

10:55-11:00 – **Arben Merkoçi** – Welcome and introduction to Nanobiosensors School

Session 1 – Zooming into biosensors: the nanoscale

Chairman: Daniel Quesada-González

11:00-11:30 – **Leyla Karadurmuş & Sibel A. Ozkan** – Recent advances of Molecularly Imprinted Polymers: Strategies for Electrochemical Methods on Pharmaceutical Analysis

11:30-12:00 – **Andrew Piper** – Why size matters, electrochemistry on the nanoscale

12:00-12:30 – **Francesco de Angelis** – Plasmonic Solid State Nanopores for single biomolecule identification

Lunch

Session 2 – Paper-based biosensors: today and tomorrow

Chairman: Maria Maddalena Calabretta

14:00-14:30 – **Daniel Quesada-González** – Lateral flow assays design and components: a tutorial

14:30-15:00 – **Andy J. Bruno Darder & Ruslan Álvarez** – Laser-Scribed rGO Electrodes Decorated with Metal Nanoparticles: Fabrication and Sensing Applications

15:00-15:30 – **Garbiel Maroli & Ruslan Álvarez** – Building your device and app: a guide for pocketable sensors

Coffee break

Session 3 – Advanced nanotechnology: biosystems and reading platforms

Chairman: Francesco de Angelis

16:00-16:30 – **Maria Guix** – Sensing technologies integrated in biorobotic platforms: what and why

16:30-17:00 – **Maria Maddalena Calabretta** – Bioluminescence-based bioanalytical tools

17:00-17:30 – **Sümeyra Savaş** – Detecting Pathogens in Real Samples Using Graphene Quantum Dots as Nanoenzymes: Is it Possible?

Session 4 – The potential of DNA: molecular biosensing

Chairman: Claudio Parolo

17:30-18:00 – **Marianna Rossetti** – DNA-Based Biosensors for Protein Detection: Harnessing Structure-Switching and Scaffold Designs

18:00-18:30 – **Petr Jakubec** – Aptamers in Electrochemistry: Expanding Horizons in Biosensing, Bioassays, and Electrocatalysis