

CONFERENCE PROGRAM

Thursday, 07th of October 2021

10:00-13:00 POSTER SESSION

OPENING SESSION, ORGANIZERS' WELCOME

13:00-13:15 Rodica STURZA, prof., dr. hab., project manager (coordinator), TUM
Antoanelia PATRAS, dr., project manager, "Ion Ionescu de la Brad" IULS

PLENARY SESSIONS

13:15-13:45 Alexei BAERLE, Technical University of Moldova, Chisinau, RM
Entropy (negentropy) control as the condition for intelligent valorisation of food raw materials

13:45-14:15 Alexandru CIOCARLAN, Institute of Chemistry, Chisinau, RM
Valorisation of some terpenes from vegetable wastes

14:15-15:15 Liliana POPESCU, Technical University of Moldova, Chisinau, RM
Principles of dairy product processing correlated to the objectives of balanced nutrition and food safety

15:15-15:30 COFFEE BREAK, POSTER SESSION

Section 1. Agro-industrial waste processing – key element of the concept of circular bioeconomy

ORAL COMMUNICATIONS

15:30-15:45 Antoanelia PATRAŞ, Ciprian Chiruta, Gabriel-Ciprian Teliban, Mihai-Marius Băetu, Rodica Sturza - *Inhabitants opinion concerning the agro-food industrial wastes*

15:45-16:00 Natalia Țislinscaia, Vitali VIŞANU, Mihail Balan, Mihail Melenciu - *Practical developments regarding drying peaches through hybrid method*

16:00-16:15 Viorica BULGARU, Tatiana Croitor - *New trends in the valorisation of dairy by-products (whey)*

16:15-16:30 Grigore Musteață, Anatol BALANUȚĂ, Iurie Scutaru, Ecaterina Covaci, Aliona Sclifos, Vasile Arhip
The possibility and necessity to production of tartaric acid in Republic of Moldova

16:30-16:45 Mihail BALAN, Natalia Țislinscaia, Vitali Vișanu, Mihail Melenciu - *Devices for uniform distribution of air flow in the tunel dryer*

Section 2. Valorisation of bioactive components from agro-industrial waste in the food, pharmaceutical, cosmetics, environmental protection industries

ORAL COMMUNICATIONS

- 16:45-17:00 Iuliana SANDU, Alexei Baerle, Pavel Tatarov, Iurie Scutaru, Artur Macari - *Valorisation of walnut septum polyphenols*
- 17:00-17:15 Violina POPOVICI, Rodica Sturza, Aliona Ghendov-Mosanu - *Physico-chemical characteristics of lipophilic extracts of rosehip (*Rosa canina*) and hawthorn (*Crataegus*) fruits*
- 17:15-17:30 Angela GUREV, Veronica Dragancea, Svetlana Haritonov, Valeriu Papuc - *The total polyphenol concentration in grape seed oil obtained by different methods*

Section 3. Biotechnologies based on the use of agro-industrial waste

ORAL COMMUNICATIONS

- 17:30-17:45 Silvica PĂDUREANU, Antoanelia Patraş - *Biological effects of merlot grape marc on germination and growth of triticum aestivum sprouts*
- 17:45-18:00 Rodica Sturza, Valentin Mitin, Irina Mitina, Dan Zgardan, Emilia BEHTA - *The detection of mycotoxicogenic microorganisms in grape marc using real-time PCR*
- 18:00-18:15 Daniela COJOCARI - *The potential of berries to serve as selective inhibitors of pathogens and their benefits on health*
- 18:15-18:30 Corina TASCA, Ecaterina Covaci, Olga Covaliov
The influence of biocatalysts on biomass fermentation processes

