

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara



Scientific Programme

Multidisciplinary Conference on Sustainable Development, 20-21 May 2021

Section: Food Chemistry, Engineering & Technology



Faculty of Food Engineering
Timişoara, 2021



Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu-Şişeşti" Timisoara Branch



Romanian Association of Food Industry Specialists Timisoara Branch



Romanian Chemistry Society Timisoara Branch

Section: Food Chemistry, Engineering & Technology

USAMVBT is inviting you to a scheduled Zoom meeting.

Topic: INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUSTAINABLE DEVELOPMENT

Time: May 20, 2021 10:00 AM Bucharest (Opening of the Conference: 10⁰⁰-12⁰⁰)

Join Zoom Meeting https://us02web.zoom.us/j/88660168234

Meeting ID: 886 6016 8234 One tap mobile +13126266799,,88660168234# US (Chicago) +13462487799,,88660168234# US (Houston) Dial by your location

+1 312 626 6799 US (Chicago); +1 346 248 7799 US (Houston);+1 646 558 8656 US (New York); +1 669 900 9128 US (San Jose); +1 253 215 8782 US (Tacoma)

+1 301 715 8592 US (Washington DC) Meeting ID: 886 6016 8234

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USAMVBT is inviting you to a scheduled Zoom meeting.

Topic: FOOD CHEMISTRY, ENGINEERING & TECHNOLOGY (orele: 1600 - 1800)

Time: May 20, 2021 04:00 PM Bucharest

Join Zoom Meeting https://us02web.zoom.us/j/86120055657

Meeting ID: 861 2005 5657 One tap mobile +13462487799,,86120055657# US (Houston) +16465588656,,86120055657# US (New York)

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Conferences Programme

1st Day - 20 May 2021 (Thursday)

Registration on-line

$10^{00} - 10^{15}$	Opening of the Conference
$10^{15} - 10^{30}$	Plenary Lecture PL ₁
$10^{30} - 10^{45}$	Plenary Lecture PL ₂
$10^{45} - 11^{00}$	Plenary Lecture PL ₃

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timișoara

Section: Agriculture - Trends in European Agriculture Development - on-line

$12^{00} - 12^{10}$	Opening of the Conference section
$12^{10} - 13^{15}$	Oral communications
$13^{15} - 13^{30}$	Concluding Remarks

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Section: Agricultural management - Management of Sustainable Rural Development - on-line

$14^{00} - 14^{10}$	Opening of the Conference section
$14^{10} - 15^{15}$	Oral communications
$15^{15} - 15^{30}$	Concluding Remarks

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Section: Food Engineering - Food Chemistry, Engineering & Technology – **on-line**

$16^{00} - 16^{10}$	Opening of the Conference section
$16^{10} - 18^{00}$	Oral communications
$18^{00} - 18^{15}$	Concluding Remarks

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timișoara

Section: Food Chemistry, Engineering & Technology

21 May 2021 (Friday)

Section: Animal Husbandry and Biotechnology - Animal Resource Bioengineering - on-line

$09^{00} - 09^{10}$	Opening of the Conference section
$09^{10} - 10^{15}$	Oral communications
$10^{15} - 10^{30}$	Concluding Remarks

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Section: Horticulture and Forestry - Horticulture, Forestry and Biotechnology - on-line

$11^{00} - 11^{10}$	Opening of the Conference section
$11^{10} - 12^{15}$	Oral communications
$12^{15} - 12^{30}$	Concluding Remarks

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Section: Veterinary Medicine - Animal Breeding and Pathology Today - on-line

$13^{00} - 13^{10}$	Opening of the Conference section
$13^{10} - 14^{15}$	Oral communications
$14^{15} - 14^{30}$	Concluding Remarks

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Scientific Programme

1^{st} Day – 20^{th} of May, 2021 (Thursday)

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timișoara

Registration (ON-LINE)

