

**MINISTRY OF EDUCATION**  
**“AUREL VLAICU” UNIVERSITY OF ARAD**  
**FACULTY OF FOOD ENGINEERING, TOURISM AND**  
**ENVIRONMENTAL PROTECTION**

**310330 Arad, Str. Elena Drăgoi, Nr. 2-4, Arad**

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**PHD STUDENTS' DAYS**  
**FACULTY OF FOOD ENGINEERING, TOURISM AND**  
**ENVIRONMENTAL PROTECTION**

**PROGRAM**

**The IV<sup>th</sup> Edition, May 23-24, 2024**

**ARAD, ROMANIA**

# PHD STUDENTS' DAYS

## FACULTY OF FOOD ENGINEERING, TOURISM AND ENVIRONMENTAL PROTECTION "AUREL VLAICU" UNIVERSITY OF ARAD

IV<sup>th</sup> Edition, May 23-24, 2024

### CHAIR OF THE ORGANIZING COMMITTEE:

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Assoc. Prof. Dr. Eng. Habil. Oana BRÎNZAN

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Assoc. Prof./Docent Dr. Salme TIMMUSK, Uppsala BioCenter, SLU, Sweden  
Prof. Dr. Habil. Simona Ioana VICAȘ, University of Oradea, Romania

# PROGRAM

**LOCATION:** "Aurel Vlaicu" University of Arad, building M, Faculty of Food Engineering, Tourism and Environmental Protection, Elena Drăgoi Str., no. 2-4, Room 134, Code 310 330, Arad.

## **Zoom**

Topic: PhD Students Day

Time: May 25, 2024 12:00 PM Athens

Join Zoom Meeting

<https://us05web.zoom.us/j/89069629797?pwd=iN83kI0HaScGIJM5OQJbzEX6PZxbY0.1>

Meeting ID: 890 6962 9797

Passcode: 5u8h6R

## **Thursday, May 23, 2024 / Joi 23 Mai 2024**

**18.00-18.30 Registration of the participants**

**Visit the Faculty of Food Engineering, Tourism and Environmental Protection of "Aurel Vlaicu" University of Arad**

**Visit the Institute of Technical and Natural Sciences Research-Development-Innovation of "Aurel Vlaicu" University of Arad**

## **Friday, May 24, 2024 / Vineri 24 Mai 2024**

**11.00-12.00 Registration of the participants**

**12.30-13.00 WELCOME SPEECH / DESCHIDEREA OFICIALĂ A EVENIMENTULUI**

Rector of „Aurel Vlaicu” University of Arad: Assoc. Prof. Teodor Cilan

Vicerector of „Aurel Vlaicu” University of Arad: Prof. Dr. Habil. Dana Copolovici

Vicerector of „Aurel Vlaicu” University of Arad: Assoc. Prof. dr. Cristina Nicolaescu

Vicerector of „Aurel Vlaicu” University of Arad: Prof. dr. Sevastian Liviu Bocii

Vicerector of „Aurel Vlaicu” University of Arad: Assoc. Prof. Ovidiu Florin Toderici

Dean of Faculty of Food Engineering, Tourism and Environmental Protection: Assoc. Prof. Dr. Eng. Virgiliu Ciutina

Research responsible of Department of Technical and Natural Sciences: Assoc. Dr. Habil. Eng. Oana Brînzan

## SECTION PRESENTATION / PREZENTAREA SECTIUNII

Chairman: Prof. dr. habil. Dana Copolovici

Prof. dr. habil. Dorina Chambre

Assoc. Prof. dr. habil. Oana Brinzan

### SECTION I

**Environmental Engineering and  
Environmental Science  
Environmental Protection  
Biodiversity, Ecology, Plant Physiology  
Health, Medicine, Pharmacy  
Biology, Applied Biology, Biochemistry,  
Chemistry**

#### **EVALUATING THE EFFICACY OF SEWAGE SLUDGE FROM ARAD'S WATER TREATMENT PLANT AS A SUSTAINABLE FERTILIZER FOR DAHLIA PLANTS**

