



PROGRAM
BOOK

XXII Congress

EuroFoodChem

June 14-16, 2023 | Belgrade, Serbia

<https://xxiieurofoodchem.com>

congress2023@xxiieurofoodchem.com

**Serbian Academy of
Sciences and Arts**

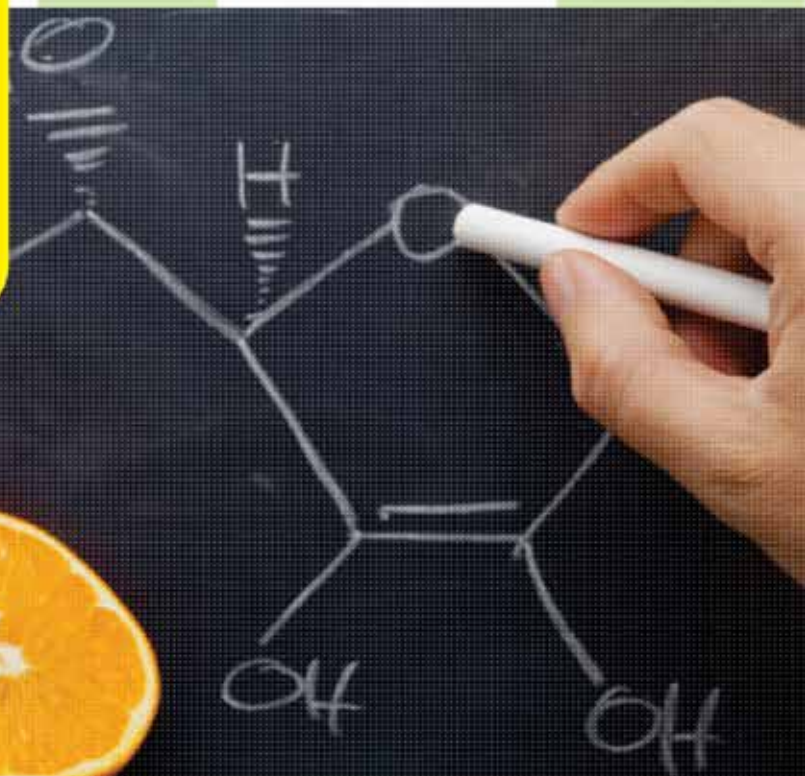
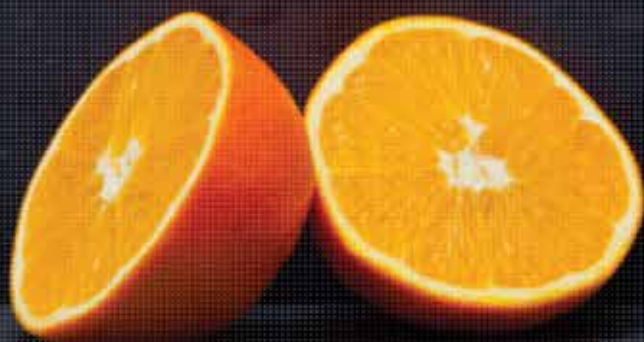
Kneza Mihaila 35

11000 Belgrade

**Faculty of Chemistry
University of Belgrade**

Studentski trg 12-16

11000 Belgrade



Since it was founded in 1996, **Analysis d.o.o.** offers high-quality instruments and reliable solutions for your laboratory.

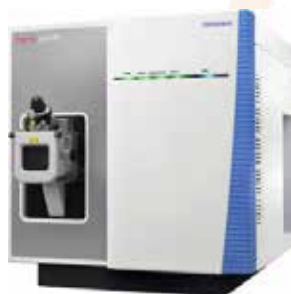
FOOD ANALYSIS SOLUTIONS

Analysis d.o.o. offers a complete solution for food analysis, that includes:

- Food adulteration, authenticity and profiling
- Food contaminants: POPs (dioxins, PCBs, etc.), pesticide residues, food contact materials, mycotoxins and other biotoxins, vet drug residues, microplastics and nanoplastics
- Food safety, composition and quality
- Inspecting chemical changes in food under processing and storage
- Food development and processing applications through rheology and extrusion
- Food imaging data analysis for gaining insights into the relation of microstructure to properties needed in food engineering, chemistry, microbiology, and safety



Vanquish Core HPLC



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Orbitrap Eclipse Tribrid MS



OUR SOLUTIONS

We differentiate our program by focusing on providing specialized sample preparation systems, as well as direct automated measurements of various sample types, to facilitate the work of laboratories.

By offering top-notch quality, particularly in terms of service, Proanalytica has become one of the market leaders. As part of the Lach-Ner Group, we provide services in accordance with the highest European standards, accompanied by exceptional service and application support.