$10^{00} - 10^{10}$	Welcome speech Cosmin Alin Popescu, Rector of the Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara,
$10^{10} - 10^{15}$	Conference opening Isidora Radulov, Vicerector of the Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara,
$10^{15} - 10^{30}$	PL ₁ : European Green Deal Michael Rupp - Head of Sector Connectivity and Green Deal, DG NEAR Eastern Partnership, European Commission
$10^{30} - 10^{45}$	PL ₂ : Ecological interactions within the rumen microbiome shape the ruminant phenotype Sharon Huws – Queen's University Belfast, United Kingdom; The Institute for Global Food Security
$10^{45} - 11^{00}$	PL ₃ : An Overview of Agriculture in Nigeria Mariam Birma - Ahmadu Bello University, Zaria – Nigeria

Section: Food Chemistry, Engineering & Technology

"Iulian Drăcea" Auditorium Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara Ist Day – 20th of May, 2021 (Thursday)

Registration (ON-LINE)

16⁰⁰ – 16¹⁰ Opening of the Conference (Section: Food Chemistry, Engineering & Technology)

Adrian Riviş, Dean of the Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Nicoleta Gabriela Hădărugă, Vicedean of the Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

Section: Food Chemistry, Engineering & Technology

Chaired by: Eng. Claudia Isabela Oprinescu

"Iulian Drăcea" Auditorium

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

PL₁: Metal-induced biomimesis in metabolically relevant processes

Athanasios Salifoglou, Olga Tsave - Laboratory of Inorganic Chemistry and

Advanced Materials, School of Chemical Engineering, Aristotle University of

Thessaloniki, Thessaloniki 54124, Greece

16⁴⁵ – 17⁰⁰ **IL**₁: Biologically active antitumor novel vanadoform containing peroxido and betaine moieties **Efrosini Kioseoglou**, Sevasti Matsia, Antonios Hatzidimitriou, Athanasios

Efrosini Kioseoglou, Sevasti Matsia, Antonios Hatzidimitriou, Athanasios Salifoglou - School of Chemical Engineering, Laboratory of Inorganic Chemistry and Advanced Materials, Aristotle University of Thessaloniki, 54124, Greece

17⁰⁰ – 17¹⁵ **IL**₂: Flavonoid-based organic and metal-organic materials as antioxidant potential agents in metabolic syndromes. **Sevasti Matsia.** Athanasios Salifoglou - School of Chemical Engineering.

Sevasti Matsia, Athanasios Salifoglou - School of Chemical Engineering, Laboratory of Inorganic Chemistry and Advanced Materials, Aristotle University of Thessaloniki, 54124, Greece

17¹⁵ – 17³⁰ **IL**₃: Properties and physicochemical characterization of biodegradable 3D printed scaffolds

Konstantina Vlachaki, Sevasti Matsia, Konstantinos Rogkotis, Athanasios Salifoglou - School of Chemical Engineering, Laboratory of Inorganic Chemistry and Advanced Materials, Aristotle University of Thessaloniki, 54124, Greece

17³⁰ – 17⁴⁵ **OC1:** Health effects of wormwood (*Artemisia absinthium* L.): From antioxidant to nutraceutical

Maria-Evelina Bordean, Sevastița Muste, Georgiana Smaranda Marțiș, Vlad Mureșan, Bettina-Cristina Buican - *University of Agricultural Science and Veterinary Medicine Cluj-Napoca*, 400372, Doctoral School of Agricultural and Engineering Sciences, Field: Agronomy, Calea Mănăștur, no. 3-5, Cluj-Napoca, Romania

 $17^{45} - 18^{00}$ **OC2:** Optimization of antimicrobial edible films obtaining process and their characterization

Maria-Ioana Socaciu, Melinda Fogarasi, **Cristina Anamaria Semeniuc**, Sonia Ancuța Socaci, Mihaela Ancuța Rotar, Vlad Mureșan, Oana Lelia Pop, Dan Cristian Vodnar - Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Romania