- 13.00-13.10 Denisa Bacalu-Rus, Flavia Bortes, Andreea Lupitu, Dana Copolovici and Lucian Copolovici  
OP 1 *Faculty of Food Engineering, Tourism and Environmental Protection, "Aurel Vlaicu" University, Romania, 2 Elena Dragoi, Arad 310330, Romania*

#### **IMPACT OF COMBINED DROUGHT AND OZONE STRESS ON PHOTOSYNTHETIC ACTIVITY IN BRASSICACEAE PLANTS**

- 13.10-13.20 Flavia Bortes, Andreea Lupitu, Cristian Moisa, Dana Copolovici, Lucian Copolovici  
OP 2 *Faculty of Food Engineering, Tourism, and Environmental Protection, Research Center in Technical and Natural Sciences, "Aurel Vlaicu" University, Romania, 2 Elena Dragoi, Arad 310330, Romania*

#### **THE EFFICIENCY OF SHEEP WOOL WASTE-BASED FILTERS FOR RETAINING HEAVY METALS FROM POLLUTED WATER**

- 13.20-13.30 Bianca-Denisa Chereji<sup>1,2</sup>, Florentina-Daniela Munteanu<sup>1,2</sup>, *Interdisciplinary School of Doctoral Studies, "Aurel Vlaicu" University of Arad, Romania, 2 "Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection, Romania*  
OP 3

#### **PERFORMANCE EVALUATION OF WASTE MANAGEMENT SYSTEMS**

- Mariana Diana Frătean<sup>1,2</sup>; Florentina Daniela Munteanu<sup>1,2</sup>\*  
1 *Interdisciplinary School of Doctoral Studies, "Aurel Vlaicu" University of Arad, Romania, 2 "Aurel Vlaicu" University of Arad, Department of Technical and Natural Sciences, Faculty of Food Engineering, Tourism and Environmental Protection, Romania*  
OP 4

#### **ANTIMICROBIAL PEPTIDES: INNOVATIONS FOR HEALTH AND THE FOOD INDUSTRY**

- Andreea Gostăviceanu<sup>1,2</sup>, Dana Maria Copolovici<sup>1</sup>  
1 *"Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection and Institute of Technical and Natural Sciences Research-Development-Innovation of "Aurel Vlaicu" University, 310010, Elena Dragoi Street, nr. 2, Arad, Romania*, 2 *University of Oradea, Biomedical Sciences Doctoral School, Universităţii Street, Nr.1, 410087, Oradea, Romania*  
OP 5

#### **PEPTIDES-BASED CONJUGATES FOR BIOLOGICAL APPLICATIONS**

- Carmen Popa<sup>1,2</sup>, Cristian Moisa<sup>1</sup>, Lucian Copolovici<sup>1</sup>, Dana Maria Copolovici<sup>1</sup>  
1 *"Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection; and Institute for Research, Development and Innovation in Technical and Natural Sciences, Romania; 2 Biomedical Sciences Doctoral School, University of Oradea, Romania*  
OP 6

### **14.00-15.00 Lunch**

- 15.00-15.10 **INTERPLAY OF VDR GENE POLYMORPHISM, VITAMIN D DEFICIENCY, AND METABOLIC SYNDROME RISK AMONG OBESE AND OVERWEIGHT INDIVIDUALS IN ROMANIA**  
OP 7 Carmina Mariana Stroia<sup>1</sup>, Maria Vranceanu<sup>2</sup>, Pallag Annamaria<sup>3</sup>

1 Doctoral School of Biomedical Sciences, Faculty of Medicine and Pharmacy, University of Oradea, Romania; 2 Department of Toxicology, Iuliu Hatieganu University of Medicine and Pharmacy Cluj Napoca; Cluj-Napoca, Romania 3 Pharmacy Department, Faculty of Medicine and Pharmacy University of Oradea, Romania

#### **ANTICANCER POTENTIAL OF ANTIMICROBIAL PEPTIDES: FOCUS ON BUFORINS**

Ana-Maria Tolos(Vasii) 1,2, Dana Maria Copolovici 1

15.10-15.20 OP 8 *1 "Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection; and Institute for Research, Development and Innovation in Technical and Natural Sciences, Romania; 2 Biomedical Sciences Doctoral School, University of Oradea, Romania*

