

**66TH SCIENTIFIC CONFERENCE
WITH INTERNATIONAL PARTICIPATION
"FOOD SCIENCE, EQUIPMENT AND TECHNOLOGY- 2019"**

**CONFERENCE PROGRAMME
ПРОГРАМА НА НАУЧНАТА КОНФЕРЕНЦИЯ**

October 11, 2019 (Friday)

11 октомври 2019 г. (петък)

8:30 - 10:00 block 1, first floor, entrance foyer

Registration of participants in 66th Scientific Conference with International Participation "FOOD SCIENCE, EQUIPMENT AND TECHNOLOGY-2019"

8:30 - 10:00 блок 1, първи етаж, входно фоайе

Регистрация на участниците в 66^{-та} Научна конференция с международно участие „ХРАНИТЕЛНА НАУКА, ТЕХНИКА И ТЕХНОЛОГИИ-2019”

10:00 - 11:20 block 2, second floor, Auditorium “Horizont”

Opening Ceremony of the 66th Scientific Conference with International Participation "FOOD SCIENCE, EQUIPMENT AND TECHNOLOGY-2019"

10:00 - 11:20 блок 2, втори етаж, Аудитория „Хоризонт“

Официална церемония по Тържествено откриване на 66-та Научна конференция с международно участие „ХРАНИТЕЛНА НАУКА, ТЕХНИКА И ТЕХНОЛОГИИ - 2019”

11:20 - 12:00 block 2, second floor, Auditorium “Horizont”

GENERAL PLENARY SESSION

11:20 - 12:00 блок 2, втори етаж, Аудитория „Хоризонт“

ОБЩО ПЛЕНАРНО ЗАСЕДАНИЕ

11:20 - 11:30

Presentation of a short CV to the invited speaker Prof. Dr. rer. nat. habil. Andreas Schieber

Представяне на кратко CV на поканения лектор Проф. д-р Андреас Шибер

11:30 - 12:00

Plenary report “Plant phenols – multifunctional constituents in foods”

Invited speaker: Prof. Dr. rer. nat. habil. Andreas Schieber

¹ Institute of Nutritional and Food Sciences, Rheinische Friedrich-Wilhelms University of Bonn, Germany

Пленарен доклад на тема „Растителните феноли – многофункционални компоненти в храните“

Поканен лектор: проф. д-р Андреас Шибер

¹ Институт по науките за храненето и храните , Университет на Бон, Германия

12:00 -13:00

Lunch

Обяд

13:00 -16:00 block 2, second floor, Auditorium “Horizont”

PARALLEL PLENARY SESSION OF THEMATIC AREA 1. FOOD SCIENCE AND TECHNOLOGY

13:00 - 16:00 блок 2, втори етаж, Аудитория „Хоризонт“

ПАРАЛЕЛНО ПЛЕНАРНО ЗАСЕДАНИЕ В ТЕМАТИЧНО НАПРАВЛЕНИЕ 1. ХРАНИТЕЛНА НАУКА И ТЕХНОЛОГИЯ

CHAIRMAN: Assoc. Prof. Maria Kaneva, PhD

SECRETARY: Chief Assis. Prof. Mihaela Ivanova, PhD

ПРЕДСЕДАТЕЛ: доц. д-р Мария Кънева

СЕКРЕТАР: гл. ас. д-р Михаела Иванова

13:00 - 13:10

Oral presentation 1.1. Interactions of starch with non-starchy polysaccharide hydrocolloids

Научно съобщение 1.1. Взаимодействия на нишестето с безкорбялови полизахаридни хидроколоиди

Authors: Marek Sikora^{1*}, Anna Dobosz¹, Magdalena Krystyjan¹, Piotr Tomasiak²

¹ Department of Carbohydrates Technology, Faculty of Food Technology, University of Agriculture in Krakow, Poland

² Nantes - Nantes Nanotechnological Systems, Bolesławiec, Poland

13:10 - 13:20

Oral presentation 1.2. Using of vegetal powders in the production of food concentrates

Научно съобщение 1.2. Използване на зеленчукови брашна при производството на хранителни концентрати

Authors: Tatyana Samuylenko^{1*}, Tatyana Gurinova¹, Vladislav Tomashov¹

¹ Department of Bakery Products Technology, Technological Faculty, Mogilev State University of Food Technologies, Mogilev, Belarus

13:20 - 13:30

Oral presentation 1.3. Image analysis of the porosity of gluten-free cakes

Научно съобщение 1.3. Имидж анализ на шупливостта на безглютенови кексове

Authors: Ivayla Sopotenska^{1*}, Valentina Chonova¹

¹ Department of Technology of Grain, Fodder, Bread and Confectionery Products, University of Food Technologies, Plovdiv, Bulgaria

13:30 - 13:40

Oral presentation 1.4. Evaluation of the antioxidant activity and oxidative stability in ginger- and turmeric-enriched soybean oils

Научно съобщение 1.4. Оценка на антиоксидантната активност и окислителната стабилност на соеви масла, обогатени с джинджифил и куркума

Authors: Federica Tinello¹, Stefania Zannoni¹, Anna Lante^{1*}

¹ Department of Agronomy Food Natural Resources Animal and Environment, University of Padova, Legnaro, Italy

