



Program

The 6th International Conference

**New Trends on
Sensing - Monitoring - Telediagnosis
for Life Sciences**

NT-SMT-LS 2022

Braşov - ON SITE and ONLINE

September 8-10, 2022



Transilvania University of Brasov,
Romania



University of Medicine and
Pharmacy
"Carol Davila"
Bucharest, Romania



Università Degli Studi di Milano, Italy



Université de Perpignan Via Domitia,
France

Collaborators



The National Institute for Research and
Development for Optoelectronics
– INOE 2000, Măgurele, Romania



International Center of Biodynamics,
Bucharest, Romania



Romanian Society of
Ethnopharmacology



Sponsors



Papa Jacques



Committees

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- **Prof. Dr. Eng. Ioan Vasile ABRUDAN**, Transilvania University of Brasov, Romania
- **Prof. Dr. Viorel JINGA**, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Conference Chairpersons

- **Mihaela BADEA**, Transilvania University of Brasov, Romania
- **Laura Elena GAMAN**, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- **Patrizia RESTANI**, Università degli Studi di Milano, Italy
- **Jean-Louis MARTY**, University of Perpignan Via Domitia, France; Sensbiotech, Ceret, France

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- Mihaela BADEA, Transilvania University of Brasov, Romania
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- Liviu GACEU, Transilvania University of Brasov, Romania
- Laura Elena GAMAN, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- Marilena GILCĂ, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- Eugen GHEORGHU, International Centre of Biodynamics, Bucharest, Romania
- Cristiana Susana GLAVCE, Francisc Rainer Institute of Antropology, Bucharest, Romania
- Angela MĂRCULESCU, Romanian Society of Ethnopharmacology, Romania
- Viorel JINGA, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

- Jean Louis MARTY, 1- Sensbiotech, Ceret, France; 2- Université de Perpignan, Perpignan Cedex, France
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- Radu Mircea MUNTEAN, Transilvania University of Brasov, Romania
- Andrea NECULAU, Transilvania University of Brasov, Romania
- Gilvanda NUNES, University of Maranhao, São Luís, Maranhao, Brazil
- Mădălina PETRAN, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- Lea POGACNIK, University of Ljubljana, Slovenia
- Bianca POPOVICI, Transilvania University of Brasov, Romania
- Aurel POPA WAGNER, University of Medicine and Pharmacy Craiova, Romania; Essen University Medical School, Germany
- Mugurel Petrinel RĂDOI, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- Patrizia RESTANI, Università degli Studi di Milano, Italy
- Liliana ROGOZEA, Transilvania University of Brasov, Romania
- Rui SILVA, Universidade de Lisboa, Portugal
- Irina STOIAN, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- Alina VASILESCU, International Centre of Biodynamics, Bucharest, Romania
- Cătălin VITELARU, National Institute of Research and Development for Optoelectronics-INOE 2000, Măgurele, Romania
- Alina VLĂDESCU, National Institute of Research and Development for Optoelectronics- INOE 2000, Măgurele, Romania

Topics

(Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine

- Analytical and bioanalytical methods for screening and diagnosis in medicine
- Telemedicine and e-Health
- E-health and education
- Endocrine disruptors: advances in assessing environmental health risk and human health
- Environmental pollution and health- sensing, (tele)monitoring and modelling of environmental risk factors
- Personalized medicine
- Biological therapies in the treatment of medical conditions
- Social innovations to improve the quality of life and well-being of elder people
- Assessment of disease susceptibility and diagnosis
- Improving health information, data exploitation and providing an evidence base for health policies and regulation
- (Tele)diagnosis and (tele)management of environmental factors related disorders
- Impacts of poor health on economic output and productivity
- Approaching melotherapy through online sources/remote methods
- Improving health promotion, lifelong physical activity and disease prevention
- Make business a key partner in promoting health and preventing disease
- Physiotherapy – a way to increase the quality and sustainability of patient's lives
- Bioeconomy for health
- Social responsibility for health
- Health and care systems during and after COVID-19 pandemic

New Trends in Nutritional Sciences and Food Control

- Analytical and bioanalytical methods for screening and diagnosis in medicine
- Telemedicine and e-Health
- E-health and education
- Endocrine disruptors: advances in assessing environmental health risk and human health
- Environmental pollution and health- sensing, (tele)monitoring and modelling of environmental risk factors
- Personalized medicine
- Biological therapies in the treatment of medical conditions
- Social innovations to improve the quality of life and well-being of elder people
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- Improving health information, data exploitation and providing an evidence base for health policies and regulation
- (Tele)diagnosis and (tele)management of environmental factors related disorders
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- Improving health promotion, lifelong physical activity and disease prevention
- Make business a key partner in promoting health and preventing disease
- Physiotherapy – a way to increase the quality and sustainability of patient's lives
- Bioeconomy for health
- Social responsibility for health
- Health and care systems during and after COVID-19 pandemic

