# SCIENTIFIC PROGRAM

***Monday, October 17th***

13:00 -14:00 Registration of participants

14:00 -14:30 Welcome to participants

**Session 1: Electrochemical Sensors**

14:30 -16:30: Lecture 1
Prof. Patrizia Mussini - Università degli Studi di Milano
*Potentiometric, amperometric, impedimetric sensors: basic principles and applications*

16:30 -16:45 Coffee break

16:45 -18:45: Lecture 2
Prof. Carlo Augusto Bortolotti – Università di Modena e Reggio Emilia
*Field effect transistors: basic principles and applications*

Dinner

***Tuesday, October 18th***

**Session 2: Optical Sensors**

9:00 - 11:00: Lecture 3
Dr. Sara Tombelli - Istituto di Fisica Applicata "Nello Carrara" (CNR Sesto Fiorentino, FI)
*Absorption and reflection sensors: basic principles and applications*

11:00 - 11:15 Coffee break

11:15 - 13:15: Lecture 4
Prof. Giuseppe Spoto – Università di Catania
*Plasmonic sensors: basic principles and applications*

13:15 - 14:30 Lunch

**Session 3: New advances in recognition elements**

14:30 - 16:30: Lecture 5
Prof. Marco Giannetto – Università degli Studi di Parma
*The role of nanomaterials in chemical sensors*

16:30 -16:45 Coffee break

16:45 -18:45: Lecture 6
Prof. Simona Scarano – Università degli Studi di Firenze
*New generation of receptors and bioreceptors in chemical sensors*

Social Dinner

***Wednesday, October 19th***

**Session 4: New advances in sensor devices**

9:00 - 11:00: Lecture 7
Prof. Laura Anfossi – Università di Torino
*Microfluidic sensors: principle and design of non-equilibrium ligand binding assay*

11:00 - 11:15 Coffee break

11:15 - 13:15: Lecture 8
Prof. Ing. Valentina Bianchi, Università degli Studi di Parma
*Instrumentation for Point of Care: smart devices with advanced features*

13:15 - 14:30 Lunch

14:30 -16:30: Lecture 9
Prof. Fabiana Arduini - Università degli Studi di Roma "Tor Vergata"
*Paper-based sensors*

16:30 -17:00 Conclusion