13:40 - 13:50

Oral presentation 1.5. Structural characteristics and functional properties of fiber-rich by-products of white cabbage modified by high-energy wet media milling

Научно съобщение 1.5. Структурни характеристики и функционални свойства на богати на фибри странични продукти от бяло зеле модифицирани при смилане във високоенергийна влажна среда

Authors: I. von Ulardt^{1*}, M. Springer¹, R. Valbuena¹

¹ Institute of Agricultural and Urban Ecological Projects, Humboldt-University of Berlin, Berlin, Germany

13:50 - 14:00

Oral presentation 1.6. Phytochemical characterization of medicinal plants of the *Lamiaceae* family with high content of biologically active substance

Научно съобщение 1.6. Фитохимично характеризиране на лечебни растения от семейство *Lamiaceae* с високо съдържание на биологично активни вещества

Authors: Ira Stancheva^{1*}, Ely Zayova¹, Maria Geneva¹, Elisaveta Kirova¹, Ivan Atanasov²

¹ Institute of Plant Physiology and Genetics, Bulgarian Academy of Sciences, Sofia, Bulgaria

² AgroBioInstitute, Agiricultural Academy, Sofia, Bulgaria

14:00 - 14:10

Oral presentation 1.7. Selection and study on technological parameters of symbiotic starter cultures *Lactobacillus bulgaricus* and *Streptococcus thermophilus* for production of Vietnamese yogurt

Научно съобщение 1.7. Селекция и проучване на технологичните параметри на симбиотични стартерни култури *Lactobacillus bulgaricus* и *Streptococcus thermophilus* за производство на виетнамско кисело мляко

Authors: Thanh Le¹, Bogdan Goranov^{2*}, Radka Vlaseva¹

¹ Department of Milk and Dairy Products Technology, University of Food Technologies, Plovdiv, Bulgaria

² Laboratory for Analysis of Milk and Dairy Products "LB Lact" Ltd., Plovdiv, Bulgaria

14:10 - 14:20

Oral presentation 1.8. Effects of fructose and stevia on the rheological, technological and sensory characteristics of ice cream

Научно съобщение 1.8. Влияние на фруктозата и стевията върху реологичните, технологичните и сензорните характеристики на сладоледа

Authors: Ernesta Treciokiene^{1*}, Iona Sostakiene¹

¹ Department of Food Technology, Faculty of Technologies, Kaunas College, University of Applied Sciences, Kaunas, Lithuania

14:20 - 14:30

Oral presentation 1.9. Influence of various cold-pressed oils on the chemical composition and microbiological quality of sausages

Научно съобщение 1.9. Влияние на различни видове студено пресовани масла върху химическия състав и микробиологичния статус на колбаси

Authors: Boban Malinov¹, Aco Kuzelov^{1*}, Elena Joshevska², Verica Ilieva³, Elizabeta Barbareeva¹

¹ Department of Food Technology and Processing of Animal products, Faculty of Agriculture, Goce Delchev University, Shtip, North Macedonia

² Department of Food Technology, Faculty of Biotechnical Sciences, St. Kliment Ohridski University, Bitola, North Macedonia

³ Department of Crop Production, Faculty of Agriculture, Goce Delchev University, Shtip, North Macedonia

14:30 - 14:40

Oral presentation 1.10. The fast food production process and the addictive ingredients

Научно съобщение 1.10. Процесът на производство на бърза храна и пристрастяващите съставки

Authors: Mihaela Karadocheva^{1*}, Ekaterina Konstantinova¹, Tsvetoslav Tsankov¹

¹ Department of Communication and Computer Technologies, Faculty of Technical Sciences, Konstantin Preslavsky University of Shumen, Shumen, Bulgaria

14:40 - 15:00

A brief presentation and discussion on the posters in Thematic area 1

Кратка презентация и дискусия върху постерите представени в Тематично направление 1

Poster 1.1. Investigation of mass flow rate during extrusion of rice flour enriched with carrot

Постер 1.1. Изследване на производителност при екструзия на оризово брашно, обогатено с моркови

Authors: Mariya Dushkova¹, Anna Koleva², Apostol Simitchiev³, Dobromir Genev^{2*}, Sevda Grozdanova

¹ Department of Process Engineering, University of Food Technologies, Plovdiv, Bulgaria

² Department of Technology of Grain, Fodder, Bread and Confectionery Products, University of Food Technologies, Plovdiv, Bulgaria

³ Department of Machines and Apparatus, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.2. Investigation of specific mechanic energy during extrusion of rice flour enriched with dried pumpkin

Постер 1.2. Изследване на специфична механична енергия при екструзия на оризово брашно, обогатено със сушена тиква

Authors: Dobromir Genev¹, Mariya Dushkova², Anna Koleva^{1*}, Apostol Simitchiev³

¹ Department of Technology of Grain, Fodder, Bread and Confectionery Products, University of Food Technologies, Plovdiv, Bulgaria

² Department of Process Engineering, University of Food Technologies, Plovdiv, Bulgaria

³ Department of Machines and Apparatus, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.3. Phytochemical characterization of the fruits and the resulting purees of two types of pumpkins cultivated in Bulgaria