#### **SECTION II**

**Food Technology**

**Food Engineering**

**Food Chemistry, Nutrition**

**Food Quality and Food Safety**

**Agrotourism Management**

**Sustainability, Bioeconomy**

#### **ADAPTING THE ROSÉ WINEMAKING TECHNOLOGY TO THE PRESENT CLIMATE CHANGES AND CONSUMER PREFERENCES**

15.20-15.30 OP 9 Bogdan Bocăneală<sup>a,\*</sup>, Gabriela Râpeanu, Nicoleta Stănciuca, Oana Emilia Constantina, Iuliana Aprodă a "Dunărea de Jos" University of Galați, Faculty of Food Science and Engineering, 111 Domnească Street, RO-800201 Galați, Romania

#### **THE INFLUENCE OF SAGE SUPERCRITICAL CO<sub>2</sub> EXTRACT ON LISTERIA MONOCYTOGENES, AND STAPHYLOCOCCUS AUREUS GROWTH KINETICS**

15.30-15.40 OP 10 Iliu Mărtiri, Leontina Grigore-Gurgu, Liliana Mihalcea, Gabriela Râpeanu, Nicoleta Stănciuca Dunărea de Jos University of Galați, 111 Domnească Street, RO-800201 Galați, Romania

#### **ONLINE PRESENTATIONS**

##### **SECTION I**

**Environmental Engineering and**

**Environmental Science**

**Environmental Protection**

**Biodiversity, Ecology, Plant Physiology**

**Health, Medicine, Pharmacy**

**Biology, Applied Biology, Biochemistry,**

**Chemistry**

**Chairman: Prof. dr. habil. Lucian Copolovici**

**Prof. dr. habil. Florentina Munteanu**

**Assoc. Prof. Dr. Salme Timmusk**

#### **ELUCIDATING THE PHOTOCATALYTIC DEGRADATION OF AZO DYES UNDER VISIBLE LIGHT RADIATION USING CU-BASED NANOPARTICLES MIXTURES**

15.40-15.50 OP 11 Patricio Paredes<sup>1</sup>, Erwan Rauwel<sup>2</sup>, David Wragg<sup>3</sup>, Laetitia Rapenne<sup>4</sup>, Isabelle Gélard<sup>4</sup> and Protima Rauwel

*1Institute of Forestry and Engineering, Estonian University of Life Sciences, Tartu, Estonia, 2Institute of Veterinary Medicine and Animal Sciences, Tartu, Estonia, 3Department of Chemistry and SMN, University of Oslo, Oslo, Norway, 4Grenoble Institute of Engineering, University Grenoble Alpes, Grenoble, France*

#### **SNO<sub>2</sub> NANOMATERIALS FOR SUSTAINABLE ENERGY STORAGE APPLICATIONS**

15.50-16.00 OP 12 Reynald Ponte<sup>1</sup>, Erwan Rauwel<sup>2</sup>, and Protima Rauwel<sup>1</sup>

*1 Institute of Forestry and Engineering, Estonian University of Life Sciences, 51014 Tartu, Estonia, 2 Institute of Veterinary Medicine and Animal Sciences, 51006 Tartu, Estonia*

## **INFINITY RESOURCE, A NEW DIGITAL ECOSYSTEM FOR WASTE MANAGEMENT**

- 16.00-16.10**  
OP 13  
Marius Marinoff<sup>1,2</sup>, Florentina-Daniela Munteanu<sup>1,2</sup>  
*1*Interdisciplinary School of Doctoral Studies, "Aurel Vlaicu" University of Arad, Romania, *2*"Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection, Romania

## **16.10-16.20 COFFEE BREAK**

### **SECTION II**

**Food Technology**

**Food Engineering**

**Food Chemistry, Nutrition**

**Food Quality and Food Safety**

**Agrotourism Management**

**Sustainability, Bioeconomy**

## **OPTIMIZATION OF ULTRASOUND EXTRACTION FROM PUMPKIN (*CUCURBITA MAXIMA*, VAR. *BLUE HUBBARD*) USING RESPONSE SURFACE METHODOLOGY**