- 18:30 **CLOSING CEREMONY**

POSTER SESSIONS

AGRO-INDUSTRIAL WASTE PROCESSING – KEY ELEMENT OF THE CONCEPT OF CIRCULAR BIOECONOMY

- P.1.1 Overview of bioactive compounds recoverable from agro-food industrial wastes**
Antoanelia Patraş, Gabriela Ungureanu, Silvica Pădureanu, Răzvan Vasile Filimon, Maria Apostol, Raluca Hlihor, Aliona Ghendov-Mosanu
- P.1.2 Wastes utilization from brewing industry**
Rodica Sturza, Ruslan Tarină
- P.1.3 Biodegradation of plastic materials in the presence of phytoremediating microorganisms**
Mihail Coscodan
- P.1.4 Use of chemical modified starch in agro-alimentary wastes valorization**
Ana-Maria Rosu, Ileana Denisa Nistor, Catherine Rafin, Etienne Veignie
- P.1.5 Biosorptive potential of new types of biosorbents based on microorganism and residual biomass**
Lăcrămioara Rusu, Cristina-Gabriela Grigoraş, Elena-Mirela Suceveanu, Andrei-Ionuț Simion, Daniela Şuteu
- P.1.6 Efficient waste management of the food industry in the context of the transition to the circular economy**
Rina Turcan
- P.1.7 Detection of addition of fats non-dairy origin into milk products**
Nicoleta Chira, Mihaela Tociu, Liliana Popescu, Mihaela Ivanova, Aurelia Bratu, Mihaela Mihalache, Calin Deleanu
- P.1.8 Biochemical production of vitamin B₁₂ from the agro-industrial wastes**
Victor Covaliov, Olga Covaliova, Corina Tasca
- P.1.9 Priority directions for agro-industrial waste processing**
Iuliu Turcan
- P.1.10 Use of databases in agricultural fields**
Ciprian Chiruta, Sorina Livia Margineanu
- P.1.11 Stability of agro-industrial waste through the convective drying process**
Mihai-Marius Băetu, Antoanelia Patraş, Petru Marian Cârlescu

VALORISATION OF BIOACTIVE COMPONENTS FROM AGRO-INDUSTRIAL WASTE IN THE FOOD, PHARMACEUTICAL, COSMETICS, ENVIRONMENTAL PROTECTION INDUSTRIES

- P.2.1 Evaluation of phenolic composition of red grape dried pomace – a sustainable source of bioactive compounds**
Vasile Răzvan Filimon, Antoanelia Patrăș
- P.2.2 Processes for the processing and recovery of waste from the beer industry**
Alina Beșliu, Natalia Chiselița, Oleg Chiselița, Nadejda Efremova, Elena Tofan, Ana Lozan
- P.2.3 Antioxidant teas from *M. charantia* and *C. metuliferus* plants waste**
Anna Cazanevscaia (Busuioc), Andreea – Veronica Dediu (Botezatu), Costel Vînătoru, Fanica Balanescu, Rodica – Mihaela Dinica
- P.2.4 Adsorption of nicosulfuron – herbicide by various surface modified straw as low cost adsorbents**
Irina Cara, Antoanelia Patras, Gerard Jitareanu
- P.2.5 Amino acid composition of protein mineral concentrates by electroactivation of whey**
Catalina Sprincean
- P.2.6 Whey wasteless processing: electroactivation of whey with medium protein content**
Irina Paladii
- P.2.7 The impact of the applied method on the content of antioxidants in spirulina, gluten-free products**
Angela Gurev, Valentina Bantea-Zagareanu, Veronica Dragancea, Adelina Dodon
- P.2.8 In vitro evaluation of antioxidant activity of coffee parchment extracts**
Amel Didi, Nassima Malti, Medjdoub Amel, Merzouk Hafida, Mohamed Amine Didi
- P.2.9 *Vinca minor* and *Chelidonium majus* as reducing agents for Ag-MnO₂ nanoparticle synthesis**
Alexandra Ciorăță, Maria Suciu, Sergiu Macavei, Irina Kacso, Ildiko Lung, Maria-Loredana Soran, Marcel Pârvu
- P.2.10 Approches for honey-based functional foods obtention**
Irina-Claudia Alexa, Elena-Mirela Suceveanu, Luminița Grosu, Oana-Irina Patriciu, Irina-Loredana Ifrim, Adriana-Luminița Fînaru
- P.2.11 In situ lactic acid removal from a characteristic fermentation medium (yoghurt) preparation by its retention onto hydrotalcite-type anionic clay- statistical modelling**
Vasilica Alisa Aruș, Oana-Cristina Pârvulescu, Nicoleta Platon, Ana-Maria Georgescu, Gabriela Muntianu, Ileana Denisa Nistor
- P.2.12 Polyphenols extraction from blackthorn berries and their application in sunscreen formulation**
Ocsana Oprîș, Maria-Loredana Soran, Ildiko Lung, Adina Stegărescu, Simona Guțoiu, Răzvan Podea, Paula Podea, Rodica Sturza, Aliona Ghendov-Mosanu

