

H2020 MSCA RISE

WORKSHOP

Budapest - June 17th, 2022

SAFEMILK

Innovative technology for milk safety

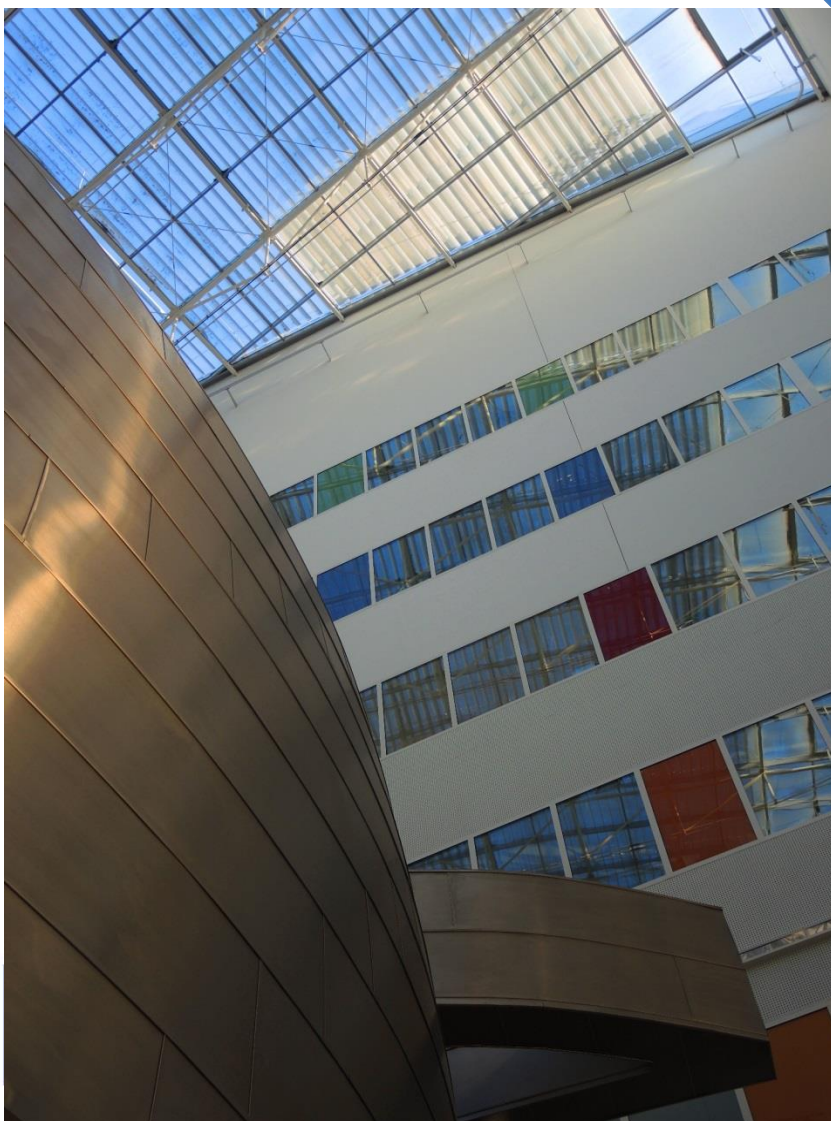
H2020 MSCA RISE No. 101007299

www.safemilkproject.com

RESEARCH CENTRE FOR NATURAL SCIENCES
TERMÉSZETTUDOMÁNYI KUTATÓKÖZPONT

INSTITUTE OF MATERIALS AND
ENVIRONMENTAL CHEMISTRY
ANYAG- ÉS KÖRNYEZETKÉMIAI INTÉZET

1117 Budapest, Magyar tudósok krt. 2.



PROGRAM

9.55 Welcome

USE AND DETECTION OF ANTIBIOTICS IN DAIRY INDUSTRY

10.00 Prof. Ákos Jerzsele

*Head of Department of Pharmacology and Toxicology,
Vice-Rector for Research and Innovation, University of Veterinary Medicine, Hungary*
Use of antibiotics in dairy cattle and the significance for public health

10.25 Adrienn Gréta Tóth, DVM.

Centre for Bioinformatics, University of Veterinary Medicine, Hungary
Dairy products, as sources in the animal-to-human antimicrobial resistance gene (ARG) transfer

10.45 Judit Süle, PhD.

Hungarian Dairy Research Institute Ltd., Hungary
Currently applied detection methods of antibiotics in the dairy industry