- 16.20-16.30**  
OP 14  
Roxana Nicoleta Ratu (Gavril) <sup>1,2</sup>, Florina Stoica<sup>2</sup>, Oana Emilia Constantin<sup>1</sup>, Nicoleta Stănciuc<sup>1</sup>, Iuliana Aprodu<sup>1</sup>, Gabriela Râpeanu<sup>1</sup>  
*1*"Dunărea de Jos" University of Galati, Faculty of Food Science and Engineering, Domnească Street, 111, RO-800201, Galati, Romania, *2*"Ion Ionescu de la Brad" University of Life Sciences of Iasi, Faculty of Agriculture, Department of Food Technologies, 3 Mihail Sadoveanu Alley, 700489 Iasi, Romania

## **FROM WASTE TO VALUE: RECYCLING, RECOVERY, AND UTILIZATION IN SENSORS FOR POLLUTANT DETECTION**

- 16.30-16.40**  
OP 15  
Norica Godja<sup>1,2</sup>, Florentina-Daniela Munteanu<sup>1,2</sup>  
*1*Interdisciplinary School of Doctoral Studies, "Aurel Vlaicu" University of Arad, Romania, *2*"Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection, Romania

### **ONLINE POSTER**

## **POSSIBILITIES OF VALORIZATION OF THE BY-PRODUCTS OBTAINED DURING CARROT PROCESSING**

- 16.40-16.50**  
PP1  
Florina-Genica Oncică<sup>\*1</sup>, Nicoleta Stănciuc<sup>1</sup>, Iuliana Aprodu<sup>1</sup>, Georgiana Horincar<sup>1</sup>, Gabriela Râpeanu<sup>1</sup>  
*1*"Dunărea de Jos" University of Galati, Faculty of Food Science and Engineering, Domnească Street, 111, RO-800201, Galati, Romania

## **INNOVATIVE STRATEGIES FOR VALORIZING THE BY-PRODUCTS RESULTING FROM COLOURED CARROT PROCESSING**

- 16.50-17.00**  
PP2  
Alexandra Teodora Gheorghe (Mărtin)<sup>a,\*</sup>, Gabriela Râpeanu<sup>a</sup>, Oana Emilia Constantin<sup>a</sup>, Iuliana Aprodu<sup>a</sup>, Nicoleta Stănciuc<sup>a</sup>  
*a* "Dunărea de Jos" University of Galati, Faculty of Food Science and Engineering, 111 Domnească Street, RO-800201 Galați, Romania;

### **POSTERS PRESENTATION**

## **FTIR-ATR SPECTRAL ANALYSIS OF MEDIEVAL BRICKS**

- PP3  
Lorena Aliana Cioban<sup>1</sup>, Alexandru Bogdan<sup>1</sup>, Lucian Copolovici<sup>2</sup>, Dana Copolovici<sup>2</sup> and Dorina Chambre<sup>2</sup>  
*1*Interdisciplinary School of Doctoral Studies, "Aurel Vlaicu" University, Romania, *2*Elena Drăgoi, Arad 310330, Romania, *2*Faculty of Food Engineering, Tourism and Environmental Protection, "Aurel Vlaicu" University of Arad, 310330 Arad, Romania

## **PLANT EXTRACTS FOR BIOLOGICAL APPLICATIONS**

- PP4  
Silvia Elena Mot <sup>1,2</sup>, Cristian Moisa <sup>1</sup>, Andreea Ioana Lupitu <sup>1</sup>, Lucian Copolovici <sup>1</sup>, Dorina Chambre <sup>1</sup>, Dana Maria Copolovici <sup>1</sup>  
*1* "Aurel Vlaicu" University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection; and Institute for Research, Development and Innovation in Technical and Natural Sciences, Romania; *2* Biomedical Sciences Doctoral School, University of Oradea, Romania

## 18.00 Awards ceremony

19.00 DINNER AT RESTAURANT RATIO (STRANDUL NEPTUN, ARAD)

Saturday, May 25, 2024, Sâmbătă 25 Mai 2024

Tour visit of Arad city/ Mureş Meadow Nature Park field visit

The participants departure

We thank to our sponsor for the provided sponsorships for the best students' awards!



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R.N.P. Romsilva RA - Mureş Meadow Nature Park Administration

R.N.P. Romsilva RA – Apuseni Nature Park Administration

**NOTES:** Abbreviations: OP = oral presentation, PP = poster presentation.