Постер 1.3. Фитохимична характеристика на плодовете и получените от тях пюре на два вида тикви отглеждани в България

Authors: Emine Saralieva¹, Petya Ivanova^{2*}, Nadezhda Petkova³, Dimka Haytova⁴

¹ BSc Student "Analysis and Control of Food Products", University of Food Technologies, Plovdiv, Bulgaria

² Institute of Canning and Food Quality, Plovdiv, Agricultural Academy, Sofia, Bulgaria

³ Department of Organic Chemistry and Inorganic Chemistry, University of Food Technologies, Plovdiv, Bulgaria

⁴ Department of Horticulture, Agriculture University, Plovdiv, Bulgaria

Poster 1.4. Valorization of onion extracts as anti-browning agents

Постер 1.4. Валоризация на екстракти от кромид лук като антипокафеняващи агенти

Authors: Federica Tinello^{1*}, Anna Lante¹

¹ Department of Agronomy Food Natural Resources Animal and Environment, University of Padova, Legnaro, Italy

Poster 1.5. The gradual development of quality complex of Bulgarian dry-cured ham during aging under natural climatic conditions

Постер 1.5. Постепенно изменение на качествената характеристика на български сурово-сушен месен продукт по време на зреене при естествени климатични условия

Authors: Daniela Mitreva¹, Dilyana Gradinarska-Ivanova^{1*}, Katya Valkova-Yorgova¹

¹ Department of Food Meat and Fish Technology, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.6. Effect of pig's feed phytonutrients supplementation on the free amino nitrogen and water holding capacity of pork

Постер 1.6. Влияние на добавката от фитонутриенти при хранене на свине върху съдържанието на свободен аминен азот и водозадържащата способност на месото

Authors: Dessislava Vlahova-Vangelova^{1*}, Dessislav Balev¹, Stefan Dragoev¹, Sonya Ivanova², Jivko Nakev², Tanya Nikolova²

¹ Department of Food Meat and Fish Technology, University of Food Technologies, Plovdiv, Bulgaria

² Animal Sciences Division, Agricultural Institute, Shumen, Agricultural Academy, Sofia, Bulgaria

Poster 1.7. Effect of refrigeration temperature on the fermentation process in kashkaval cheese

Постер 1.7. Влияние на температурата на охлаждане върху ферментационния процес на кашкавал от краве мляко

Authors: Atanaska Markova^{1*}, Galin Ivanov²

¹ Department of Food Preservation and Refrigeration Technology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Technology of Milk and Milk Products, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.8. Proteolysis in kashkaval cheese stored at different temperatures

Постер 1.8. Протеолиза в кашкавал от краве мляко съхраняван при различни температурни режими

Authors: Galin Ivanov^{1*}, Atanaska Markova²

¹ Department of Technology of Milk and Milk Products, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Food Preservation and Refrigeration Technology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.9. Production of instant coffee from cold brewed coffee; process characteristics and optimization

Постер 1.9. Производство на разтворимо кафе от студено сварено кафе - характеристики на процеса и оптимизация

Authors: Patroklos Vareltzis^{1*}, Gargali Irene¹, Smaro Kiroglou¹, Marina Zeleskidou¹

¹ Department of Chemical Engineering, Laboratory of Food Industry Technologies and Agricultural Industries, Aristotle University of Thessaloniki, Thessaloniki, Greece

Poster 1.10. Phytochemical composition and biological activity of *Physalis* spp.: A mini-review

Постер 1.10. Фитохимичен състав и биологична активност на видове *Physalis* spp.: кратък обзор

Authors: Nadezhda Mazova^{1*}, Venelina Popova¹, Albena Stoyanova¹

¹ Department of Tobacco, Sugar, Vegetable and Essential Oils, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.11. Comparative study of physical and chemical characteristics of two brands of cigarillos on Bulgarian market

Постер 1.11. Сравнително изследване на физични и химични показатели на две марки пурети, продавани на българския пазар

Authors: Violeta Nikolova¹, Venelina Popova^{1*}, Nikolay Nikolov¹

¹ Department of Tobacco Processing, Tobacco and Tobacco Products Institute, Markovo, Agricultural Academy, Sofia, Bulgaria

² Department of Tobacco, Sugar, Vegetable and Essential Oils, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 1.12. Comparative characteristics of milking systems in ZK Pelagonija-Bitola

Постер 1.12 Сравнителни характеристики на доилните системи в ЗК Пелагония - Битоля

Authors: Vangelica Jovanovska^{1*}, Ivan Baloski¹, Dimitra Jovanovska¹, Mila Arapceska¹, Darko Veljanovski¹, Elizabeta Hristovska¹

¹ Department of Food Technology, Faculty of Biotechnical Sciences, St. Kliment Ohridski University, Bitola, North Macedonia

