

Joint Operational Programme Romania-Republic of Moldova 2014-2020

CONFERENCE PROGRAM

INTERNATIONAL CONFERENCE INTELLIGENT VALORISATION OF AGRO- FOOD INDUSTRIAL WASTES 7-8 OCTOBER 2021

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the European Union



Romania-Republic of Moldova
ENI-CROSS BORDER COOPERATION



TECHNICAL UNIVERSITY
OF MOLDOVA



„ION IONESCU DE LA BRAD”
IASI UNIVERSITY OF LIFE SCIENCES

International Conference

INTELLIGENT VALORISATION OF AGRO-INDUSTRIAL WASTES

Organized within the Project

2SOFT/1.2/83 "Intelligent Valorisation of Agro-Food Industrial Wastes",
funded by the European Union, within the program Cross border cooperation
Romania - Republic of Moldova 2014-2020

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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
Antoanela 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 same 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

Antoanela PATRAȘ, 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 VIȘANU, Mihail Balan, Mihail Melenciuc - *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 Melenciuc - *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 diferent methods*

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

ORAL COMMUNICATIONS

- 17:30-17:45** Silvica PĂDUREANU, Antoanela 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 mycotoxigenic 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**
Antoanela Patraș, 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 Țarină
- P.1.3** **Biodegradation of plastic materials in the presence of phyto-remediating
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 Grigoraș, Elena-Mirela Suceveanu, Andrei-Ionuț
Simion, Daniela Șuteu
- 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, Antoanela Patraș, 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, Antoanela Patraș
- P.2.2** **Processes for the processing and recovery of waste from the beer industry**
Alina Beșliu, Natalia Chiselita, Oleg Chiselita, 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 Vinătoru, Fanica Balanescu, Rodica – Mihaela Dinica
- P.2.4** **Adsorption of nicosulfuron – herbicide by various surface modified straw as low cost adsorbents**
Irina Cara, Antoanela 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 Ciorîță, 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 Opriș, Maria-Loredana Soran, Ildiko Lung, Adina Stegarescu, 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 Aruş, 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 Cesco, Rodica Sturza, Natalia Ţislinscaia, Nadejda Turculeţ, Aliona Ghendov-Moşanu
- P.2.15** **The content of biologically active substances and antioxidant activity in pumpkin pomace of different varieties**
Aliona Ghendov-Moşanu, Mariana Railean, Olga Deseatnicova, Natalia Suhodol, Carmen Socaciu, Adela Pinteă, Rodica Sturza
- P.2.16** **Use of chickpeas aquafaba in the technology of manufacturing vegetal sponge cake**
Mihail Mazur, Elisaveta Sandulachi, Antoanela Patras, Aliona Ghendov-Mosanu
- P.2.17** **Color stability of yogurt with natural dye obtained from safflower (*Carthamus tinctorius* L)**
Liliana Popescu, Aliona Ghendov-Moşanu, Alexandra Savcenco, Alexei Baerle, Pavel Tatarov
- P.2.18** **Valorisation of spent grain from brewing and malt whisky in food industry**
Ancuţa Chetrariu, 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 Reşitca, 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, Antoanela Patraş
- 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, Antoanela Patraş
- P.3.3** **Wasteless whey processing: technological aspects**
Mircea Bologa, Elvira Vrabie, Irina Paladii, Tatiana Stepurina, Valeria Vrabie, Albert Policarpov, 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, Antoanela Patraş
- P.3.5** **The effect of modified aluminosilicate 7amellae 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 Boeştean
- P.3.12** **Valorization of greenhouse biomass waste using pyrolysis**
Violeta Alexandra Ion, Oana Cristina Pârvulescu, Andrei Moţ, Vlad Ioan Popa, Suzana
Calcan, Cristi Răducanu, Liliana Bădulescu, Claudia Grigoraş
- P.3.13** **The influence of microwave-assisted extraction parameters on the yield of bioactive
compounds in grape marc extracts**
Rodica Sturza, Antoanela 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 Turculeţ, Aliona Ghendov-Moşanu, 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 Opriş, Simona Guţoiu,
Ovidiu-Ioan Pană
- P.3.18** **Biogas – a sustainable energy solution from agro-industrial wastes**
Natalia Vladei, Ecaterina Covaci