18⁰⁰ – 18¹⁵ Concluding Remarks

Section: Food Chemistry, Engineering & Technology

POSTERS

- P₁ Mass transfer through biodegradable and edible membranes important factor in the stability of meat preparations
 - **Sonia Amariei**, Ionuţ Avramia, Florin Ursachi, Ancuţa Chetrariu Faculty of Food Engineering, Ştefan cel Mare University of Suceava
- P₂ The environmental impact of waste dumping on soil health and vegetation contamination level
 - **Despina-Maria Bordean**, Luminita Pirvulescu, Mariana-Atena Poiana, Ersilia Alexa, Diana Nicoleta Raba, Liana Alda, Aurica Breica Borozan, Corina Dana Misca, Ioan Ladislau Caba Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Calea Aradului no. 119, 300645 Timisoara, Romania
- P₃ Innovative protein bar obtaining and evaluating of some physico-chemical and nutritional characteristics
 - **Delia-Gabriela Dumbravă**, Radu-Marian Tulpan, Camelia Moldovan, Diana-Nicoleta Raba, Viorica- Mirela Popa, Nicoleta-Gabriela Hădărugă Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Calea Aradului no. 119, 300645 Timisoara, Romania
- P4 A challenging biostimulant used in agriculture: Papain study on its mechano-chemical properties
 - **Simona Butan**, Veronica Filimon "Dunarea de Jos" University of Galati, Faculty of Sciences and Environment, 47 Domneasca Street, 800008, Galati, Romania
- P₅ Contributions related to the analysis of the absorbtion of European funds by the food producing industry in the V-West region of Romania

 Cristian Edmund Csosz, Teodor Ioan Trașcă Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Calea Aradului no. 119, 300645 Timisoara, Romania
- P6 Hydrid bis-peroxido-zwitterion-vanadium compounds as oxidation catalysts with technological applications
 Efrosini Kioseoglou, Antonios Hatzidimitriou, Athanasios Salifoglou School of Chemical Engineering, Laboratory of Inorganic Chemistry and Advanced Materials, Aristotle University of Thessaloniki, 54124, Greece
- P7 Vanadium peroxido compounds reduces autophagic flux and inhibits epithelial-mesenchymal transition by triggering TRAIL-induced apoptosis in cancer cells Efrosini Kioseoglou, Antonios Hatzidimitriou, Athanasios Salifoglou School of Chemical Engineering, Laboratory of Inorganic Chemistry and Advanced Materials, Aristotle University of Thessaloniki, 54124, Greece
- P8 Monascus purpureus, monacolin K and dyslipidemia
 Doina Georgescu, Simona Dragan, Mihaela Muntean, Oana-Elena Ancusa, Ioana Suceava,
 Liviu-Andrei Georgescu Department of Internal Medicine I, "Victor Babeş" University of
 Medicine and Pharmacy, Timisoara, Romania
- P9 Exploring the phytochemicals and bioactive potential of gooseberries: A review Roxana-Diadora Gruiescu, Despina-Maria Bordean, Adriana-Ioana Moraru Manea, Diana Moigradean, Mariana-Atena Poiana Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Calea Aradului no. 119, 300645 Timisoara, Romania

Section: Food Chemistry, Engineering & Technology

- P₁₀ Preliminary aspects regarding the role of the technological operations to produce an authentic food
 - Ilie (căs. Hireș) Sorina Elena, Trașcă Teodor Ioan Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Calea Aradului no. 119, 300645 Timisoara, Romania
- Past, present and future for traditional products from southeastern Romania

 Gabriela Iordăchescu, Vassilis Inglezakis, Silvius Stanciu, Gabriela Ploscuțanu, Augustin

 Octavian Mihalache "Dunărea de Jos" University, Faculty of Food Science and

 Engineering, Department Food Science, Food Engineering, Biotechnologies and

 Aquaculture, 111 Domnească str. Galați, Romania,

 University of Strathclyde, Chemical Process Engineering Department, 347 Cathedral Street,

