

Giovedì 19 Giugno 2025

Ore 8.30 Registrazione

9.15 Apertura dei lavori (**Aula Coro di Notte, Monastero dei Benedettini**)

Ore 9.30-10.10 INV 1 **Invited lecture:** *Single Molecule Detection with Plasmonically Enhanced Readout*, **Jakub Dostalek** (Institute of Physics of the Czech Academy of Sciences, Praga).

SESSIONE 1

10.10-10.30 O1 *Molecular Imprinting Meets Spectroscopy: A New Frontier in Bioanalytical Sensing*, **Simona Scarano** (Firenze).

10.30-10.50 O2 *Fractal Networks of Nanostructures for Imaging and Sensing*, **Maria Josè Lo Faro** (Catania).

10.50-11.10 O3 *Analytical characterization by spectroscopic techniques of Gellan gum-based hydrogels for cartilage tissue regeneration*, **Elvira De Giglio** (Bari).

Ore 11.10-11.50 **Coffee Break**

SESSIONE 2

11.50-12.10 O4 *Raman spectroscopy for fingerprinting historical inks: a valuable tool for discriminating logwood recipes*, **Adele Ferretti** (Pisa).

12.10-12.30 O5 *Spectroscopic characterization of novel cross-linked biopolymeric sodium alginate films with ZnO NSs for food packaging*, **Antonica Valeria Montefusco** (Bari).

12.30-12.50 O6 *From Surface to Air: Leveraging Spectroscopy to Monitor Iso-Eugenol Release from Mesoporous Silica*, **Anna Laura Tassi** (Milano).

12.50-13.10 **SPONSOR (Shimadzu)** *Analysis of microplastics with IR technique coupled to Raman in a microscope*, **Andrea D'Alessandro**, **SPECTRO & TOC Product Specialist**.

13.10-15.10 **Pranzo** (Chiostro di Levante) e **SESSIONE POSTER**

SESSIONE 3

15.10-15.30 O7 *Statistical analysis of bacterial motion as a new methodology to study bacteria/antimicrobial interactions*, **Margherita Izzi** (Bari).

15.30-15.50 O8 *Decoding Plastic Behavior in Environment through Surface Characterization: an X-ray photoelectron spectroscopy (XPS) study*, **Tiziano Di Giulio** (Salento).

15.50-16.10 O9 *The optimization of a combined analytical approach for clarifying the cadmium removal mechanism by Sardinian limestone and Carrara marble*, **Enrica Tuveri** (Cagliari).

16.10-16.30 O10 *Synthesis and characterization of silver-based nanoantimicrobials included in food-grade polypropylene*, **Valerio De Marzo** (Bari).

16.30-16.50 O11 *A multi-analytical approach for assessing the performance of hydrogen permeation barriers on iron*, **Deborah Biggio** (Cagliari).

16.50-17.10 O12 *Investigating sulfur crystal formation in arsenic sulfide pigments by using advanced mobile X-rays methods*, **Eva Luna Ravan** (Catania).

17.10-17.30 O13 *An XPS investigation on Neodymium – Chitosan interaction*, **Giulio Casula** (Cagliari).

17.30-18.00 **Riunione del Gruppo Spettroscopia Analitica**

Ore 20.30 **CENA SOCIALE**

Venerdì 20 Giugno 2025

Aula Coro di Notte, Monastero dei Benedettini

Ore 9.20-10.00 INV 2 **Invited lecture:** *Circulating tumor DNA (ctDNA): clinical applications and outlook on optical biosensors*, **Patrizio Giacomini** (Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma).

SESSIONE 4

10.00-10.20 O14 *Unravelling Metabolic Alterations in Parental and Drug-Resistant Human Non Small Lung Cancer: from spectroscopic screening to high-resolution transcriptomics*, **Emilia Bramanti** (Pisa).

10.20-10.40 O15 *High throughput evanescent-wave biosensor for the early-stage detection of biomarkers in liquid biopsies*, **Caterina Dallari** (Firenze).

10.40-11.20 O16 **Relazione Vincitore premio “Mazzucotelli”**

Ore 11.20-11.50 **Coffee Break**

SESSIONE 5

11.50-12.10 O17 *Co-registered Hyperspectral Imaging System with Multiblock Data Processing for Stratigraphic Investigation of Paintings*, **Li Zelan** (Bologna).

12.10- 12.30 O18 *Integrated analytical approach for the characterisation of dyed wool fibers in the oldest Moroccan carpet*, **Stefano Legnaioli** (Pisa).

12.30-12.50 O19 *From field to data: real-time protein and moisture analysis in wheat using portable spectroscopic sensors and chemometrics*, **Manuel Monti** (Como).

12.50-13.10 O20 **SPONSOR (Renishaw)** *Simultaneous and colocalised Raman and SEM imaging for correlated multimodal analysis*, **Riccardo Tagliapietra**, Renishaw S.p.A.

13.10-14.10 **Pranzo** (Chiostro di Levante)

SESSIONE 6

14.10-14.30 O21 *The gardener of the Grand Duke: history and analysis of Ms. 462 Hortus Pisanus, Icones variarum plantarum*, **Giulia Lorenzetti** (Pisa).

14.30-14.50 O22 *Qualitative Study of Apatite and Clays Using IR Spectroscopy: The Case Study of Riparo Gaban*, **Alessia Santiglia** (Milano).

14.50-15.10 O23 *Degradation of Silk under the Influence of Dyes and Different Aging Conditions*, **Cecilia Campi** (Pisa).

15.10-15.30 O24 *Advancing Liquid Biopsy: Direct Capture of Circulating Tumor DNA from Plasma with Superparamagnetic Beads*, **Alessandro Del Grosso** (Catania)

15.30-16.30 **Premio Franco Cariati e Chiusura dei Lavori**

Ore 16.30 **Visita guidata al Monastero dei Benedettini**