CONTACT

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Bulevar umetnosti 27,
Belgrade, Serbia



ETHOS X, MILESTONE

The ETHOS X utilizes the innovative microwave hydrodiffusion and gravity technique to enable extraction of essential oils from natural products, available in two interchangeable configurations tailored for fragrances and flavors.



FREESTYLE SPE PFAS, LC TECH

LC Tech provides automated solutions for PFAS analysis, offering specialized robotic systems that minimize blank values by eliminating plastics containing fluorine, thereby addressing the challenges of sensitive sample preparation.



RAPID N EXCEED, ELEMENTAR

Rapid N exceed, the nitrogen and protein analyzer, operates according to the safe, simple, and eco-friendly Dumas combustion method.



LKB Vertriebs doo Beograd-Palilula
Cvijićeva 115, 11120, Belgrade, Serbia
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EXCELLENCE IN ROUTINE AND SCIENCE

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Have a close contact with leading European and American companies

LKB is an ISO 9001 Certified Company dedicated to supply, distribution and customer service of Life Science, Biotechnology and Analysis equipment, supplements and solutions.

Our team includes certified service engineers for qualified installation and technical service providement.

- ✓ Preparative chromatography systems and solutions
- ✓ Micro Array Analysis
- ✓ Gel and Blot Imaging & Analysis
- ✓ Spectrophotometry
- ✓ Microplate readers
- ✓ Filtration (NFF/TFF)
- ✓ Amio acid analysis



Biochrom 30+ Series of amino acid analyzers are designed for the analysis of complex oxidised hydrolysates. Over 30 years of experience resulted in a product, that meets the requirements of AOAC and the EU Commission Directive 98/64/EC.



Ortec is a producer of superb alpha, beta and gamma detectors. These instruments have been proven as reliable and robust in food, soil and fertilizers radioactivity detection and measurement



Hidex provides an array of both portable and stable liquid scintillation detectors, both with reduced and low-level background properties, suitable for food, water and soil samples.



Continuing the legacy of GE Healthcare in case of preparative chromatography solutions, Cytiva broadened it's portfolio with cell culture products, as well as analytical solutions (imagers, surface-plasmon resonance analysis).



Cytiva's Whatman™ filtration products bring efficiency and accuracy to food and beverage testing, standardizing and streamlining lab workflows and safety. The product line covers both production and quality control applications.



Analytical equipment for material characterization, composition, physicochemical properties and sensorial characteristics.



XXII Congress EuroFoodChem

**June 14-16, 2023
Belgrade, Serbia**

*<https://xxiieurofoodchem.com>
congress2023@xxiieurofoodchem.com*

Under the auspices



Ministry of Science, Technological
Development and Innovations,
Republic of Serbia



Serbian Academy of
Sciences and Arts

Organizers



EuChemS, Division of Food Chemistry



Serbian Chemical Society

WELCOME ADDRESSES

Dear Colleagues and Friends,

On behalf of the Food Chemistry Division of EuChemS and Serbian Chemical Society with support of the Serbian Academy of Sciences and Arts, I am delighted to welcome all the experts from different countries to Belgrade, Serbia to XXII EuroFoodChem.

Following the previous successful meetings of EuroFoodChem since 1981, Belgrade is for the first time honored to host this important international gathering in the field of food chemistry.

After a very successful virtual edition in 2021, we are thrilled to organize a face-to-face meeting again.

The Congress program offers both exciting recent trends in food chemistry research and engaging networking opportunities that we all have missed over the last couple of years. In addition to abstract presentations and lectures by world renowned speakers, we will be offering a variety of networking options. The EuroFoodChem is an excellent opportunity for initiating or strengthening cooperations and knowledge.

For centuries Serbia has been strategically the most important region in the Balkans; many conquerors fought for this piece of land and left their own traces in time and space. We can only hope that the rich and tightly packed scientific program will allow you to explore the capitol of Serbia and historical places nearby.

Serbia is a country of diversities and the city of Belgrade, as a place of intersection of different cultures and history, is the most beautiful example of it. Wine making has a long tradition in Serbia and it is now experiencing its renaissance. Vineyards have been a part of the diverse Serbian landscape since before the times of Romans. Belgrade is also a new hot spot on the European gastronomical map. In a city with so many historical influences, tradition intertwines with innovation.

I would also like to thank all of you who have worked with devotion on putting up this meeting together. On behalf of all of us involved in the event preparation, I wish you a great time at EuroFoodChem, and thank you for your participation and contribution to the high scientific quality of the event.

Hope that you will find the Congress and your stay in Belgrade valuable, enjoyable, and memorable!

