lecture)</i>
14:30-14:45	Greta C. Magnano, University of Trieste	<i>Effectiveness of barrier creams against human skin penetration of Ni nanoparticles</i>
14:45-15:00	Maddalena Sguizzato, University of Ferrara	<i>Niogels for polyphenols skin application</i>
15:00-15:15	Flavia Carton, University of Piemonte Orientale	<i>The role of microscopy to develop hyaluronic acid-based nanoparticles for the treatment of muscle diseases</i>
15:15-16:30	Session Nano@Biomedicine II (Chairperson: Massimiliano Perduca)	
15:15-15:45	Concepcion Jimenez Lopez, University of Granada	<i>Biomimetic magnetic nanoparticles as platforms to combine directed chemotherapy and hyperthermia (invited lecture)</i>
15:45-16:00	Annalisa Bozza, University of Torino	<i>The fatty acids coacervation method: an easy way to obtain solid lipid nanoparticles from synthetic and natural soaps</i>
16:00-16:15	Edoardo Donadoni, University of Milano-Bicocca	<i>Multi-scale modeling of folic acid-functionalized TiO₂ nanoparticles for active targeting of tumor cells</i>
16:15-16:30	Salvatore C. Gaglio, University of Verona	<i>Towards the design of nano-platforms to target intracellular pathogens</i>
16:30-17:00	Coffee break	
17:00-18:00	Session Nano@Environment (Chairperson: Adolfo Speghini)	
17:00-17:30	Silvia Gross, University of Padova	<i>Exploring the chemical parameters space for the low temperature and sustainable synthesis of crystalline inorganic nanomaterials for catalysis and energy conversion (invited lecture)</i>
17:30-17:45	Sara Cerra, University of Rome "La Sapienza"	<i>Gold nanomaterials: exploiting plasmonics for surface enhanced Raman scattering applications</i>
17:45-18:00	Eros Radicchi, University of Verona	<i>Gold-decorated biomorphic nanostructured titania for pollutants photodegradation</i>
18:00-19:15	Flash presentations (Chairperson: Mariapina D'Onofrio)	
	Sabina Baskhanova, Sechenov University	<i>The animal model in the study of medication adherence</i>
	Arnaud M. Capuzzo, University of Verona	<i>Magnetic resonance imaging of adipose-derived adult stem cells labelled with superparamagnetic iron oxide nanoparticles</i>
	Paolo Caricato, EU Commission	<i>A new objective method to test on site the fishery products freshness</i>
	Anita Conti, University of Verona	<i>Adipose tissue enriched with biopolymer scaffolds in ischemia/reperfusion injury</i>
	Andrea Galvan, University of Verona	<i>A fluid dynamic system to test nanovesicles on human skin explants</i>
	Chiara R. Inguscio, University of Verona	<i>Transmission electron microscopy methods to reveal nanoparticles inside cells</i>
	Sara Mazzocato, University of Verona	<i>Can the surface of an artwork be a source of information about climatic changes?</i>
	Lorenzo Sarasino, University of Torino	<i>Innovative material for solar fuel production in visible light</i>
	Giorgia Zanella, University of Verona	<i>Nanotechnology for biocatalysis: cellulase immobilization on mam-c mediated biomimetic magnetic nanoparticles (BMNPs)</i>
	Xiaowu Hu, University of Verona	<i>Preparation and properties of Tm³⁺-doped NaBiF₄ blue-emitting phosphors</i>
	Maria A. Lacavalla, University of Verona	<i>Ethosomes and transethosome for vitamin D3 delivery: an in vitro study</i>
	Martina Leoncini, University of Padova	<i>Cytotoxic investigation over silver and gold nanoparticles obtained by chemical and biogenic synthesis</i>
Friday, 9 June 2023 Room E, Ca' Vignal 1		
8:30-10:30	Session Nano@Biomedicine III (Chairperson: Federica Bortolotti)	
8:30-9:00	Samo Hudoklin, University of Ljubljana	<i>Urinary bladder and nanoparticles: tools for basic and applicative research (invited lecture)</i>
9:00-9:15	Elena Buratti, University of Ferrara	<i>Hybrid PNIPAM-keratin microgels: synthesis and release study for biomedical applications</i>
9:15-9:30	Luca Paoletti, University of Rome "La Sapienza"	<i>Hyaluronan-estradiol nanogels as potential drug carriers to target ER+ breast cancer cell line</i>
9:30-9:45	Matilde Tubertini, University of Insubria	<i>Biomimetic nanobinders built on bioresponsive prodrugs for immune chemotherapy against triple negative breast cancer</i>

9:45-10:00	Sofia Sturari, University of Torino	<i>Functionalization of nanodiamonds with hyaluronic acid: a study for their potential applications in radiosensitization and selective tumor detection</i>
10:00-10:15	Ilaria Andreana, University of Torino	<i>How to preserve the physicochemical properties of biodegradable nanoparticles during freeze drying?</i>