New Trends in (Bio)engineering Sciences Applied in Life Sciences

- Innovative smart healthcare and bio-medical systems: artificial intelligence, intelligent computing and connected technologies
- Assistive technologies to the needs of the elderly, disabled and chronic disease patients
- Materials for health
- New (bio)materials used in medical and electronic fields
- Progress in 3D bioprinting technology for tissue/organ regenerative engineering
- Nanotechnology for life sciences
- Personalized electronic tools for effective virtual rehabilitation
- Built environment, urbanization and chronic non-communicable disease
- Hospital hygiene through engineering and ICT solutions.
- Building materials impact on human health
- Occupant safety and health in construction
- Monitoring the indoor air quality in buildings
- Electronic medical devices
- Image, data and signal processing in life sciences
- Computing and simulation in life sciences
- Medical equipment and instruments



Program

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NT-SMT-LS 2022

Location

- Aula "Sergiu Chiriacescu" of the Transilvania University of Braşov, Romania (Strada Iuliu Maniu 41A)

- online presentations – platform will be announced every day using personal email of the registered people

Time – Romanian time

September 8, 2022

| | |
|--------------|---|
| 12.30-13.30 | REGISTRATION |
| 13.30-14.00 | OPENING |
| 14.00-14.40 | PLENARY SESSION |
| 14.40-15.40 | S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (I) – Keynote and Oral presentations |
| 15.40-16.00 | COFFEE BREAK |
| 16.00-17.15 | S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (II) - Keynote and Oral presentations |
| 17.15-17.30 | COFFEE BREAK |
| 17.30 -18.00 | PLENARY SESSION |
| 17.30-19.00 | Honorific event - Prof. dr Jean-Louis Marty - international scientific personality |

September 9, 2022

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| 9.00-11.00 | S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (III) – Keynote, Oral and Poster presentations |
| 11.00-11.30 | COFFEE BREAK |
| 11.30-13.30 | S2. New Trends in Nutritional Sciences and Food Control (I) – Keynote and Oral presentations |
| 13.30-15.00 | LUNCH |
| 15.00-16.45 | S2. New Trends in Nutritional Sciences and Food Control (II) –Oral presentations |
| 16.45-17.00 | COFFEE BREAK |
| 17.00-18.25 | S2. New Trends in Nutritional Sciences and Food Control (III) – Keynote, Oral and Poster presentations |
| 19.30 | Gala Dinner |

September 10, 2022

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| 9.00-11.00 | S3. New Trends in (Bio)engineering Sciences Applied in Life Sciences (I) – Keynote and Oral presentations |
| 11.00-11.15 | COFFEE BREAK |
| 11.15-13.00 | S3. New Trends in (Bio)engineering Sciences Applied in Life Sciences (II) – Keynote and Oral presentations |
| 13.00-13.15 | COFFEE BREAK |
| 13.15-14.15 | S3. New Trends in (Bio)engineering Sciences Applied in Life Sciences (III) – Poster presentations |
| 14.15 | AWARDS AND CLOSING CEREMONY |

September 8, 2022

Location

- Aula “Sergiu Chiriacescu” of the Transilvania University of Braşov, Romania (Strada Iuliu Maniu 41A)
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Time – Romanian time

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|--|---------------------|--|
| 12.30-13.30 - REGISTRATION | | |
| 13.30-14.00 - OPENING | | |
| PLENARY SESSION | | |
| Chairpersons – Mihaela BADEA, Laura Elena GAMAN, Marius MOGA | | |
| 14.00-14.40 | PL1 | Optical biosensors for diagnostics of infectious viral disease: a recent update Jean-Louis MARTY (1,2) 1 – Sensbiotech, Ceret, France; 2 – Université de Perpignan, Perpignan Cedex, France |
| S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (I) | | |
| Chairpersons – Aurel POPA WAGNER, Maria TOTAN, Liliana ROGOZEA | | |
| 14.40-15.10 | S1-KN1 | Towards point of use systems for fast and on-site detection Mihaela TERTIȘ, Oana HOSU, Andreea CERNAT, Bogdan FEIER, Cecilia CRISTEA Analytical Chemistry Department, Faculty of Pharmacy, “Iuliu Hațieganu” University of Medicine and Pharmacy, Cluj Napoca, Romania |
| 15.10-15.25 | S1-O1 | Use of wearable devices for health and fatigue monitoring Horia Alexandru MODRAN (1), Doru URSUTIU (1,2), Cornel SAMOILĂ (1,3), Lilia ALJIHMANI (4), Khalid QARAQE (4) 1 - Transilvania University of Brașov, Brasov, Romania 2 - Romanian Academy of Scientists, Bucharest, Romania 3 - Romanian Academy of Technical Sciences, Bucharest, Romania 4 - Texas A&M University at Qatar, Doha, Qatar |
| 15.25-15.40 | S1-O2 | Studies of determination of urinary bioactive metabolites Ligia CHELMEA, Mihaela BADEA, Ioan SCÂRNECIU Transilvania University of Brașov, Faculty of Medicine, Brasov, Romania |
| 15.40-16.00 | COFFEE BREAK | |
| S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (II) | | |
| Chairpersons – Cecilia CRISTEA, Marilena GILCĂ, Liliana ROGOZEA | | |
| 16.00-16.30 | S1-KN2 | Long-term treatment with chloroquine for healthy aging in animal model Aurel POPA WAGNER (1,2) 1-Center for Clinical and Experimental Medicine, University of Medicine and Pharmacy, Craiova, Romania; 2-Essen University Medical School, Germany |