Congress Chairman

Tanja Cirkovic Velickovic

COMMITTEES

Chair: Tanja Cirkovic Velickovic, Corresponding Member of SASA

SCIENTIFIC COMMITTEE

Joana Amaral (Portugal) – Chair, EuChemS-FCD

Marco Arlorio (Italy) – Past-Chair, EuChemS-FCD

Livia Simonné Sarkadi (Hungary)

Todasca Cristina (Romania) – Secretary, EuChemS-FCD

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Karel Cejpek (Czech Republic)

Matthias Wüst (Germany)

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Michael Murkovic (Austria) – Treasurer, EuChemS-FCD

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Zuzana Ciesarova (Slovakia)

Reto Battaglia (Switzerland)

Irena Vovk (Slovenia)

Andreja Rajkovic (Serbia & Belgium)

LOCAL ORGANIZING COMMITTEE

Dusanka Milojkovic-Opsenica (University of Belgrade – Faculty of Chemistry, Serbia)

Jelena Radosavljevic (University of Belgrade – Faculty of Chemistry, Serbia)

Jelena Mutic (University of Belgrade – Faculty of Chemistry, Serbia)

Jelena Trifkovic (University of Belgrade – Faculty of Chemistry, Serbia)

Mirjana Radomirovic (University of Belgrade – Faculty of Chemistry, Serbia)

Petar Ristivojevic (University of Belgrade – Faculty of Chemistry, Serbia)

Maja Krstic Ristivojevic (University of Belgrade – Faculty of Chemistry, Serbia)

Ivana Prodic (Institute of Molecular Genetics and Genetic Engineering
(Institute of molecular genetics and genetical engineering), Serbia)

Elizabet Janic Hajnal (University of Novi Sad, Institute of Food Technology in Novi Sad, Serbia)

Danijela Kostic (University of Nis, Faculty of Sciences and Mathematics)

CONGRESS TOPICS

- **Food composition, quality, and safety**
- **Food sustainability, including byproducts valorization**
- **Novel foods**
- **Food and health, functional foods, and ingredients**
- **Chemical reactions and interactions of food components**
- **Chemical changes in food under processing and storage**
- **Food adulteration, authenticity, and traceability**
- **Novel methods for food chemistry**
- **Food contaminants**

GENERAL INFORMATION

Official Language:

English. No simultaneous translation will be provided.

Registration Desk opening times.

Day 1: June 14, 2023, 8:30-10:30h

Day 2: June 15, 2023, 8:30-10:30h

Day 3: June 16, 2023, 8:30-10:30h

**The Registration Desk is situated in Serbian Academy of Sciences and Arts
Kneza Mihaila 35, 11000 Belgrade**

LOCAL ORGANIZER

PCO – ARIA Conference & Events doo

Karadjordjev trg 34 – 11080 Zemun – Belgrade, Serbia

Office: + 381 11 2600 978

Mail: office@aria.co.rs

www.ariaconference.com

Liability and Insurance: Neither the Food Chemistry Division of EuChemS nor the local organizers will assume any responsibility whatsoever for damage or injury to persons or property during the Congress. Participants are recommended to arrange for their personal travel and health insurance.

Certificate of Attendance: Will be given at the registration desk and sent by email after the end of the Congress.

ABOUT BELGRADE

With a 7.000-year history, Belgrade is one of the oldest cities in Europe and the meeting point for centuries among different civilizations. Dynamic and vibrant two million people city it is the capital of Serbia, located at the confluence of the rivers Sava and Danube, where the Pannonian Plain meets the Balkan. Discover magnificent nature, monasteries, archaeological sites, wineries, ethno villages, and spas.



BELGRADE FORTRESS

Kalemegdan is Belgrade's central park and fortress complex lying on a hill overlooking the Sava and Danube confluence, on the eastern side of the river Sava. This has been the sight of the ancient Roman city of Singidunum, the medieval and Turkish era Belgrade and was converted into a park in the mid-19th century. It is home to several galleries and museums, restaurants, sports courts, and the Belgrade Zoo.



SKADARLIJA

It is in the heart of Belgrade, the old, romantic and bohemian, known in history and legend, and it lives more than a century in many songs, interesting stories, and anecdotes as well as many literary and journalistic writings. The history of Skadarlija began in the 1830s with the settlement of Gypsies in the abandoned trenches in front of the ramparts. The 1854 town plan of Belgrade reveals that the Gypsy hovels had been replaced by brick buildings into which artisans, caterers, petty clerks, and others moved. The whole locality was referred to as the Gypsy Quarter until 1872 when it was named Skadarlija and it kept that name until the present day. Skadarlija changed its name once in the meantime, during the Austro-Hungarian occupation, when it was changed to The Rose Street. And that's the only time the name of the street was changed for a short period of time. Today Skadarlija is one of the key tourist attractions of Belgrade. It is under state protection as a cultural monument. It has its own code and its own flag, with the symbols of a walking stick, carnation, and a hat. In this neighborhood there are a handful of restaurants where you'll be able to really experience the traditional Serbian cuisine. There are also galleries, antique shops, and souvenir shops.



