

Department of Molecular Sciences and Nanosystems PhD program in Science and Technology of Bio and Nanomaterials



Summer workshop of the PhD Program in Science and Technology of Bio and Nanomaterials

16-17 July 2025 Sala Conferenze A.A. Orio & G. Zanetto

16 July 2025

14.00-14.25 Giulia Fischetti

Uncertainty quantification for reliable automatic multiplet classification in Nuclear Magnetic Resonance (NMR) spectroscopy

14.25-14.50 **Violina Potlog**

Implementation of Nanopore Sequencing to speed up and improve the rAAV production stage for cell and gene therapy

14.50-15.15 Nicolò Spigariol

Sustainable solutions for the application of circular economy to the industrial manufacturing

15.15-15.35 **Mahnoor Hassan**

Precursor/Solvent Dependent CDs for Luminescent Solar Concentrators

15.35-15.55 **Davide Frigatti**

Alternative solvents and innovative synthesis routes for the formation of dimers

15.55-16.15 **Ilaria Bertuol**

Polymeric materials with functional properties for surface modification and functionalization

16.15-16.35 **Jacopo Moi**

A diffusive model to quantify usability of public green areas

16.35-16.55 Muhammad Ali

Network analysis of complex systems in the venture capital market

16.55-17.10 Cristian Fregonese

Computational design of macrocyclic peptide for precision delivery of nucleic acid-based therapeutics

Enjoy PhD life

Aperitivo di networking

17 July 2025

9.20-09.40 Silvia Multari

Predicting molecular interactions with Artificial Intelligence

9.40-09.55 **Zhihao Xiang**

Light-Responsive Nanostructures Based on Bio-Templated CdS and ZnS for Environmental Photocatalysis

9.55-10.10 Jacopo Cangiotti

Singly-doped Cr3+ and Mn5+-activated Near-Infrared Emitting (Nano-)Materials for Contactless Temperature and Pressure Sensing

10.10-10.25 Michele Crozzolin

Studies on doped fluorides nanoparticles: luminescence and ROS generation

Coffee Break

11.00-11.20 Giulia Cazzador

Development of Greener Electrochemical Wearable Biosensor for Biomarkers detection

11.20-11.35 Alexandru Dron

Electroactive and bio-responsive inks based on modular and degradable 2D electrocatalysts

11.35-11.50 Nicola Furlan

Development of electrochemical immunosensors for the quantification of biomarkers for amyotrophic lateral sclerosis in-vitro models

11.50-12.10 Sabrina Molinaro

Study of archaeological glass and development of an innovative glass stabilization treatment

12.10-12.30 Amir Abdelmohsen

Nanostructured materials in synergy with 2D materials for the protection of archaeological metallic objects

12.30-12.50 Edoardo Tartaglia

Innovative conservation treatment for archaeological bronzes based on nanostructured materials

12.50-13.05 **Sofia Scipioni**

Cellulose-based nanostructured materials for paper restoration (a porte chiuse)

Lunch

14.30-14.50 **Kübra KoÇak**

Exploring organoid-bacteria co-culture for cancer treatment and prevention: a multidisciplinary approach

14.50-15.05 **Sara Mennella**

Gut microbiota dynamics to SARS-CoV-2 infection in a gut in-vitro system

15.05-15.25 Giorgia Schinello

39 Investigating the role of Multimerin-2 in tumor-associated vessels

15.25-15.40 **Anna Bertocco**

Osteoconductive and antibacterial 3D printed calcium phosphate scaffolds with hierarchical porosity for applications in biomedicine

15.40-16.00 Federico Surra

Simulation of the evolutionary dynamics of HGSOC with in-silico and in-vivo models

16.00-16.15 **Laura Tripodi**

precision nanoTherapy in ovarian cancer

16.15-16.30 Martina Glerean

Delivery of self-therapeutic nanoparticles through biomimetic membrane coating

16.30-16.45 Gloria Laudato

Assessment of tumor evolution using a single – cell metabolic liquid biopsy in droplet microfluidics

16.45-17.05 **Eleonora Botte**r

39 Omo- and Hetero-bimetallic complexes bearing organopalladium fragments with promising anticancer properties