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| 16.30-16.45 | S1-O3 | Myo-inositol - never-ending resource in patients with polycystic ovary syndrome (PCOS) Elena VASILICA, Laura Elena GAMAN “Carol Davila” University of Medicine and Pharmacy, Faculty of Medicine, Bucharest, Romania |
| 16.45-17.00 | S1-O4 | Clinical and paraclinical evaluations of deficiency rickets Maria TOTAN (1,2), Oana-Raluca ANTONESCU (1), Ionela MANIU (3,4), Elisabeta ANTONESCU (1,5) 1- Lucian Blaga University of Sibiu, Faculty of Medicine, Sibiu, Romania; 2- Clinical Pediatric Hospital, Clinical Laboratory, Sibiu, Romania; 3- Lucian Blaga University of Sibiu, Faculty of Sciences, Mathematics and Informatics Department, Research Center in Informatics and Information Technology, Sibiu, Romania 4- Pediatric Clinical Hospital Sibiu, Research team, Sibiu, Romania 5- County Clinical Emergency Hospital, Sibiu, Romania |
| 17.00-17.15 | S1-O5 | Drug safety for elderly people – ethical, psychological and pragmatic aspects Liliana ROGOZEA (1), Mihaela BADEA (1), Angela REPANOVICI (2), Claudiu COMAN (3), Maria Cristina BULARCA (3), Daniela POPA (4), Eleonora DINU (1), Florin LEAŞU (1) 1-Faculty of Medicine, Transilvania University of Braşov, Braşov, Romania 2-Faculty of Product Design and Environment, Transilvania University of Braşov, Braşov, Romania 3-Faculty of Sociology and Communication, Transilvania University of Braşov, Braşov, Romania 4-Faculty of Psychology and Education Sciences, Transilvania University of Braşov, Braşov, Romania |
| 17.15-17.30 | S1-O6 | Early puberty – clinical and paraclinical aspects M.A. VLAD (1,2), B.M.PASCU (1), N.LACATUS (1), M.D.HAIDAUTU (1), D.A.TUTOVEANU (1), A.CIMPEAN (2) 1-INSMC Alessandrescu-Rusescu, Pediatrics Department, Bucharest, Romania 2-Faculty of Biology, Bucharest University, Bucharest, Romania |
| 17.15-17.30 | COFFEE BREAK | |
| 17.30-19.00 | Honorific event - Prof. dr Jean-Louis Marty - international scientific personality Chairpersons –Alina VASILESCU, Mihaela BADEA | |
| 17.30 - 18.00 | PL2. | Biosensing across continents: from advanced materials development to field deployable devices Silvana ANDREESCU Clarkson University Potsdam, USA |
| 18.00-19.00 | | Discussions |

September 9, 2022

Location

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Time – Romanian time

| S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (III) | | |
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| Chairpersons – Rui SILVA, Alina VASILESCU, Madalina PETRAN | | |
| 9.00-9.30 | S1-KN3 | Portable Surface Plasmon Resonance system for blood marker analysis supporting rapid point-of-care diagnostics and treatment monitorin Cristina POLONSCHII (1), Arian OLOUMI (1,2), Mihnea ROSU-HAMZESCU (1), Sorin DAVID (1), Eugen GHEORGHIU (1,2) 1-International Centre of Biodynamics, Bucharest, Romania 2-University of Bucharest, Bucharest, Romania |
| 9.30-9.45 | S1-O7 | Towards an integrated automatic platform for rapid determination of antibiotic susceptibility of target bacteria Sorin DAVID (1), Ionela-Cristina PETCU (1,2), Ioana-Cristina CERNAT (1,2), Cristina POLONSCHII (1), Raluca-Elena MUNTEANU (1,3), Mihaela GHEORGHIU (1,3), Dumitru BRATU (1), Daniela TUDOR (1,3), Eugen GHEORGHIU (1,3) 1-International Centre of Biodynamics, Bucharest, Romania; 2-University Politehnica of Bucharest, Bucharest, Romania; 3-University of Bucharest, Bucharest, Romania |
| 9.45-10.00 | S1-O8 | Evaluation of oxidative stress in the granulomatous disease C.E.DELIA (1,2), M.G.TOMA (1), A.V.COCHINO (1), A.GHITA (1) 1- National Institute for Mother and Child Health Alessandrescu-Rusescu, Pediatric Department; Bucharest, Romania 2-Faculty of Biology, Bucharest University, Bucharest, Romania |
| 10.00-10.15 | S1-O9 | Lipid peroxidation and oxidative stress Mihaela HORHOCEA (ŞTEFAN) (1,2), Gabriela MARIN-ŞTEFAN (1,2), Laurenţiu NEDELCU (1,2), Mihaela BADEA (1) 1-Transilvania University of Brasov, Faculty of Medicine, Brasov, Romania 2- County Clinical Hospital of Brasov, Brasov, Romania |
| 10.15-10.30 | S1-O10 | Vitamin D status in the pediatric population in the pandemic context M.A.VLAD (1,2), C.E.DELIA (1,2), M.D.HAIDAUTU (1), N.LACATUS (1), M.G.TOMA (1) 1- NIMCH Alessandrescu-Rusescu, Pediatric Department, Bucharest, Romania 2- Faculty of Biology, Bucharest University, Bucharest, Romania |
| 10.30-10.40 | S1-O11 | Telemedicine for older patients. Advantages and disadvantages Sergiu Costin CIUPERCĂ Transilvania University of Brasov, Faculty of Medicine, Brasov, Romania |