- P.2.13 **The using of hen eggshells powder at bread fabrication**
Nicoleta Platon, Vasilica-Alisa Aruș, Ana-Maria Georgescu, Ileana-Denisa Nistor
- P.2.14 **Influence of heat treatment on the yield of extraction of bioactive compounds in apple pomace**
Tatiana Ceșco, Rodica Sturza, Natalia Țislinscaia, Nadejda Turculeț, Aliona Ghendov-Moșanu
- P.2.15 **The content of biologically active substances and antioxidant activity in pumpkin pomace of different varieties**
Aliona Ghendov-Moșanu, Mariana Railean, Olga Deseatnicova, Natalia Suhodol, Carmen Socaciu, Adela Pintea, Rodica Sturza
- P.2.16 **Use of chickpeas aquafaba in the technology of manufacturing vegetal sponge cake**
Mihail Mazur, Elisaveta Sandulachi, Antoanelia Patras, Aliona Ghendov-Mosanu
- P.2.17 **Color stability of yogurt with natural dye obtained from safflower (*Carthamus tinctorius L.*)**
Liliana Popescu, Aliona Ghendov-Moșanu, Alexandra Savcenco, Alexei Baerle, Pavel Tatarov
- P.2.18 **Valorisation of spent grain from brewing and malt whisky in food industry**
Ancuța Chetariu, Adriana Dabija
- P.2.19 **Study about the quality of some sweet pepper jam assortments**
Gabriela Constantinescu, Amelia Buculei
- P.2.20 **Use of brewers' spent grain in food production**
Olesea Saitan, Vladislav Reșitca, Aliona Ghendov-Mosanu

BIOTECHNOLOGIES BASED ON THE USE OF AGRO-INDUSTRIAL WASTE

- P.3.1. **Exhausted waste of grape marc for an efficient Pb(II) biosorptive removal**
Gabriela Ungureanu, Irina Gabriela Cara, Antoanelia Patraș
- P.3.2 **The influence of white and red grape marc extracts on the rooting of *Sansevieria trifasciata***
Maria Apostol, Mihai-Marius Băetu, Vasile Răzvan Filimon, Antoanelia Patraș
- P.3.3 **Wasteless whey processing: technological aspects**
Mircea Bologa, Elvira Vrabie, Irina Paladii, Tatiana Stepurina, Valeria Vrabie, Albert Polycarpov, Valeriu Goncearuc, Catalina Sprincean
- P.3.4 **Use of different agro-food wastes to fertilize the lettuce culture**
Gabriel-Ciprian Teliban, Vasile Stoleru, Marius Băetu, Gabriela Mihalache, Antoanelia Patraș
- P.3.5 **The effect of modified aluminosilicate 8amellae on protein and polyphenolic compounds in white wine**
Andreea Hortolomeu, Diana-Carmen Mirilă, Sid Ahmed Elhabiri, Mohamed Amine Didi, Yury Scutaru, Rodica Sturza, Ileana-Denisa Nistor, Abdelkrim Azzouz
- P.3.6 **Liquid-solid extraction of La(III) in nitrate medium by XAD-1180 Resin**
Sid Ahmed Elhabiri, Diana-Carmen Mirilă, Andreea Hortolomeu, Ileana-Denisa Nistor, Mohamed Amine Didi

- P.3.7 **Quality management systems in beer production enterprises**
Nadejda Onescu
- P.3.8 **Silver nanoparticles incorporated in phyllosilicates**
Diana-Carmen Mirila, Dumitra Raducanu, Sid Ahmed Elhabiri, Nicoleta Platon, Mohamed Amine Didi
- P.3.9 **The influence of encapsulation on the antioxidant activity of grape marc extract**
Elena Cristea
- P.3.10 **Depuration of terbium contaminated water using a liquid membrane supported**
Sid Ahmed Elhabiri, Diana-Carmen Mirila, Andreea Hortolomeu, Ileana-Denisa Nistor, Mohamed Amine Didi
- P.3.11 **Physical properties of grape seeds**
Natalia Netreba, Olga Boștean
- P.3.12 **Valorization of greenhouse biomass waste using pyrolysis**
Violeta Alexandra Ion, Oana Cristina Pârvulescu, Andrei Moț, Vlad Ioan Popa, Suzana Calcan, Cristi Răducanu, Liliana Bădulescu, Claudia Grigoraș
- P.3.13 **The influence of microwave-assisted extraction parameters on the yield of bioactive compounds in grape marc extracts**
Rodica Sturza, Antoanelia Patras, Ildiko Lung, Maria – Loredana Soran, Aliona Ghendov-Mosanu
- P.3.14 **Comparative analysis of coffee decaffeination processes**
Amelia Buculei, Gabriela Constantinescu
- P.3.15 **Influence of preservation procedures on bioactive compounds in sea buckthorn**
Nadejda Turculeț, Aliona Ghendov-Moșanu, Rodica Sturza, Artur Macarl, Iurie Scutaru, Sergiu Popa
- P.3.16 **The bioactive compounds potential of grape waste**
Ecaterina Covaci, Aliona Sclifos
- P.3.17 **Application of nanocomposites to grape wastes processing for improve biodiesel production**
Adina Stegarescu, Maria-Loredana Soran, Ildiko Lung, Ocsana Opris, Simona Guțoiu, Ovidiu-Ioan Pană
- P.3.18 **Biogas – a sustainable energy solution from agro-industrial wastes**
Natalia Vladei, Ecaterina Covaci