15:00 - 16:00

Coffee break - informal discussion between the participants

Кафе пауза – неформална дискусия между участниците

13:00 – 16:00 block 3, second floor, seminar hall 222

PARALLEL PLENARY SESSION OF THEMATIC AREA 2. FOOD CHEMISTRY, MICROBIOLOGY, BIOTECHNOLOGY AND SAFETY

13:00 -16:00 блок 3, втори етаж, семинарна зала 222

ПАРАЛЕЛНО ПЛЕНАРНО ЗАСЕДАНИЕ В ТЕМАТИЧНО НАПРАВЛЕНИЕ 2. ХИМИЯ, МИКРОБИОЛОГИЯ, БИОТЕХНОЛОГИЯ И БЕЗОПАСНОСТ НА ХРАНИТЕ

CHAIRMAN: Assoc. Prof. Velichka Gocheva, PhD

SECRETARY: Chief Assis. Prof. Nadezhda Petkova, PhD

ПРЕДСЕДАТЕЛ: доц. д-р Величка Гочева

СЕКРЕТАР: гл. ас. д-р Надежда Петкова

13:00 - 13:10

Oral presentation 2.1. Stability of corn and olive oil-in-water emulsions supplemented with ethanol-treated rapeseed meal protein isolate

Научно съобщение 2.1. Стабилизиране на емулсионни системи тип „масло във вода“ с протеинов изолат, получен от обработен с етанол рапичен шрот

Authors: Hristo Kalaydzhiev^{1*}, Vanya Gandova², Petya Ivanova¹, Teresa Brandão⁴, Tzvetelin Dessev³, Cristina Silva⁴, Vesela Chalova¹

¹ Department of Biochemistry and Molecular Biology, University of Food Technologies, Plovdiv, Bulgaria

² Department of Analytical and Physical Chemistry, University of Food Technologies, Plovdiv, Bulgaria

³ Department of Technology of Cereal and Bakery Products, University of Food Technologies, Plovdiv, Bulgaria

⁴ Center for Biotechnology and Fine Chemistry - Associated Laboratory, Biotechnology Higher School, Porto, Portugal

13:10 - 13:20

Oral presentation 2.2. Characteristics of water and water-ethanolic extracts from industrial rose wastes

Научно съобщение 2.2. Характеристики на водни и водно-етанолни екстракти от отпадъци на розово-маслената индустрия

Authors: Nikoleta Yantcheva^{1*}, Ivelina Vasileva¹, Rada Dinkova², Vasil Shikov², Rositsa Denkova³, Zapryana Denkova³, Anton Slavov¹

¹ Department of Organic and Inorganic Chemistry, University of Food Technologies, Plovdiv, Bulgaria

² Department of Food Preservation and Refrigeration Technology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

³ Department of Biochemistry and Molecular Biology, University of Food Technologies, Plovdiv, Bulgaria

⁴ Department of Microbiology, University of Food Technologies, Plovdiv, Bulgaria

13:20 - 13:30

Oral presentation 2.3. Low-toxic organic solvent-based liquid-liquid extraction-chromogenic system for copper (II)

Научно съобщение 2.3. Течно-течна екстракционна-хромогенна система за мед (II) базирана на нискотоксичен органичен разтворител

Authors: Siyna Chobanova¹, Mariela Kalendarska¹, Ivelina Koicheva¹, Kiril Gavazov², Galya Toncheva^{1*}

¹ Department of General and Inorganic Chemistry with Methodology of Chemical Education, Faculty of Chemistry, Paissii Hilendarski University of Plovdiv, Plovdiv, Bulgaria

² Department of Chemical Sciences, Faculty of Pharmacy, Medical University of Plovdiv, Plovdiv, Bulgaria

13:30 - 13:40

Oral presentation 2.4. Aquaphotomics in biotechnology - new tools and opportunities

Научно съобщение 2.4. Аквафотомика в биотехнологията - нови инструменти и възможности

Authors: Albert Krastanov^{1*}

¹ Department of Biotechnology, University of Food Technologies, Plovdiv, Bulgaria

13:40 - 13:50

Oral presentation 2.5. Biopreservation of emulsified food and cosmetic products by synergistic action of probiotics and plant extracts: a Franco-Bulgarian perspective

Научно съобщение 2.5. Биоконсервиране на емулгирани храни и козметични продукти чрез синергично действие на пробиотици и растителни екстракти: Френско-Българска гледна точка

Authors: Georgi Kostov¹, Rositsa Denkova-Kostova², Zapryana Denkova³, Nenko Nenov⁴, Vesela Shopska¹, Mina Dzhivoderova-Zarcheva⁵, Desislava Teneva⁶, Bogdan Goranov⁷, Ivan Petelkov¹, Lynda Bouarab⁸, Yann Demarigny⁹, Nadia Oulahal⁸, Florence Husson¹⁰, Yves Waché¹⁰, Pascal Degraeve^{8*}

¹ Department of Technology of Wine and Beer, University of Food Technologies, Plovdiv, Bulgaria

² Department of Biochemistry and Molecular Biology, University of Food Technologies, Plovdiv, Bulgaria

³ Department of Microbiology, University of Food Technologies, Plovdiv, Bulgaria

⁴ Department of Industrial Heat Engineering, University of Food Technologies, Plovdiv, Bulgaria

⁵ Department of Technology of Tobacco, Sugar, and Plant Essential Oils, University of Food Technologies, Plovdiv, Bulgaria