S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (IV) – Poster session

Chairpersons – Francesca COLOMBO, Laura Elena GAMAN, Corina DELIA

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| 10.40 | S1-P1 | Strategies to address the non-specific adsorption in electrochemical aptasensors for clinically relevant proteins Robertta Maria BANCUIU, Alina VASILESCU, Cristina POLONSCHII International Centre of Biodynamics, 1B Intrarea Portocalelor, Bucharest, Romania |
| 10.45 | S1-P2 | The behavior of the medical staff and of the students from the Faculty of Medicine regarding the use of the mobile phone Cristina ADOCHIŢE (1), Mihaela IDOMIR (1), Sarah Costinaş (1), Marius MOGA (1), Liliana ROGOZEA (1), Daniela NECULOIU (1), Laura Floroian (1), Catalin VITELARU (2), Anca C. PARAU (2), Adrian E. KISS (2), Iulian PANA (2), Mihaela DINU (2), Lidia R. CONSTANTIN (2), Alina VLADESCU (2,3), Mihaela BADEA (1) 1- Faculty of Medicine, University of Transilvania Braşov, România; 2- National Institute for Research and Development in Optoelectronics INOE 2000, Magurele, Romania; 3- Research Center for Physical Materials Science and Composite Materials, Research School of Chemistry & Applied Biomedical Sciences, Tomsk Polytechnic University, Tomsk, Russia |
| 10.50 | S1-P3 | Vitamin D deficiency in diabetes Gabriela MARIN-STEFAN (1,2), Mihaela HORHOCEA (STEFAN) (1,2), Mihaela BADEA (1) 1- Transilvania University of Brasov, Faculty of Medicine, Brasov, Romania 2- County Clinical Hospital of Brasov, Brasov, Romania |
| 10.55 | S1-P4 | Vitamin D levels and pathology association in hospitalized patients Sandica N. BUCURICA (1,2), Alexandra HOZA (2), Monica GRIGORE (2), Mihaela PAVALEAN (2), Mariana JINGA (1,2), Florentina IONITA-RADU (1,2), Laura GAMAN (2), Ioana PRODAN (2) 1- Carol Davila University of Medicine and Pharmacy, Bucharest, Romania 2- Central Emergency Military Hospital Bucharest, Romania |
| 11.00-11.30 | COFFEE BREAK | |

S2. New Trends in Nutritional Sciences and Food Control (I)

Chairpersons – Jean-Louis MARTY, Cristina POLONSCHII, Sorin DAVID

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| 11.30-12.00 | S2-KN1 | Botanical extracts as new food as new food additives: are they really new? Patrizia RESTANI (1,2), Chiara DI LORENZO (1,2), Corinne BANI (1), Francesca COLOMBO (1) 1 - Dept. Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Milan, Italy 2 - CRC "Innovation for Well-Being and Environment", Università degli Studi di Milano, Milan, Italy |
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| 12.00-12.15 | S2-O1 | Electroanalytical method coupled with chemometry for detection of virgin olive oil adulteration Constantin APETREI (1), Elisabeta-Irina GEANĂ (2), Irina Mirela APETREI (3) 1- Faculty of Sciences and Environment, Dunarea de Jos University of Galati, Galati, Romania 2- National Research and Development Institute for Cryogenics and Isotopic Technologies - ICSI Rm. Valcea, Ramnicu Valcea, Romania 3- Faculty of Medicine and Pharmacy, Dunarea de Jos University of Galati, Galati, Romania |
| 12.15-12.30 | S2-O2 | Develop a series of ultra-sensitive detection methods for mycotoxins Cheng YANG, Shengnan CUI, Xiaolin CHU, Fathimath ABBAS, Yaqi ZHANG, Shengnan DONG, Yue WANG, Yingying SUN State Key Laboratory of Fine Chemicals, Department of Chemistry, School of Chemical Engineering, Dalian University of Technology, Dalian, China |
| 12.30-12.45 | S2-O3 | Sustainable approach for functional fermented product development Cristina POPOVICI (1), Gjore NAKOV (2,3), Jasmina LUKINAC (4), Marko JUKIĆ (4) 1-Technical University of Moldova, Faculty of Food Technology, Chisinau, Republic of Moldova; 2-Agricultural Academy, Institute of Cryobiology and Food Technologies, Sofia Bulgaria 3-Technical University of Sofia, College of Sliven, Sliven, Bulgaria 4-Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology, Osijek Croatia |
| 12.45-13.00 | S2-O4 | Harmonized in vitro digestion and Ussing chamber to investigate the effects of polyphenols on the intestinal physiology Marco TRETOLA, Giuseppe BEE, Frigga DOHME-MEIER, Paolo SILACCI 1-University of Milan, Lodi, Italy 2-Agroscope, Posieux, Switzerland |
| 13.00-13.15 | S2-O5 | Cider yeasts associated with Hardanger cider during fermentation process Urban ČESNIK (1), Mitja MARTELANC (1), Branka MOZETIČ VODOPIVEC (1), Ingunn OVSTHUS (2), Lorena BUTINAR (1) 1- Wine Research Centre, University of Nova Gorica, Nova Gorica, Slovenia 2 - NIBIO Ullensvang, 5781 Lofthus, Norway |
| 13.15-13.30 | S2-O6 | New educational trends in European teenagers obesity management Monica TARCEA, Roxana MARTIN-HADMAŞ, Irina MATRAN, George VRAPCEA, Anișoara POP Department of Community Nutrition and Food Safety, G.E. Palade University of Medicine, Pharmacy, Science and Technology of Targu Mures, Romania |
| 13.30-15.00 | LUNCH | |
| S2. New Trends in Nutritional Sciences and Food Control (II) Chairpersons – Constantin APETREI, Cristina POPOVICI, Patrizia RESTANI | | |
| 15.00-15.30 | S2-KN2 | Rapid and sensitive tools for enhanced chemical safety of food G. ISTAMBOULIE, C. AYMARD, S. BEN AISSA, G. CATANANTE, T. NOGUER 1-Université de Perpignan Via Domitia, Biocapteurs-Analyse-Environnement, |