COFFEE BREAK



NOVEL BIOSENSOR CONCEPTS

11.15 Prof. Joseph Wang

Laboratory of Nanobioelectronics, University California of San Diego, USA
Wearable Sensors for Nutrition Tracking

11.55 Prof. Anastasios Economou

Department of Chemistry, National and Kapodistrian University of Athens, Greece
(Micro)fabrication technologies for chemical sensors and biosensors

TECHNICAL BREAK TO ONLINE LECTURES

12.45 Prof. Tibor Hianik

Faculty of Mathematics, Physics and Information, Comenius University, Slovakia

Biosensors based on DNA aptamers for monitoring food safety (on-line)

13.25 Prof. Michael Thompson

Department of Chemistry, Toronto University, Canada

Long-term reduction of microbial adherence to surfaces (on-line)



LUNCH



SAFEMILK - H2020 MSCA-RISE PROJECT WORKS

14.30 Thierry Jacquin, PhD.

Research Executive Agency, European Commission

H2020 MSCA RISE: Marie Skłodowska-Curie Action - Research and Innovation Staff Exchange

15.15 Attila Hucker

Head of laboratories, Hungarian Dairy Research Institute Ltd.

Listeria spp. detection methods in the dairy industry

15.30 Marek Tatarko, PhD.

Faculty of Mathematics, Physics and Information, Comenius University, Slovakia

Application of QCM-D for analysis of molecular interactions at surfaces

15.45 Panagiota Petrou, PhD.

Immunoassays/Immunosensors Lab, Institute of Nuclear and Radiological Sciences & Technology, Energy & Safety, National Centre for Scientific Research "Demokritos", Greece

Optical immunosensors for label-free detection of food contaminants

16.00 Michailia Angelopoulou, PhD.

Immunoassays/Immunosensors Lab, Institute of Nuclear and Radiological Sciences & Technology, Energy & Safety, National Centre for Scientific Research "Demokritos", Greece

Applications of label-free optical immunosensors for detection of contaminants in dairy products



COFFEE BREAK



16.30 Leda Bousiakou PhD.

Intermedical Nanodiagnosics Laboratory, Greece

Methylene blue tagged aptamer adsorption on mesoporous TiO₂:Mn working electrode surfaces

16.45 Stefanos Karapetis, PhD.

Intermedical Nanodiagnosics Laboratory, Greece

Sensitivity and selectivity of an electrochemical biosensor utilizing an MB tagged aptamer for penicillin detection

17.00 Nikitas Mielos

Biomedical Research Foundation of the Academy of Athens, Greece

Multifaceted biophysical characterization of aptamers and its significance in aptasensor development for food monitoring: AFM1 as a case study

17.15 Sandro Spagnolo

Faculty of Mathematics, Physics and Information, Comenius University, Slovakia

Novel modified DTT linker molecule for reducing fouling from biological fluids on gold surfaces in biosensor applications (on-line)

17.30 Ivan Piovarči

Faculty of Mathematics, Physics and Information, Comenius University, Slovakia

Colorimetric and reflectometric methods for detection of bacteria employing DNA aptamers as receptors

17.45 Laura Csanádi

Functional Interfaces Research Group, Research Centre for Natural Sciences, Hungary

Elaboration of metallic nanostructures on quartz surface for electromagnetic piezoelectric acoustic sensor applications

- Poster presentations related to **SAFEMILK** project:

Henrietta Búzás

Hungarian Dairy Research Institute Ltd.

Aflatoxin M1 contamination in pasteurized, ESL and UHT milk during autumn and winter seasons in Hungary

Veronika Oravczová

Faculty of Mathematics, Physics and Information, Comenius University, Slovakia

Detection of bacteria using aptasensors based on electrochemical methods

Veronika Šubjaková, PhD.

Faculty of Mathematics, Physics and Information, Comenius University, Slovakia

The development of colorimetric biosensor for detection of antibiotics using gold nanoparticles

Kiran S. Sontakke

RUSA Centre for Advance Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, India

Electrochemical Immunosensor for the detection of Salmonella in the milk

Kristóf Jakab

Functional Interfaces Research Group, Research Centre for Natural Sciences, Hungary

Electrochemical study of the effect of nanostructure on antibiotic adsorption on platinum and carbon interfaces

Tamás Marek, PhD.

Functional Interfaces Research Group, Research Centre for Natural Sciences, Hungary

Photoluminescent polymer layers with potential sensor applications