 Glasgow, UK
- P12 Thermostability of biological active compounds extracted red beetroot by products Silvia Lazăr (Mistrianu), Gabriela Râpeanu, Nicoleta Stănciuc, Iuliana Aprodu, Oana Constantin "Dunărea de Jos" University of Galati, Faculty of Food Science and Engineering, 111 Domnească Street, RO-800201, Galati, Romania
- P₁₃ Sensory and physical-chemical characterization of a Romanian dairy product: Sana Corina Iuliana Megyesi, Lucian Radu, Nicoleta Gabriela Hădărugă Department of Food Science, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" Timișoara, Calea Aradului 119, 300645 Timișoara, Romania
- Preliminary research on the health benefits of dried Muscat Ottonel grape (Vitis Vinifera L.) probiotic pomace
 Larisa Anghel, Adelina Ștefania Milea, Liliana Ceclu, Oana Emilia Constantin, Oana Viorela Nistor, Doina Georgeta Andronoiu, Livia Pătrașscu, Gabriel Dănuț Mocanu Department of Food Science, Food Engineering, Biotechnology and Aquaculture, Food Science and Engineering Faculty, "Dunarea de Jos" University of Galati, Romania; Department of Engineering and Applied Sciences, Faculty of Economics, Engineering and Applied Sciences, "Bogdan Petriceicu Hasdeu" Cahul State University, Cahul, Republic of Moldova
- P₁₅ The use of natural antioxidants of vegetal origin as food additives in meat and meat products: A review

 Adriana-Ioana Moraru Manea, Diana-Nicoleta Raba, Roxana-Diadora Gruiescu, Diana Moigradean, Mariana-Atena Poiana Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Calea Aradului no. 119, 300645 Timisoara, Romania
- P₁₆ Mulberry fruits source of biominerals and bioactive compounds
 Georgeta-Sofia Popescu, Ariana-Bianca Velciov, Nicoleta Nebancea Faculty of Food
 Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King
 Mihai I of Romania" Timisoara, Romania
- P₁₇ Chemical and nutritional characteristics of innovative sausage prototypes

 Georgeta-Sofia Popescu, Ariana-Bianca Velciov, Florina Radu, Lia Rotariu, Antoanela
 Cozma Faculty of Food Engineering, Banat's University of Agricultural Sciences and
 Veterinary Medicine "King Mihai I of Romania" Timisoara, Romania

Section: Food Chemistry, Engineering & Technology

- P18 Preliminary aspects regarding the dairy product "Brânza de Novaci" as a Protected Designation of Origin
 - **Petru Bogdan Radoi**, Ionela Jianu, Alexandru Erne Rinovetz Faculty of Food Engineering, Banat's University of Agricultural Sciences and Veterinary Medicine "King Mihai I of Romania" Timisoara, Romania
- P19 Hydromel, food fortification potential
 Alexandru Rinovetz, Felicia-Antonela Bernat, Ersilia Alexa, Corina Mişcă, Despina
 Bordean, Ariana Velciov, Ileana Cocan, Monica Negrea, Petru Bogdan Rădoi, Okros
 Adalbert Faculty of Food Engineering, Banat's University of Agricultural Sciences and
 Veterinary Medicine "King Mihai I of Romania" Timisoara, Romania
- P20 Fatty acids distribution in different pastries
 Lia Sanda Rotariu, Iuliana Popescu, Sofia Popescu, Florina Radu Faculty of Management
 and Rural Tourism, Banat's University of Agricultural Sciences and Veterinary Medicine
 "King Mihai I of Romania" Timisoara, Romania
- P21 Future trends on special beer segment expansion
 Liana-Claudia Salanță, Maria Tofană, Elena Mudura, Carmen R. Pop, Teodora E. Coldea,
 Valentina M. Ignat, Anamaria Pop, Andrei Borșa Department of Food Science, Faculty of
 Food Science and Technology, University of Agricultural Sciences and Veterinary Medicine
 Cluj-Napoca, 3-5 Calea Mănăștur, Cluj-Napoca, Romania
- P22 Characterization of the red grapes of microencapsulated powder
 Daniela Serea, Gabriela-Elena Bahrim, Iuliana Aprodu, Nicoleta Stanciuc, Livia Patrascu,
 Gabriela Rapeanu Faculty of Food Science and Engineering, Dunarea de Jos University of
 Galati, 111 Domneasca Street, 800201, Galati, Romania
- P23 Development of anthocyanins-rich buns based on purple corn flour (Zea mays L.)