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| | | Perpignan, France 2-Laboratoire de Biodiversité et Biotechnologies Microbiennes, Sorbonne Universités (UPMC) Paris 6 et CNRS Observatoire Océanologique, Banyuls-sur-Mer, France |
| 15.30-15.45 | S2-O7 | Invasive knotweed species as a source of bioactivities Lea POGACNIK (1), Rui SILVA (2) 1- Biotechnical Faculty, University of Ljubljana, Slovenia 2- Universidade de Lisboa, Lisbon, Portugal |
| 15.45-16.00 | S2-O8 | Use trend and attitude of young people towards food supplements: comparison between surveys performed in 2011 and 2021 Matteo LODA (1), Chiara DI LORENZO (1), Francesca COLOMBO (1), Corinne BANI (1), Patrizia RESTANI (1,2), Mihaela BADEA (3) 1- Department of Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Milano, Italy 2- Centri di Ricerca Coordinata (CRC) “Innovation for Well-Being and Environment”, Università degli Studi di Milano, Milano, Italy 3- Faculty of Medicine, Transilvania University of Brasov, Romania |
| 16.00-16.15 | S2-O9 | Screening grapes for infection by Botrytis cinerea: detection of spores versus the evaluation of laccase activity Alina VASILESCU (1), Elena BRINDUSE (2), Szilvester GASPARI (1), Monica POTARA (3), Andreea Catalina LULEA (1), Roberta Maria BANCUI (1), Robert RUGINESCU (4), Cristina PURCAREA (4) 1- International Centre of Biodynamics, Bucharest, Romania 2- Institute for Research and Development for Vine and Wine, Valea Calugareasca, Romania 3- Department of Microbiology, Institute of Biology Bucharest of the Romanian Academy, Bucharest, Romania 4- Babes-Bolyai University, Nanobiophotonics and Laser Microspectroscopy Center, Interdisciplinary Research Institute in Bio-Nano-Sciences, Cluj-Napoca, Romania |
| 16.15-16.30 | S2-O10 | Research on the use of <i>Saccharina latissima</i> seaweed as an innovative ingredient in the bakery industry Liviu GACEU (1), Mihaela BADEA (1), Michael BANTLE (2), Cristina ADOCHITE (1), Oana Bianca OPREA (1) 1 – Transilvania University of Brasov, Brasov, Romania 2 – Sintef Energy Research, Norway |
| 16.30-16.45 | S2-O11 | Insect material as innovative feed ingredient in animal nutrition Matteo OTTOBONI, Marco TRETOLA, Federica CHELI, Luciano PINOTTI Department Veterinary Medicine and Animal Sciences, University of Milan, Italy |
| 16.45-17.00 | COFFEE BREAK | |
| S2. New Trends in Nutritional Sciences and Food Control (III) | | |
| Chairpersons – Lea POGACNIK, Chiara DI LORENZO, Gaëlle CATANANTE | | |
| 17.00-17.15 | S2-O12 | PlantMolecularTasteDB: a versatile tool in designing fortified food Dorin DRAGOȘ (1,2), Mădălina PETRAN (3), Cristiana GRĂDINARU (3), Marilena GILCĂ (3) 1-Department of Medical Semiology, Faculty of Medicine, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania; |

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| | | 2- 1st Internal Medicine Clinic, University Emergency Hospital Bucharest, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania; 3-Department of Functional Sciences, Biochemistry, Faculty of Medicine, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania |
| 17.15-17.30 | S2-O13 | Pigmented cereals and gluten related diseases Francesca COLOMBO (1), Stefano PIAZZA (1), Corinne BANI (1), Giulia MARTINELLI (1), Enrico SANGIOVANNI (1), Patrizia RESTANI (1,2), Mario DELL'AGLI (1), Chiara DI LORENZO (1) 1-Department of Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Milano, Italy 2-Centri di Ricerca Coordinata (CRC) "Innovation for Well-Being and Environment", Università degli Studi di Milano, Milano, Italy |
| 17.30-17.40 | S2-O14 | Physiopatology of malnutrition in Crohn's disease Ruxandra CIOARCA-NEDELCU Biochemistry Department of Medicine and Pharmacy University "Carol Davila", Bucharest, Romania |
| 17.40-17.50 | S2-O15 | Food - the history of a society Serena Lucia CIOCAZAN Faculty of Medicine, Transilvania University of Braşov, Braşov, Romania |