10:15-10:30	Federico Luchi, University of Verona	<i>Coating nature directs the cellular uptake of gold nanoparticles</i>
10:30-11:00	Coffee break	
11:00-12:30	Session Nano@Energy (Chairperson: Alessandro Romeo)	
11:00-11:30	Alberto Vomiero, University of Venezia	<i>Interfacial properties in composite nanosystems for energy harvesting (invited lecture)</i>
11:30-11:45	Elisa Artegiani, University of Verona	<i>Thin film solar cells</i>
11:45-12:00	Federico Barbon, University of Padova	<i>Integrating lab- and industry-scale battery production: continuous hydrothermal synthesis of NMC-like cathodes</i>
12:00-12:15	Leonardo Cecon, University of Verona	<i>Energy transfer process in TbAl₃(BO₃)₄ huntite-type materials undoped and singly doped with Eu³⁺</i>
12:15-12:30	Narges Torabi, University of Verona	<i>Analysis of CdSe as alternative buffer layer for Sb₂Se₃ solar cells</i>
12:30-13:30	Lunch	
13:30-15:30	Session Nano@Biomedicine IV (Chairperson: Adolfo Speghini)	
13:30-13:45	Carlo G. Barracchia, University of Verona	<i>Nanotracers target abnormal assemblies of the amyloidogenic protein tau</i>
13:45-14:00	Paulo Siani, University of Milano-Bicocca	<i>Mechanistic insights from molecular dynamics simulations in nanomedicine research</i>
14:00-14:15	Mimimorena Seggio, University of Verona	<i>Estradiol detection in water exploiting plasmonic spoon-shaped biosensor</i>
14:15-14:30	Silvia Mizzoni, University of Verona	<i>Circularly polarized activity from two photon excitable europium and samarium chiral bioprobes</i>
14:30-14:45	Francesca Tajoli, University of Padova	<i>Continuous-flow crystallization of surfactant-free doped zinc sulfide nanoparticles for optical bioimaging</i>
14:45-15:00	Ilaria Bettin, University of Verona	<i>STAT3-loaded extracellular vesicles: basis of a new possible therapeutic approach to restore STAT3 signalling deficiency</i>
15:00-15:15	Emil Milan, University of Verona	<i>Influence of the synthesis conditions on the particle size and luminescence of lanthanide activated fluoride based nanomaterials</i>
15:15-15:30	Giovanna Viola, University of Verona	<i>Interaction of ultrasmall nanoparticles with condensates of an intrinsically disordered protein</i>
15:30-16:00	Coffee break	
16:00-17:20	Flash presentations (Chairperson: Barbara Cisterna)	
	Ju Wang, University of Rome "La Sapienza"	<i>Hyaluronan-cholesterol nanogels: novel nano-delivery systems for topical transdermal delivery of betamethasone in potential psoriasis treatment</i>
	Claudia Migliorini, University of Rome "La Sapienza"	<i>Hyaluronan-cholesterol nanogels for the enhancement of the ocular delivery of therapeutics</i>
	Giulia Frigerio, University of Milano-Bicocca	<i>Molecular dynamics simulations of cRGD-conjugated pegylated TiO₂ nanoparticles for targeted photodynamic therapy</i>
	Corrado Maucieri, University of Padova	<i>Biogenic synthesis of ZnS e ZnO nanoparticles by microalgae extracts from Nannochloropsis gaditana</i>
	Davide Vendrame, University of Padova	<i>Synthesis of metal oxocluster-based hybrid nanoparticles as catalysts for oxidation reactions of environmental interest</i>
	Mariyam Mukhtar, University of Verona	<i>Development of high efficiency second generation thin film photovoltaic CdTe cell manufacturing system</i>
	Alessandro Negri, University of Verona	<i>Iron-Boron nanoparticles as diagnostic agent in MRI and therapeutic agent in photothermal and magnetic fluid hyperthermia</i>
	Riccardo Ossanna, University of Verona	<i>Adipose tissue-derived products for regenerative medicine applications</i>
	Sara Pesavento, University of Verona	<i>A point-of-need device for detecting cyanide in cadaveric blood: integration of gas diffusive and paper-based technologies</i>
	Alessia Raneri, Diamante SB srl	<i>Plant-made nanoparticles for autoimmune diseases treatment</i>
	Giulia Soldati, University of Verona	<i>Can tissue deparaffinization influence the extracted DNA for forensic purposes?</i>
	Pietro Vaccari, University of Verona	<i>Sustainable encapsulation of phase change materials for smart building applications</i>
	Matilde Murari, University of Verona	<i>The use of Zebrafish early life stages to investigate the metabolism and toxic effects of nine novel psychoactive substances with opioid effects</i>
	Nicola Pigaiani, University of Verona	<i>A new approach for identifying the post-mortem formation of ethanol: development and validation of a salt-assisted HS-GC-FID method for determining ethanol in the vitreous humor</i>
17:20-17:30	Conclusion (Adolfo Speghini, University of Verona)	