



Program

The 6th International Conference

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

NT-SMT-LS 2022

ON SITE and ONLINE

September 8-10, 2022

Organizers



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





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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

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- **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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- Ganesh BORA, Mississippi State University, USA
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- 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
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- Social responsibility for health
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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

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

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

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

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Time – Romanian time

12.30-13.30 - REGISTRATION		
13.30-14.00 - OPENING		
PLENARY SESSION		
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)		
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)		
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
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 - 18.00	PL2.	Biosensing across continents: from advanced materials development to field deployable devices Silvana ANDREESCU Clarkson University Potsdam, USA
17.30-19.00	Honorific event - Prof. dr Jean-Louis Marty - international scientific personality	

September 9, 2022

Location

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S1. (Tele)diagnosis, (Tele)monitoring and (Tele)management in Medicine (III)		
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, Buchares, 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		
10.40	S1-P1	Strategies to address the non-specific adsorption in electrochemical aptasensors for clinically relevant proteins Roberta Maria BANCIU, 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 ADOCHIȚE (1), Mihaela IDOMIR (1), Sarah Costinaș (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 Brașov, 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)		
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
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)		
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, 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 GASPAR (1), Monica POTARA (3), Andreea Catalina LULEA (1), Roberta Maria BANCIU (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 Saccharina latissima 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)

17.00-17.15	S2-O12	PlantMolecularTasteDB: a versatile tool in designing fortified food Dorin DRAGOŞ (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; 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

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) 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
18.10	S2-P5	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
19.30	Gala Dinner	

September 10, 2022

Location

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- 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)		
9.00-9.30	S3- KN1	In situ remote monitoring of novel biodegradable cardiovascular stents - design & validation Lilia ALJIHMANI (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 Catalin 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 Daniela-Alexandra TUDOR (1,2), Raluca-Elena MUNTEANU (1,2), Cristina POLONSCII (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)		
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), 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		
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

		<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>
13.30	S3-P4	<p>Electrochemical properties of 2,6-bis((e)-2-(furan-2-yl) vinyl)-4-(azulen-1-yl) pyridine</p> <p>Oana Iulia ENACHE (1), Ovidiu-Teodor MATICA (1), Magdalena-Rodica 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 BANCUI (2), Szilveszter GASPAR (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	ZrCu thin film metallic glasses as biomaterials for coating of metallic orthopedic implants Gabriela A. JURAVLEA (1,2), Alina VLADESCU (1), Anca C.PARAU (1) 1- National Institute of Research and Development for Optoelectronics - INOE 2000, Magurele, Romania 2- University Politehnica of Bucharest, Bucharest, Romania
14.05	S3-P10	In vitro evaluation of doped hydroxyapatite coatings electrochemically deposited on titanium nanostructured surface 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) 1 - University Politehnica of Bucharest, Bucharest, Romania 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	