S2. New Trends in Nutritional Sciences and Food Control (IV)

- POSTER SESSION

Chairpersons – Liviu GACEU, Georges ISTAMBOULIE, Angela MARCULESCU

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| 17.50 | S2-P1 | Phenolic profile and antioxidant activity of different corn and rice varieties Corinne BANI (1), Chiara DI LORENZO (1), Patrizia RESTANI (1,2), Francesca MERCOGLIANO (3), Francesca COLOMBO (1) 1- Department of Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Milano, Italy 2- Centro di Ricerca Coordinata "Innovation for Well-Being and Environment" (CRC), Università degli Studi di Milano, Milano, Italy 3- Dr. in Safety Assessment of Xenobiotics and Biotechnological Products, Università degli Studi di Milano, Milano, Italy |
| 17.55 | S2-P2 | Electrochemical determination of hydroxytyrosol in extravirgin olive oils using screen-printed electrodes modified with single wall carbon nanotubes and tyrosinase Alexandra Virginia BOUNEGRU, Constantin APETREI "Dunarea de Jos" University of Galati, Faculty of Sciences and Environment, Galaţi, Romania |
| 18.00 | S2-P3 | Consumer perceptions of functional foods with antioxidant and anticancer potential Ecaterina ROBU, Elena SERGHEEVA, Cristina POPOVICI Technical University of Moldova, Faculty of Food Technology, Chisinau, Republic of Moldova |
| 18.05 | S2-P4 | Facile specific detection of acetaldehyde in air samples using electrochemical enzyme biosensors Alina VASILESCU (1), Victoria Oana PAUN (2), Roberta Maria BANCUI (1), Sorin DAVID (1), Georgiana NECULA-PETRAREANU (2), Cristina PURCAREA (2), Petru EPURE (3) |

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| | | <p>1- International Centre of Biodynamics, Bucharest, Romania; 2 - Department of Microbiology, Institute of Biology Bucharest of the Romanian Academy, Bucharest, Romania 3 - EPI SISTEM SRL, Sacele, Brasov, Romania</p> |
| 18.10 | S2-P5 | <p>Consumer perceptions of functional foods for type 2 diabetes in Romania and Republic of Moldova Elena SERGHEEVA (1), Mihaela GEICU-CRISTEA (2), Florentina MATEI (2), Mona Elena POPA (2), Elisabeta Elena POPA (2), Ecaterina ROBU (1), Cristina POPOVICI (1) 1- Technical University of Moldova, Faculty of Food Technology, Chisinau, Republic of Moldova 2- University of Agronomic Sciences and Veterinary Medicine of Bucharest, Faculty of Biotechnology, Bucharest, Romania</p> |
| 19.30 | Gala Dinner | |

September 10, 2022

Location

- Aula “Sergiu Chiriacescu” of the Transilvania University of Braşov, Romania (Strada Iuliu Maniu 41A)
- online presentations – platform will be announced every day using personal email of the registered people

Time – Romanian time

| S3. New Trends in (Bio)engineering Sciences Applied in Life Sciences (I) | | |
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| Chairpersons – Cătălin VIȚELARU, Laura FLOROIAN, Doru URSUȚIU | | |
| 9.00-9.30 | S3- KN1 | In situ remote monitoring of novel biodegradable cardiovascular stents - design & validation Lilia ALJHMANI (1), Hasan ABBAS (2), Bilal MANSOOR (3), Khalid QARAQE (1) 1 - Electrical and Computer Engineering, Texas A&M University at Qatar, Education City, Doha, Qatar 2 - James Watt School of Engineering, University of Glasgow, Glasgow, United Kingdom 3 - Mechanical Engineering, Texas A&M University at Qatar, Education City, Doha, Qatar |
| 9.30-9.45 | S3-O1 | Development of nanotechnologies and their impact on public health Cristina ADOCHIȚE, Mihaela BADEA Faculty of Medicine, University of Transilvania Brasov, România |
| 9.45-10.00 | S3-O2 | Functional Cell Sorting and Cellular Spectroscopy: New technologies for the study of cellular heterogeneity Cătălin CHIMEREL University of Exeter, United Kingdom |
| 10.00-10.15 | S3-O3 | Defining protein function and activity associated to different pathologies by combining molecular, cellular, biochemical and analytical methods Gabriela N. CHIRITOIU, Cristian V.A. MUNTEANU, Marioara CHIRITOIU, Simona GHENEA, Andrei PETRESCU, Stefana PETRESCU Institute of Biochemistry of the Romanian Academy, Bucharest, Romania |
| 10.15-10.30 | S3-O4 | Lab-chip evaluation of bacterial cells' dynamics for rapid antimicrobial susceptibility testing Raluca-Elena MUNTEANU (1,2), Daniela TUDOR (1,2), Sorin DAVID (1), Eugen GHEORGHIU (1,2), Mihaela GHEORGHIU (1,2) 1- International Centre of Biodynamics, Bucharest, Romania; 2 - Faculty of Biology, University Of Bucharest, Romania |
| 10.30-10.45 | S3-O5 | Novel reflected light microscopy assay for rapid, label free assessment of cellular processes and cellular status at single cell level |

