# Workshop

"Sustainable nanotech-based biosensors" Tirana (Albania) - October 18, 2023



During the **nanoBalkan2023 International Conference** one day will be dedicated to the workshop "Sustainable nanotech-based biosensors", organized in the frame of SUSNANO Project -Twinning to boost the scientific and innovation capacity of the Universiteti i Tiranes to develop sustainable nanosensors for water pollution detection, (<u>www.susnano.eu</u>). The SUSNANO project aims to develop innovative sustainable nanosensors to detect heavy metals, pesticides and antiobiotics. This workshop aims to highlight the most important achievements at the world level in the in the field of developing sensors and biosensors based on smart nanomaterials and innovative techniques for environment, diagnostic and food & safety control. This event aims to create the possibility of establishing contacts, connections and collaborations important for other developments in this field. Scientists from different countries and representatives from SUSNANO partners will share the experience and scientific achievements and also ideas about new trends in developing nanotech-based biosensors.

LOCATION: Tirana International Hotel & Conference Centre. City Center, Scanderbeg Square, Tirana, Albania DATE: October 18, 2023 ORGANISERS: Event organized by SUSNANO Project with the support of Phantoms Foundation (Spain) ORGANISING COMMITTEE: Coordinator: Majlinda Vasjari (University of Tirana, Albania) Arben Merkoçi (ICN2, Spain) Michal Otyepka (Palacky University, Check Republic) Ruslan Alvarez (ICN2, Spain) Petr Jakubec (Palacky University, Check Republic) Nevila Broli (University of Tirana, Albania) Loreta Vallja (University of Tirana, Albania) Besnik Bare (University of Tirana, Albania)

#### SUSNANO Symposium: "Sustainable nanotech-based biosensors"

Wednesday October 18, 2023 - Tirana International Hotel

09:00-09:15 Welcome (Majlinda Vasjari)

### 09:15-09:45 Antonella Macagnano, CNR, Italy

Convergence of Molecularly Imprinted Polymers and Electrospinning technologies to design advanced selective sensors of VOCs

09:45-10:15 Fabiana Arduini, Roma, Italy

Paper-based electrochemical (bio)sensors: a new generation of devices with unprecedented features

### 10:15-10:45 Mamas (Mamantos) Prodromidis, Joanina, Greece

Wax Screen Printed Fabric-Based Colorimetric Microfluidic Wearable (Bio)Sensors for Biomarkers in Sweat

## 10:45 -11:15 Brainstorming & Coffee break/Poster session

11:15 -11:45 Sibel A. OZKAN, Ankara, Turkey

An Overview of Electroanalytical Carbon-Based Nanosensors and Their Applications: The Current and Future Prospect

11:45-12:15 Jean-Jacques Toulmé, Paris, France

Aptamer-based nanosensors for the detection of small organic molecules

12:15-12:45 Martin Pumera, CEITEC, Czech Republic

3D printing meets 2D materials for Energy Storage and Sensing

12:45-13:00 Angela Gilda Carota, University of Pisa, Italy

CRISPR/Cas12a based portable and low-cost Inkjet printed platform for onepot pathogen detection

- 13:00-14:00 Brainstorming & Lunch
- 14:00-14:30 Can Dincer, Frieburg, Germany

CRISPR-powered multiplexed biosensors for point-of-care management of infectious diseases

- 14:30-14:45 Liridon Berisha, University of Prishtina, Albania Electrochemical Paper Analytical Device for nitrite and nitrate determination
- 14:45-15:10 Coffee Break / Poster Session
- 15:10-15:20 Ana Ameda, University of Tirana, Albania

Electrochemical determination of heavy metals using hybrid nanosheets of Au@rGO

#### 15:20-15:30 Gabriel Maroli, ICN2, Spain

Enhancing Resistive Humidity Sensors with rGO Resistors for Thermal Compensation

## 15:30-15:40 Lueda Kulla, University of Tirana, Albania

Development of GCE modified with graphene derivatives for detection of paraquat

## 15:40-15:50 Nensi Isak, University of Tirana, Albania

Maximizing the adsorption efficiency in electrochemical determinations: Insights into electrode surface modifications

- 15:50-16:00 Sadik Cenolli, University of Tirana, Albania Electrochemical detection of azithromycin based on modified carbon paste electrode
- 16:00-16:15 Wrap-up and Closing remarks
- 16:15-17:45 **Project partners meeting (restricted meeting).**