⁶ Laboratory Biologically Active Substances - Plovdiv, Institute of Organic Chemistry with Centre of Phytochemistry, Plovdiv, Bulgarian Academy of Sciences, Sofia, Bulgaria

⁷ Laboratory LB Lact Bass Ltd., Plovdiv, Bulgaria

⁸ Laboratory of Bioengineering and Microbial Dynamics at Food Interfaces, Claude Bernard University of Lyon 1, Bourg en Bresse, France

⁹ Laboratory of Bioengineering and Microbial Dynamics at Food Interfaces, Claude Bernard University of Lyon 1, Lyon, France

¹⁰ Food and Microbiological Processes, Franche-Comté University of Burgundy, AgroSup Dijon, Dijon, France

13:50 - 14:00

Oral presentation 2.6. Antimicrobial effect of thyme essential oil against *Salmonella enteritidis* inoculated in flour and homogenized eggs

Научно съобщение 2.6. Антимикробен ефект на етерично масло от мащерка срещу *Salmonella enteritidis*, инокулирана в брашно и хомогенизирани яйца

Authors: Jasmina Stojiljkovic¹, Metodija Trajchev², Dimitar Nakov^{2*}, Milena Petrovska³, Biljana Petanovska Ilievska², Ljupche Kochoski⁴, Marija Glavash Dodov⁵

¹ Department of Food Technology, College of Applied Studies, Vranje, Republic of Serbia

² Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia

³ Faculty of Medicine, Institute of Microbiology with Parasitology, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia

⁴ Department of Food Technology, Faculty of Biotechnical Sciences, St. Kliment Ohridski University, Bitola, North Macedonia

⁵ Faculty of Pharmacy, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia

14:00 - 14:10

Oral presentation 2.7. Analysis of aqueous and alcoholic extracts of *Onopordum acanthium L.* (Scotch Thistle)

Научно съобщение 2.7. Анализ на водни и алкохолни екстракти от лечебното растение *Onopordum acanthium L.* с цел влагане в маринати за месни и рибни ястия

Authors: Albena Parzhanova^{1*}, Aneta Popova¹, Ivo Finkov¹, Iordanka Alexieva¹, Snezhana Ivanova¹

¹ Department of Nutrition and Tourism, University of Food Technologies, Plovdiv, Bulgaria

14:10 - 14:20

Oral presentation 2.8. Risks and benefits of using nanomaterials in food packaging

Научно съобщение 2.8. Рискове и ползи от използването на наноматериали в опаковките на храните

Authors: Ekaterina Konstantinova^{1*}, Mihaela Karadocheva¹

¹ Department of Communication and Computer Technologies, Faculty of Technical Sciences, Konstantin Preslavsky University of Shumen, Shumen, Bulgaria

14:20 - 14:30

Oral presentation 2.9. Solubilities of bioactive compounds from *Hyperici herba* in aqueous alcoholic solvent mixtures

Научно съобщение 2.9. Разтворимост на биоактивни компоненти от *Hyperici herba* във водно-алкохолни разтвори

Authors: Maria Boykova¹, Ilonka Saykova^{1*}, Ilian Iliev¹

¹ Department of Chemical Engineering, University of Chemical Technology and Metallurgy, Sofia, Bulgaria

14:30 - 14:40

Oral presentation 2.10. Antimicrobial effect of sweet basil essential oil against *Salmonella enteritidis* growth in vitro

Научно съобщение 2.10. Антимикробен ефект на етеричното масло от сладък босилек срещу in vitro растежа на *Salmonella enteritidis*

Authors: Jasmina Stojiljkovic¹, Metodija Trajchev², Dimitar Nakov^{2*}, Milena Petrovska³, Biljana Petanovska Ilievska², Ljupche Kochoski⁴, Marija Glavash Dodov⁵

¹ Department of Food Technology, College of Applied Studies, Vranje, Republic of Serbia

² Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia

³ Faculty of Medicine, Institute of Microbiology with Parasitology, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia

⁴ Department of Food Technology, Faculty of Biotechnical Sciences, St. Kliment Ohridski University, Bitola, North Macedonia

⁵ Faculty of Pharmacy, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia

14:40 - 15:00

A brief presentation and discussion on the posters in Thematic area 2

Кратка презентация и дискусия върху постерите представени в Тематично направление 2

Poster 2.1. Optimization of polyphenols extraction process with antioxidant properties from wild bilberry and lingonberry leaves

Постер 2.1. Оптимизиране процеса на екстракция на полифеноли с антиоксидантна активност от листа на боровинка

Authors: Radka Vrancheva¹, Ivan Ivanov^{2*}, Ilian Badjakov³, Ivayla Dincheva³, Vasil Georgiev⁴, Atanas Pavlov^{1,4}

¹ Department of Analytical Chemistry and Physical chemistry, University of Food Technologies, Plovdiv, Bulgaria

² Department of Organic Chemistry and Inorganic Chemistry, University of Food Technologies, Plovdiv, Bulgaria

³ AgroBioInstitute, Sofia, Agricultural Academy, Sofia, Bulgaria

⁴ Laboratory of Applied Biotechnologies, Plovdiv, The Stephan Angeloff Institute of Microbiology, Bulgarian Academy of Sciences, Sofia, Bulgaria

