TENTATIVE PROGRAM (as of 01/02/2021)

Conference Time Zone – Madrid, Spain (GMT+1)

ZOOM
Video Conferencing

P: Plenary / K: Keynote lecture / I: Invited Lecture / FP: FlashPoster contribution

💬 **Tuesday (02/02/2021)**

08:50 – 09:00: *Opening - Welcome and Introduction*
Antonio Correia – President (Phantoms foundation, Spain)
Rosa Menendez – President (Spanish National Research Council (CSIC), Spain)
Arben Merkoçi – (ICREA/ICN2, Spain)

09:00 – 09:45: **Aydogan Ozcan** (UCLA, USA)   P
Deep Learning-enabled Computational Imaging and Sensing
09:45 – 10:15: **Jing Wang** (ETH Zürich, Switzerland)   K
Improving the sensor performance for SARS-CoV-2
10:15 – 10:45: **Amy Shen** (Okinawa Institute of Technology Graduate University, Japan)   K
Antibody detection of SARS-CoV-2 spike protein by an integrated plasmonic microfluidic chip

10:45– 11:00: Break

11:00 – 11:30: **Isabel Pastoriza-Santos** (University of Vigo, Spain)   K
Surface-enhanced Raman scattering based biosensors
11:30 – 11:50: **Fabiana Arduini** (Università degli Studi di Roma "Tor Vergata", Italy)   I
Electrochemical miniaturized (bio)sensors to support the sustainable management of COVID-19 outbreak
11:50 – 12:20:   **Dean Ho** (NUS, Singapore)   K
Harnessing Digital Medicine for Pandemic Preparedness and Next Generation Healthcare

12:20 – 12:50: **ePoster Session**

12:50 – 14:00: Lunch Break

14:00 – 14:30: **Hossam Haick** (Technion, Israel)   K
Non-Invasive Intelligent Nanosensors for Monitoring Pandemics
14:30 – 15:00: **Wei Gao** (California Institute of Technology, USA)   K
SARS-CoV-2 RapidPlex: A Graphene-Based Multiplexed Telemedicine Platform for COVID-19 Diagnosis
15:00 – 15:30: **Hadi Shafiee** (Harvard Medical School, USA)   K
Virus detection using nanoparticles, deep learning, and smartphones

15:30 – 15:45: **FlashPoster Session**

15:45 – 16:00: Break

16:00 – 16:20: **Vincent Bouchiat** (Grapheal, France)   I
Monolayer Graphene FET biosensors for Covid-19 antigen detection
16:20 – 16:40: **Cecília de Carvalho Castro e Silva** (MackGraphe, Brazil)   I
Integration of Aptamers on Graphene Field Effect Transistors for the Ultra-Sensitive Detection of SARS-CoV-2 Spike Protein
16:40 – 17:00: **Kiana Aran** (Cardea Bio / Keck Graduate Institute, USA)   I
Next Generation Graphene Transistors for Biological Threat

17:00– 18:00: Round Table (Moderator: Arben Merkoçi (ICREA/ICN2))
18:00 - 18:05: End of Day 1

💬 **Wednesday (03/02/2021)**

CSIC SARS-CoV-2 Session – part 1 (Co-organised by César Fernández & Pilar Marco (IQAC / IMB-CNM-CSIC)
09:00 – 09:25: **César Fernández** (IQAC / IMB-CNM-CSIC, Spain)   K
Analytical tools for the multiplex rapid detection of SARS-CoV-2
09:25 – 09:50: **Javier Tamayo** (IMN-CSIC, Spain)   K
Towards ultrasensitive detection of SARS-Cov-2 within 48 after infection by means of a high throughput optoplasmonic technology
09:50 – 10:15: **Antonio Alcamí** (CBMSO, CSIC-UAM, Spain)   K
Monitoring SARS-CoV-2 aerosol transmission in hospitals
10:15 – 10:25: **Manuel Fuentes** (Centro de Investigación del Cancer. IBSAL.IBMCC: CSIC-USAL, Spain)   O
Deciphering Biomarkers for acute respiratory distress syndrome by novel nanoproteomics approaches
10:25 – 10:35: **Guillermo Rodrigo** (Instituto de Biología Integrativa de Sistemas (I2SysBio), Spain)   O
CRISPR-based detection of SARS-CoV-2
10:35 – 10:45: **Giulio Rosati** (ICN2, Spain)   O
A plug & print platform for SARS-CoV-2 rapid detection on inkjet-printed nanobiosensors with smartphone readout

10:45– 11:00: Break

CSIC SARS-CoV-2 Session – part 2 (Co-organised by César Fernández & Pilar Marco (IQAC / IMB-CNM-CSIC)
11:00 – 11:25: **Gloria Sanchez** (IATA-CSIC, Spain)   K
Tracking SARS-CoV-2 in Wastewater as a Real Time Viral Hotspot Indicator
11:25 – 11:50: **Jorge Camacho** (ITEFI-CSIC, Spain)   K
ULTRACOV: An intelligent ultrasound scanner for lung condition evaluation in COVID-19
11:50 – 12:15: **Juan Ramón Tejedor** (CINN-CSIC, Spain)   K
Enhanced detection of SARS-CoV2 RNA species using signal amplification technologies in the context of DNA duplexes and DNA-RNA hybrids.
12:15 – 12:40: **Pilar Domingo-Calap** (Universitat de València - CSIC, Spain)   K
Unraveling the possible fecal-oral transmission route of SARS-CoV-2

12:40 – 14:00: Lunch Break

14:00 – 14:30: **Dipanjan Pan** (University of Maryland, USA)   K
Emerging Biosensing Approaches to SARS-CoV-2 from Molecular Targeting to Digital Detection
14:30 – 14:50: **M.Carmen Estevez** (ICN2 / CSIC, Spain)   I
Nanophotonic biosensors: superior diagnostic tools for COVID-19 management
14:50 – 15:00: **Zhugen Yang Yang** (Cranfield University, UK)   O
Paper-origami device for rapid diagnosis and testing sewage for early warning of pandemic
15:00 – 15:10: **Bergoi Ibarlucea** (TU Dresden, Germany)   O
Rapid antigen detection with antibody-doped hydrogels on impedimetric biosensors
15:10 – 15:20: **María Sanromán** (DIPC, Spain)   O
Colorimetric Detection of SARS-CoV-2 based on Multiple AuNPs Aggregation
15:20 – 15:40: **Andy Yeh** (University of Washington, USA)   I
De novo design of protein biosensors for COVID-19 diagnostic

15:40 – 16:00: Break

16:00 – 16:30: **Chuck Henry** (Colorado State University, USA)   K
Disposable Capillary-Driven Immunoassays for COVID-19
16:30 – 16:40: **Débora Albuquerque** (INESC-MN, Portugal)   O
Quantitative point-of-care device for serological testing of anti-SARS-CoV-2 IgM
16:40 – 17:10: **Melanie Ott** (University of California San Francisco, USA)   K
Amplification-free detection of SARS-CoV-2 with CRISPR-Cas13a and mobile phone microscopy.

17:10: Closing