 Mioara Gabriela Slavu (Ursu), Ștefania-Adelina Milea, Iuliana Aprodu, Iuliana Banu,
 Gabriela Râpeanu, Nicoleta Stănciuc "Dunărea de Jos" University of Galati, Faculty of
 Food Science and Engineering, Domneasca Street 111, Building E; 800201, Galati,
 Romania.
- P₂₄ Microencapsulation of some glucosinolates from *Brassica oleracea* extract in β-cyclodextrin Mariana Nela Ştefănuţ, Raluca O. Pop, Adina Căta, Ioana Maria Ienaşcu *National Institute of Research and Development for Electrochemistry and Condensed Matter, Dr. A. P. Podeanu 144, 300569 Timişoara, Romania*
- P25 Microencapsulation of red onion skins anthocyanins by freeze drying method Florina Stoica, Gabriela Rapeanu, Nicoleta Stanciuc, Iuliana Aprodu, Livia Pătrașcu, Gabriela Elena Bahrim Faculty of Food Science and Engineering, University of "Dunărea de Jos", Galati, Domnească Street 111, Galați, România
- P₂₆ Evaluating soil spore-forming bacteria to prevent food contamination
 Laurentiu Urucu, Izabela Vulpe, Dana Gina Radu "Aurel Vlaicu" University of Arad,
 Faculty of Food Engineering, Tourism and Environmental Protection, Arad, Romania
- P₂₇ Determination of some nutritional parameters of dark chocolate
 Ariana Bianca Velciov, Adrian Riviş, Georgeta Sofia Popescu, Antoanela Cozma,
 Andreea Annemarie Kiss, **Maria Rada** *University of Medicine and Pharmacy "Victor Babes"*, 300041, Timisoara, Romania

Section: Food Chemistry, Engineering & Technology

- P₂₈ Evaluation of some nutritional parameters of dried figs
 Ariana Bianca Velciov, Adrian Riviş, Milan Velimirovici, Georgeta Sofia Popescu,
 Daniela Stoin, Dana Velimirovici, **Maria Rada** *University of Medicine and Pharmacy*"Victor Babes", 300041, Timisoara, Romania
- Polyphenols from Vitis species:occurrence, antioxidant properties and interactions with cyclodextrins
 Claudia Oprinescu, Paul Moldovan, Daniel Ioan Hădărugă, Nicoleta Gabriela Hădărugă -

Claudia Oprinescu, Paul Moldovan, Daniel Ioan Hadaruga, Nicoleta Gabriela Hadaruga - Doctoral School "Engineering of Vegetable and Animal Resources", Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara, Calea Aradului 119, 300645-Timişoara, Romania

P₃₀ Triterpenoid saponins from *Aesculus* species: occurrence, chronic venous insufficiency effects and interactions with cyclodextrins

Laurentin Părana Prăghiai Parial Lean Hădărusă Nicolate Gabriele Hădărusă

Laurenţiu-Răzvan Drăghici, Daniel Ioan Hădărugă, Nicoleta Gabriela Hădărugă - Doctoral School "Engineering of Vegetable and Animal Resources", Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara, Calea Aradului 119, 300645-Timişoara, Romania