Poster 2.2. Optimizing the sterilization protocol in the process of *in vitro* cultivation of the genus *Vaccinium*

Постер 2.2. Оптимизиране на стерилизацията при *in vitro* култивиране на представители от род *Vaccinium*

Authors: Maria Georgieva^{1*}, Diyan Georgiev¹, Denitsa Hristova¹, Violeta Kondakova²

¹ Research Institute of Mountain Stockbreeding and Agriculture, Troyan, Agricultural Academy, Sofia, Bulgaria

² AgroBioInstitute, Sofia, Agricultural Academy, Sofia, Bulgaria

15:00 - 16:00

Coffee break - informal discussion between the participants

Кафе пауза – неформална дискусия между участниците

13:00 -16:00 block 2, second floor, Auditorium 202

PARALLEL PLENARY SESSION OF THEMATIC AREA 3. FOOD PROCESS ENGINEERING

13:00 - 16:00 блок 2, втори етаж, Аудитория 202

ПАРАЛЕЛНО ПЛЕНАРНО ЗАСЕДАНИЕ В ТЕМАТИЧНО НАПРАВЛЕНИЕ 3.

ХРАНИТЕЛЕН ПРОЦЕСЕН ИНЖЕНЕРИНГ

CHAIRMAN: Assoc. Prof. Stanislava Tasheva, DSc

SECRETARY: Chief Assis. Prof. Vladimira Ganchovska, PhD

ПРЕДСЕДАТЕЛ: доц. дн. инж. Станислава Ташева

СЕКРЕТАР: гл. ас. д-р Владимира Ганчовска

13:00 - 13:10

Oral presentation 3.1. Optimization of vacuum assisted cold extraction of ground coffee beans

Научно съобщение 3.1. Оптимизация на вакуум подпомогната студена екстракция на смлени зърна от кафе

Authors: Patroklos Varelziz¹, Konstantina Thanasoulia¹, Smaro Kiroglou^{1*}

¹ Department of Chemical Engineering, Laboratory of Food Industry Technologies and Agricultural Industries, Aristotle University of Thessaloniki, Thessaloniki, Greece

13:10 - 13:20

Oral presentation 3.2. Analysis of the increase of fuel burning performances by the use of a mixture of bio-fuels

Научно съобщение 3.2. Анализ на повишеното изгаряне на гориво чрез използване на смес от био-горива

Authors: Gheorghe Lăzăroiu¹, Lucian Mihăescu², Viorel Berbec^{2*}, Pișă Ionel², Gabriel-Paul Negreanu²

¹ Department of Power Systems, Power Engineering Faculty, University Politehnica of Bucharest, Romania

² Department of Heat Engineering, Mechanical Engineering Faculty, University Politehnica of Bucharest, Romania

13:20 - 13:30

Oral presentation 3.3. Optimal location of biodiesel refineries using waste oils and fats as a raw material

Научно съобщение 3.3. Оптимално разполагане на рафинериите за биодизел, използващи отработени масла и мазнини като суровина

Authors: Evgeniy Ganev^{1*}, Boyan Ivanov¹

¹ Laboratory of Process System Engineering, Institute of Chemical Engineering, Sofia, Bulgarian Academy of Sciences, Sofia, Bulgaria

13:30 - 13:40

Oral presentation 3.4. Numerical analysis of transport phenomena and mechanical behavior in capillary-porous colloidal materials subjected to convective drying

Научно съобщение 3.4. Числено симулиране на преносни и механични процеси в капилярно-порести колоидни тела при конвективно сушене

Authors: Nina Penkova^{1*}, Boian Mladenov¹, Blagoi Zlatkov¹, Tsvetelina Georgieva², Oleg Panayotov³

¹ Department of Silicate Technology, Faculty of Metallurgy and Material Science, University of Chemical Technology and Metallurgy, Sofia, Bulgaria

² Department of Engineer Chemistry, Faculty of Chemical and System Engineering, University of Chemical Technology and Metallurgy, Sofia, Bulgaria

³ Department of Organic Synthesis and Fuels, Faculty of Chemical Technology, University of Chemical Technology and Metallurgy, Sofia, Bulgaria

13:40 - 13:50

Oral presentation 3.5. Thermal treatment of food through solar energy concentrators

Научно съобщение 3.5. Термично обработване на храна чрез концентратори на слънчева енергия

Authors: Kalin Krumov^{1*}, Neli Siveva¹

¹ University of Chemical Technology and Metallurgy, Sofia, Bulgaria

13:50 - 14:00

Oral presentation 3.6. A comparative study of thresholding algorithms for cut surface evaluation of Bulgarian white cow cheese in brine

Научно съобщение: 3.6. Сравнително изследване на бинаризиращи алгоритми за оценка на разрезната повърхност на Българско бяло саламурено сирене от краве мляко

Authors: Atanaska Bosakova-Ardenska¹, Lena Kostadinova-Georgieva¹, Nikolay Shopov¹, Peter Panayotov¹, Hristina Andreeva¹, Petya Boyanova², Vladimira Ganchovska^{1*}, Angel Danev¹, Evelina Pashova¹, Toni Iliev¹