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| | | Daniela-Alexandra TUDOR (1,2), Raluca-Elena MUNTEANU (1,2), Cristina POLONSCHII (1), Eugen GHEORGHIU (1,2), Mihaela GHEORGHIU (1,2) 1- International Centre of Biodynamics, Bucharest, Romania; 2 - Faculty of Biology, University Of Bucharest, Romania |
| 10.45-11.00 | S3-O6 | ZrCu based thin films metallic glasses in medicine A. VLADESCU (1), L.R. CONSTANTIN (1), G.A. JURAVLEA (1,2), A. PARAU (1) 1-National Institute for Optoelectronics INOE 2000, Department for Advanced Surface Processing and Analysis by Vacuum Technologies, Magurele, Romania 2-University Politehnica of Bucharest, Faculty of Material Science and Engineering, Bucharest, Romania |
| 11.00-11.15 | COFFEE BREAK | |
| S3. New Trends in (Bio)engineering Sciences Applied in Life Sciences (II) Chairpersons – Alina VLĂDESCU, Jean-Louis MARTY, Diana VRÂNCEANU | | |
| 11.15-11.45 | S3-KN2 | Synthesis and characterization of nanostructured silver based antibacterial coatings on protective polymer foils of touch screen devices Catalin VITELARU (1), Anca C. PARAU (1), Adrian E. KISS (1), Iulian PANA (1), Mihaela DINU (1), Lidia R. CONSTANTIN (1), Alina VLADESCU (1,2), Lavinia E. TONOFREI (3), Cristina S. ADOCHITE (4), Sarah COSTINAS (4), Liliana ROGOZEA (4), Marius MOGA (4), Mihaela E. IDOMIR (4), Mihaela BADEA (4) 1- National Institute for Research and Development in Optoelectronics INOE 2000, Magurele, Romania; 2- Research Center for Physical Materials Science and Composite Materials, Research School of Chemistry &Applied Biomedical Sciences, Tomsk Polytechnic University, Tomsk, Russia 3- ATS Novus SRL, Bucharest, Romania 4- Faculty of Medicine, Transylvania University of Brasov, Brasov, Romania |
| 11.45-12.00 | S3-O7 | MXenes-based bioanalytical sensors: design, characterization and applications Reem KHAN, Silvana ANDREESCU Clarkson University Potsdam, USA |
| 12.00-12.15 | S3-O8 | Investigation of a truncated aptamer for ofloxacin detection Gaëlle CATANANTE (1), Sondes Ben AISSA (1,2), Georges ISTAMBOULIE (1), Thierry NOGUER (1) 1- BAE-LBBM Laboratory, Université de Perpignan Via Domitia, Perpignan, France 2-Sensors and Biosensors Group, Laboratoire de Chimie Analytique et Electrochimie (LR99ES15), Faculté des Sciences de Tunis, Universitaire de Tunis El Manar, Tunis, Tunisia |
| 12.15-12.30 | S3-O9 | Multifunctional nanomaterials an emerging area for biosensors Akhtar HAYAT Interdisciplinary Research Centre in Biomedical Materials (IRCBM), |

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| | | COMSATS University, Islamabad, Lahore Campus, Pakistan |
| 12.30-12.45 | S3-O10 | Nano-engineered surface coatings on polymer substrates: the correlation between surface morphology, hydrophilic/hydrophobic properties and antibacterial activity Sibu C PADMANABHAN (1), Sukhananazerin ABDULLA (1), Paula FERNANDEZ GARCIA (2), Malco-Cruz ROMERO (2), Joseph P KERRY (2), Michael A MORRIS (1) 1- Advanced Materials and BioEngineering Research (AMBER) Centre, & School of Chemistry, University of Dublin, Trinity College, Dublin 2, Ireland 2- Department of Food and Nutritional Sciences at University College Cork, Cork, Ireland |
| 12.45-13.00 | S3-O11 | Smart nanocoatings with thermo-switchable antibacterial activity Joanna RACZKOWSKA (1), Yuriy STETSYSHYN (2), Kamil AWSIUK (1), Ostap LISHCHYNSKYI (2), Yana SHYMBORSKA (1), Svyatoslav NASTYSHYN (1), Andrzej BUDKOWSKI (1) 1- Smoluchowski Institute of Physics, Jagiellonian University, Kraków, Poland 2- Lviv Polytechnic National University, Lviv, Ukraine |
| 13.00-13.15 | COFFEE BREAK | |
| S3. New Trends in (Bio)engineering Sciences Applied in Life Sciences (II) - POSTER SESSION Chairpersons – Gabriela N. CHIRITOIU, Mihaela BADEA, Khalid QARAQE | | |
| 13.15 | S3-P1 | Comparative study on the antioxidant activity of extra virgin olive oil samples using a newly developed electrochemical method and DPPH spectrophotometric assay Irina-Georgiana BULGARU (MUNTEANU), Constantin APETREI Department of Chemistry, Physics and Environment, Faculty of Sciences and Environment, “Dunărea de Jos” University of Galați, Galați, Romania |
| 13.20 | S3-P2 | IT technologies for medical data management Liviu Doru DOGAR, Laura FLOROIAN Transilvania University of Brasov, Brasov, Romania |
| 13.25 | S3-P3 | Electrochemical and DFT analysis of quantum chemical reactivity parameters for electrochemical applications of an azulene-phenyloxazolone Cornelia Elena MUSINA (BORSARU) (1), Alina-Giorgiana Brotea (1), Ovidiu Teodor MATICA (1), Oana Iulia ENACHE (1), Amalia STEFANIU (2), Eleonora-Mihaela UNGUREANU (3) 1- Faculty of Chemical Engineering and Biotechnologies, University Politehnica of Bucharest, Romania 2- Institute of Organic Chemistry C. D. Nenitzescu of Romanian Academy, 202B, Bucharest, Romania 3- Doctoral School “Applied Chemistry and Materials Science”, University Politehnica of Bucharest, Romania |
| 13.30 | S3-P4 | Electrochemical properties of 2,6-bis((e)-2-(furan-2-yl) vinyl)-4-(azulen-1-yl) pyridine Oana Iulia ENACHE (1), Ovidiu-Teodor MATICA (1), Magdalena-Rodica |

