WEDNESDAY 13th December

15:00 – 15:30: Welcome and introduction to the congress
15:30 – 16:15: ***Lectio Magistralis*** – Prof. Luisa Torsi (UniBA) "The single-molecule with a large-transistor (SiMoT) technology for translational medicine"
16:15 – 16:35: O1 – S. Tombelli (CNR-IFAC) "Molecular beacon- based optical biosensing for diagnostics and theranostics"
16:35 – 16:55: O2 – L. Fetter (UCSB-USA) "The impact of physiological-scale variations in cations, pH, and temperature on electrochemical aptamer-based sensor calibration"

16:55 – 17:15 COFFEE BREAK

17:15 – 17:35: O3 – W. Cimmino (UniNA) "Comparison of printed electrochemical strips towards miRNA detection associated to lung cancer"
17:35 – 17:55: O4 – A. Di Pede (UniTOV) "Improving specificity of CRISPR-based sensing platforms using triplex DNA probes"
17:55 – 18:15: O5 – O. Ajunwa (iNANO-Denmark) "Peroxidase activity and bioelectrochemical sensing of extracellular G-quadruplex/hemin complexes in Staphylococcus epidermidis"
18:15 – 18:35: O6 – N. Bellassai (UniCT) "Superparamagnetic beads-enhanced plasmonic biosensor for discrimitation of single-point mutation in unamplified genomic DNA"
18:35 – 18:55: O7 – A. Urosevic (UniTOV) "Entropy driven cell-free transcription sensors"

THURSDAY 14th December

9:00 – 9:35: Welcome and awards ceremony
9:35 – 10:20: ***Plenary speaker*** – Prof. Arben Merkoçi (ICN2-Spain) "Nanobiosensing platforms for diagnostics applications"

10:20 – 10:40 COFFEE BREAK

10:40 – 11:00: O8 – A. Scroccarello (UniTE) "Laser scribing of metal nanoparticles on paper for the assembly of customized optical sensing devices"
11:00 – 11:20: O9 – F. Silveri (UniTE) "CO_2 laser-induced activation of carbon-based inks for lab-made 3rd generation biosensors development"
11:20 – 11:40: O10 – G. Arrabito (UniPA) "Self-cleaning cellulose-based devices: towards sustainable piezotronics?"
11:40 – 12:00: O11 – S. Brannetti (UniTOV) "Decorated DNA-based scaffolds as lateral flow biosensors"
12:00 – 12:20: O12 – L. Fabiani (UniTOV) "Smartphone-assisted paper-based electrochemical immunosensor for SARS-CoV-2 detection in saliva"
12:20 – 12:40: O13 – A. Silvestri (UniVE) "An electroactive and self-assembling bio-ink for the manufacture of fully inkjet-printed paper-based analytical devices"
12:40 – 13:00: O14 – F. Fama (UniVE) "Paper-based electrochemical sensor of tackling pesticides in urine: tools for epidemiological studies"
13:00 – 13:20: O15 – V. Mazzaracchio (UniTOV) "Real-time dehydration monitoring during physical activity with a butterfly-like paper-based microfluidic electrochemical device"

13:20 – 15:00 LUNCH BREAK + POSTER SESSION

15:00 – 15:30: ***Keynote speaker*** – Dr. Paolo Bollella (UniBA) "From wearable and minimally invasive to edible enzyme -based amperometric biosensors"
15:30 – 15:50: O16 – S. Fortunati (UniPR) "A novel electrochemical magneto-assay for BRD4 protein determination in cancer treatment"
15:50 – 16:10: O17 – M. Costa (UniSalento) "Advanced chemometric methods coupled to voltammetric sensor based on ion imprinted poly-o-aminophenol polymeric film for pattern recognition and quantitative prediction of Co(II) ions in aqueous environment"
16:10 – 16:30: O18 – D. Fumagalli (UniMI) "Metal-titania heterojunctions for photoelectrochemical analysis of emerging pollutants"
16:30 – 16:50: O19 – L. Quadrini (UniFI) "Electroanalytical sensor for characterization of corrosion oatinas in metal Artworks"

16:50 – 17:20 COFFEE BREAK

17:20 – 17:40: O20 – A. Cucinotta (UniPR) "Application of SERS for the detection of miRNAs as a tool for cancer diagnosis"
17:40 – 18:00: O21 – C.I. Santo (UniBO) "Nanostructured Cerium Oxide for Enhancing Electrochemiluminescent Biosensors in Early Prostate Cancer Diagnosis"
18:00 – 18:20: O22 – C. Zanoni (UniPV) "New electrochemical strategies for Glyphosate sensing by modified screen-printed cells"
18:20 – 18:40: O23 – A. Fracassa (UniBO) "Redox-mediated electrochemiluminescence enhancement for bead-based immunoassay"
18:40 – 19:00: O24 – S. Casalini (UniPD) "A general overview of a liquid-gated transistor based on reduced graphene oxide for chemical sensing"

20:30/21:00 SOCIAL DINNER

FRIDAY 15th December

9:00 – 9:20: Welcome and introduction
9:20 – 9:40: O25 – E. Mazzotta (UniSalento) "Vapor-phase synthesis of molecularly imprinted polymers for optical sensing applications"
9:40 – 10:00: O26 – F. Torrini (UniFI) "Harnessing the potential of nano-imprinted biopolymers: IgG detection using SPR technology"
10:00 – 10:20: O27 – L.R. Magnaghi (UniPV) "Do we need to wash fresh-cut salads? Ask to our bioplastic-based colorimetric sensors for freshness detection!"
10:20 – 10:40: O28 – C. Trono (CNR-IFAC) "Sensitivity enhancement and noise reduction strategies in long period fiber grating based biosensors"
10:40 – 11:00: O29 – A. Pace (UniBO) "A Guanosine-based self-assembled hydrogel with peroxidase mimic activity as supporting platform for H_2O_2 detection"
11:00 – 11:20: O30 – A. Rossi (UniTO) "Colorimetric identification of heavy metal ions using functionalized AgNPs and MCR-ALS analysis"

11:20 – 11:40 COFFEE BREAK

11:40 – 12:00: O31 – L. Fiore (UniTOV) "Development of sensors for the detection of infections in the orthopedic field"
12:00 – 12:20: O32 – C. Giliberti (UniPR) "Portable e-tongue based on nanocomposite modified screen-printed electrodes coupled with chemometrics, IC-PAD and HPLC-DAD for food adulteration detection"
12:20 – 12:40: O33 – S. Fiori (UniTE) "Nanofibrillar biochar from industrial byproducts for sensor modification and manufacturing"
12:40 – 13:00: O34 – P. Sfragano (UniFI) "Electrochemical sensors from waste material: characterisation of biochar from sewage sludges for electroanalytical applications"
13:00 – 13:20: O35 – R. Cancelliere (UniTOV) "Development of a label-free immunosensor for the detection of norovirus in water"

13:20 – 13:40 CONCLUSION