¹ Department of Computer Systems and Technologies, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Milk and Dairy Technology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

14:00 - 14:10

Oral presentation 3.7. Program for managing an automated conveyor for packaged food products and 3D simulation of its work

Научно съобщение 3.7. Програма за управление на автоматизиран конвейер за пакетирани хранителни продукти и 3D симулация на работата му

Authors: Daniel Denev^{1*}, Mario Vasilev¹, Yordanka Yankova-Yordanova²

¹ Department of Communication and Computer Technologies, Faculty of Technical Sciences, Konstantin Preslavsky University of Shumen, Shumen, Bulgaria

² Department of Engineering Logistics, Faculty of Technical Sciences, Konstantin Preslavsky University of Shumen, Shumen, Bulgaria

14:10 - 15:00

A brief presentation and discussion on the posters in Thematic area 3

Кратка презентация и дискусия върху постерите представени в Тематично направление 3

Poster 3.1. Effect of the quantity of cocoa shells and moisture content on sorption characteristics of extrudates from corn semolina

Постер 3.1. Влияние на съдържанието какаови люспи и влажността върху сорбционните характеристики на екструдати от царевичен грис

Authors: Nesho Toshkov^{1*}, Apostol Simitchiev², Ventsislav Nenov², Ivan Panchev³

¹ Department of Process engineering, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Machines and Apparatus for Food Industry, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

³ Professor Emeritus from Department of Mathematics and Physics, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.2. Effect of the working pressure on the flux during ultrafiltration of goat's milk

Постер 3.2. Влияние на работното налягане върху относителната производителност при ултрафилтрация на козе мляко

Authors: Mariya Dushkova¹, Siyka Kodinova^{1*}, Georgi Angelov¹

¹ Department of Process Engineering, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.3. Sorption characteristics and technological study on Lucuma powder (*Pouteria lucuma*) as a sugar substitute and „Super Food“

Постер 3.3. Сорбционни характеристики и технологични изследвания върху брашно от Лукума (*Pouteria lucuma*) като захарозаместител и „Супер храна“

Authors: Albena Durakova^{1*}, Tzvetana Gogova², Stefka Vladeva³, Velichka Yanakieva⁴, Ivan Dimov⁵, Romyana Krasteva⁶, Kornelia Choroleeva⁷, Adelina Bogoeva⁸, Kristina Dosheva², Neli Georgieva²

¹ Department of Process Engineering, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Technology of Grain, Fodder, Bread and Confectionery Products, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

³ Clinic of Endocrinology and Metabolic Disorders, Kaspela University Hospital, Plovdiv, Bulgaria;

⁴ Department of Microbiology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

⁵ Department of Food Technologies, Faculty of Technics and Technologies, Yambol, Trakia University, Stara Zagora, Bulgaria

⁶ Center of Physical Education and Sport, Department of Language Training, Physical Education and Sport, University of Food Technologies, Plovdiv, Bulgaria

⁷ Language Training Centre, Department of Language Training, Physical Education and Sport, University of Food Technologies, Plovdiv, Bulgaria

⁸ Department of Food Technologies, Institute of Food Preservation and Quality, Plovdiv, Agriculture Academy, Sofia, Bulgaria

Poster 3.4. Studying and modeling the process of acetic acid fermentation

Постер 3.4. Изследване и моделиране на процеса оцетно-кисела ферментация

Authors: Jeko Stoychev¹, Svetla Lekova², Georgi Terziyski^{1*}

¹ Department of Automation, Information and Control Engineering, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Automation of the Production, University of Chemical Technology and Metallurgy, Sofia, Bulgaria

Poster 3.5. Phase detector for packing machine with centered printing foil

Постер 3.5. Фазов детектор към опаковъчен автомат за работа с фолио с центриран печат

Authors: Veselin Stanchev¹, Borjana Zekova², Jordan Badev^{1*}

¹ Department of Automation, Information and Control Systems, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Biochemistry and Molecular Biology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.6. Optical pulse sensor behind the identified marker on the folio with the centered printed

Постер 3.6. Импулсен оптичен сензор за опознаване маркера на фолио с центриран печат

Authors: Veselin Stanchev¹, Borjana Zekova^{2*}, Jordan Badev¹

¹ Department of Automation, Information and Control Systems, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Biochemistry and Molecular Biology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.7. Automatic control of a horizontal wrapping machine when printing with a centered printing foil

Постер 3.7. Автоматизирано управление на хоризонтален опаковъчен автомат при работа с фолио с центриран печат

Authors: Veselin Stanchev^{1*}, Borjana Zekova², Jordan Badev¹

¹ Department of Automation, Information and Control Systems, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

² Department of Biochemistry and Molecular Biology, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.8. Monitoring and analysis of fresh meat, based on data fusion, mechatronic modules, and intelligents algorithms for decision making

Постер 3.8. Проследяване и анализ на пресни меса на база сензорно обединяване, мехатронни модули и интелигентни алгоритми за вземане на решение

Authors: Tanya Titova^{1*}

¹ Department of Automation, Information and Control Systems, Technical Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.9. Evaluating the consumption of energy sources for rose oil production

Постер 3.9. Оценка на разхода на енергийни източници за производство на розово масло