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| | | <p>BUJDUVEANU (1), Raluca ISOPESCU (1), Mihaela CRISTEA (2), Eleonora-Mihaela UNGUREANU (3)</p> <p>1- Faculty of Chemical Engineering and Biotechnologies, University Politehnica of Bucharest, Romania</p> <p>2- Institute of Organic Chemistry C. D. Nenitzescu of Romanian Academy, 202B, Bucharest, Romania</p> <p>3- Doctoral School “Applied Chemistry and Materials Science”, University POLITEHNICA of Bucharest, Romania</p> |
| 13.35 | S3-P5 | <p>Data management application in a smart hospital</p> <p>Liviu Doru DOGAR, Laura FLOROIAN</p> <p>Transilvania University of Brasov, Brasov, Romania</p> |
| 13.40 | S3-P6 | <p>Biopolymeric compounds with medicinal applications</p> <p>Dana-Maria MIU (1,2), Ramona-Daniela PAVALOIU (1), Gabriela SAVOIU (1), Maria SPIRIDON (1), Mihaela-Carmen EREMIA (1)</p> <p>1- The National Institute for Chemical Pharmaceutical Research & Development, Bucharest, Romania</p> <p>2- Faculty of Chemical Engineering and Biotechnologies, Bucharest, Romania</p> |
| 13.50 | S3-P7 | <p>Folate-modified pullulan acetate nanoparticles loaded with curcumin for cancer therapy</p> <p>Dana-Maria MIU (1,2), Maria PETRESCU (1,2), Ramona-Daniela PAVALOIU (1), Fawzia SHA’AT (1), Mousa SHA’AT (3) , Gabriela SAVOIU (1), Maria SPIRIDON (1), Mihaela-Carmen EREMIA (1)</p> <p>1- The National Institute for Chemical Pharmaceutical Research & Development, Bucharest, Romania</p> <p>2- Faculty of Chemical Engineering and Biotechnologies, University Politehnica Bucharest, Bucharest, Romania</p> <p>3- Faculty of Pharmacy, Department of Pharmaceutical Technology, Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy, Iasi, Romania</p> |
| 13.55 | S3-P8 | <p>From whole cyanobacterial cells of Synechococcus elongatus PCC 7942 to PSII: the effect of diuron on photosynthesis</p> <p>Robert RUGINESCU (1), Alina VASILESCU (2), Roberta Maria BANCIU (2), Szilveszter GASPARG (2), Cristina PURCAREA (1)</p> <p>1- Department of Microbiology, Institute of Biology Bucharest of the Romanian Academy, Bucharest, Romania</p> <p>2- International Centre of Biodynamics, Bucharest, Romania</p> |
| 14.00 | S3-P9 | <p>ZrCu thin film metallic glasses as biomaterials for coating of metallic orthopedic implants</p> <p>Gabriela A. JURAVLEA (1,2), Alina VLADESCU (1), Anca C. PARAU (1)</p> <p>1- National Institute of Research and Development for Optoelectronics - INOE 2000, Magurele, Romania</p> <p>2- University Politehnica of Bucharest, Bucharest, Romania</p> |
| 14.05 | S3-P10 | <p>In vitro evaluation of doped hydroxyapatite coatings electrochemically deposited on titanium nanostructured surface</p> <p>D.M. VRANCEANU (1), I.C. IONESCU (1), E. UNGUREANU (1), A.C. PARAU (2), R.I. ZAMFIR (1), I. TITORENCU (3), M. BADEA (4), C. ADOCHITE (4), S. COSTINAS (4), M. IDOMIR (4), A. VLADESCU (2), C.M. COTRUT (1)</p> <p>1 - University Politehnica of Bucharest, Bucharest, Romania</p> |

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| | | 2 - National Institute for Optoelectronics, Magurele, Bucharest, Romania 3 - Institute of Cellular Biology and Pathology "Nicolae Simionescu, Bucharest, Romania 4 - Faculty of Medicine, Transilvania University of Brasov, Brasov, Romania |
| 14.10 | S3-P11 | Influence of Mg and Zn content on the properties of hydroxyapatite based coatings D.M. VRANCEANU (1), I.C. IONESCU (1), E. UNGUREANU (1), A. KISS (2), A.C. PARAU (2), C.M. COTRUT (1) 1 - University Politehnica of Bucharest, Bucharest, Romania 2 - National Institute for Optoelectronics, Magurele, Bucharest, Romania |
| 14.15 | AWARDS AND CLOSING CEREMONY | |