Authors: Stepan Akterian^{1*}

¹ Division Technology of Fat, Essential Oils, Perfumery and Cosmetics, Department of Tobacco, Sugar, Vegetable and Essential Oils, Technological Faculty, University of Food Technologies, Plovdiv, Bulgaria

Poster 3.10. State, capabilities and prospects of mobile processors and controllers

Постер 3.10. Състояние, възможности и перспективи на мобилните процесори и контролери

Authors: Ivaylo Dragnev^{1*}, Krassimir Kolev¹

¹ Department of Computer Systems and Technologies, Technical faculty, University of Food Technologies, Plovdiv, Bulgaria

15:00 - 16:00

Coffee break - informal discussion between the participants

Кафе пауза – неформална дискусия между участниците

13:00 - 16:00 block 3, second floor, seminar hall 225

PARALLEL PLENARY SESSION OF THEMATIC AREA 4. CATERING, TOURISM AND ECONOMY OF FOOD INDUSTRY

13:00 -16:00 блок 3, втори етаж, семинарна зала 225

ПАРАЛЕЛНО ПЛЕНАРНО ЗАСЕДАНИЕ В ТЕМАТИЧНО НАПРАВЛЕНИЕ 4. КЕТЪРИНГ, ТУРИЗЪМ И ИКОНОМИКА НА ХВП

CHAIRMAN: Prof. Bozhidar Hadzhiev, DSc

SECRETARY: Chief Assis. Prof. Georgi Toskov, PhD

ПРЕДСЕДАТЕЛ: проф. дн. Божидар Хаджиев

СЕКРЕТАР: гл. ас. д-р Георги Тосков

13:00 - 13:10

Oral presentation 4.1. Factors stimulating food waste in restaurant industry

Научно съобщение 4.1. Фактори, стимулиращи хранителните отпадъци в рестораторството

Authors: Ivo Finkov¹, Iordanka Alexieva¹, Iliana Milkova-Tomova^{1*}

¹ Department of Catering and Tourism, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

13:10 - 13:20

Oral presentation 4.2. Some modern aspects of e-marketing

Научно съобщение 4.2. Някои съвременни аспекти на е-маркетинга

Authors: Donka Kumanova-Larde¹, Philip Hristov^{2*}

¹Department of Industrial Business and Entrepreneurship, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

² PhD student at the Department of Industrial Business and Entrepreneurship, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

13:20 – 13:30

Oral presentation 4.3. Optimization of corporate growth financing

Научно съобщение 4.3. Оптимизация на финансирането на корпоративния растеж

Authors: Snezhinka Konstantinova^{1*}, Asen Konarev², Gergana Veselina-Georgieva¹

¹ Department of Industrial Business and Entrepreneurship, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

² Technologies and Innovations Corporation PLC, Plovdiv, Bulgaria

13:30 - 13:40

Oral presentation 4.4. Problems of the corporate growth of public companies from the food industry

Научно съобщение 4.4. Проблеми на корпоративния растеж на публичните компании от хранително-вкусовата промишленост

Authors: Snezhinka Konstantinova¹, Asen Konarev^{1*}, Gergana Veselina-Georgieva¹

¹ Department of Industrial Business and Entrepreneurship, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

² Technologies and Innovations Corporation PLC, Plovdiv, Bulgaria

13:40 - 13:50

Oral presentation 4.5. Reengineering initiatives applied to Bulgarian sugar industry enterprises

Научно съобщение 4.5. Инициативи за реинженеринг, приложени в предприятия от българската захарна промишленост

Authors: Atanas Rusinov^{1*}

¹ Department of Industrial Business and Entrepreneurship, Faculty of Economics, University of Food Technologies, Plovdiv, Bulgaria

13:50 - 15:00

A brief presentation and discussion on the posters in Thematic area 4

Кратка презентация и дискусия върху постерите представени в Тематично направление 4

Poster 4.1. Food processing and preservation – an added economic and ecological value to European countries

Постер 4.1. Преработката и консервирането на храни - добавена икономическа и екологична стойност за Европейските страни

Authors: Nikolche Jankulovski^{1*}, Katerina Bojkovska¹, Goran Mihajlovski¹, Angjelka Jankulovska²

¹Faculty of Biotechnical Sciences, St. Kliment Ohridski University, Bitola, North Macedonia

²Higher Medical School, St. Kliment Ohridski University, Bitola, North Macedonia

15:00 - 16:00

Coffee break - informal discussion between the participants

Кафе пауза – неформална дискусия между участниците

19:30 – 23:30 Conference Dinner in Restaurant Ambassador of Ramada Plovdiv Trimontium hotel

19:30 – 23:30 Официална вечеря в ресторант „Амбасадор“ на хотел Рамада Пловдив Тримонциум

Notes:

1) The posters are placed on the boards in front of the halls where will be conduct scientific sessions from 8:30 to 13:00 AM on 11 October 2019

*2) The names of delegates at the conference are marked with **

Забележки:

1) Постерите се поставят на таблата пред залите за провеждане на научните сесии от 8:30 до 13:00 ч. на 11 Октомври 2019 г.

*2) Имената на делегатите на конференцията са отбелязани със знака **