ROYAL PALACE

The Royal Palace was built between 1924 and 1929 with the private funds of His Majesty King Alexander I (the grandfather of HRH Crown Prince Alexander). The architects were Zivojin Nikolic and Nikolay Krassnoff of the Royal Academy. The palace is made of white stone in the Serbian-Byzantine style. Attached to The Royal Palace there is a Royal Chapel dedicated to Saint Apostle Andrew the First-Called, the Patron Saint of The Royal Family. The Royal Palace was the home of King Alexander I and King Peter. Today The Royal Palace is the home of Crown Prince Alexander II and his family.



TEMPLE OF SAINT SAVA

It is located on the Vračar plateau, on the eastern part of the Svetosavski Trg square in Belgrade which is believed to be the location where the remains of Saint Sava were burned in 1595 by Ottoman Grand Vizier Sinan Pasha in order to break the Serbian spirit. The Church of Saint Sava is not only the largest Serbian Orthodox church, it is the largest Orthodox place of worship in the Balkans and one of the largest Orthodox churches in the world. It holds a special place in the hearts of Belgraders. It is a gathering spot, a safe refuge, and an important place of support for all those in need. In between its walls the residents of Serbia's capital share their joy and their sorrow, and celebrating important holidays in front of it has become a tradition a long time ago.



PRACTICAL INFORMATION

Climate: Weather in June

The weather in Belgrade in June is quite pleasant this month. The thermometer averaged maximum of 28°C. In the morning the temperature drops to 17°C. Thus, the mean temperature average in June in Belgrade is 22°C. On this month of June, day length in Belgrade is generally 15:35. The sun rises at 04:51 and sunset is at 20:26

Time Zone: Belgrade and Serbia are in the Central European time zone region – GMT +1

Water: Water in Belgrade is safe to drink.

Currency

RSD – Serbian Dinar

1 EUR = +/-120 dinars

What additional to see in Belgrade in brief

The National Museum, Residences of Princess Ljubica and Prince Miloš, Nikola Tesla Museum, House of Flowers, Cathedral, St Sava's Church, St Mark's Church, Church of the Holy Virgin Mary – Ružica, Church of Christ the King, Synagogue and Bayrakli Mosque, Ada Ciganlija, Zemun and Gardos, Kalemegdan.

For any other information visit following websites:

Tourist Organization of Belgrade: <http://www.tob.rs/>

How to get from Belgrade Nikola Tesla airport to the city center

Transfer Options from Belgrade Airport to the City Center:

There are 3 transportation options to get from Belgrade Nikola Tesla Airport (BEG) to the City Center: **private car transfer, taxi, public bus**. Distance from Belgrade Nikola Tesla Airport to the city center is about 20 km. The fastest option is taking a car transfer. Trip takes around 30 minutes by car and cost between 25-30 Euros. The Cheapest option is the Bus and takes around 60 minutes to reach the city center.

Near airport exit gate there is bus station for "Mini Bus A1". Mini bus A1 operate between airport and Slavija Square. Bus stop also in New Belgrade (Fontana stop) and near Belgrade main train station.

Important telephone numbers:

Emergencies

Police – 192

Fire department – 193

Ambulance -194

Information for oral and flash presentations

Plenary lectures - 45 minutes /located at Serbian Academy of Sciences and Arts
Kneza Mihaila 35, 11000 Belgrade

Keynote lectures - 30 minutes/ located at Serbian Academy of Sciences and Arts
Kneza Mihaila 35, 11000 Belgrade

Oral presentations - 15 minutes / Faculty of Chemistry, University of Belgrade
Studentski trg 12-16, 11000 Belgrade

Flash presentations - 5 minutes / Faculty of Chemistry, Belgrade University
Studentski trg 12-16, 11000 Belgrade

Technical Equipment is available for all presentations.

Preview Desk: All speakers should give their presentation 30 minutes before their session. Please make sure that your presentation is fully operational. Only presentations on USB Memory devices will be accepted.

Information for Poster Presenters

Please note that only paper posters will be accepted.

Presenting authors are requested to be available for short presentations and discussion of their posters during the allocated Poster Walk. Poster board is 95 cm width & 238 cm height. Recommended dimensions for posters 80 x 120 cm.

SOCIAL PROGRAM



WELCOME RECEPTION, June 14, 2023
THE ILIJA M. KOLARAC ENDOWMENT
Studentski trg 5, 11000 Belgrade



CONGRESS DINNER
June 15th, 2023 at restaurant Velika Skadarlija
Dress code: Casual

PROGRAM AT A GLANCE

Day 1: June 14, 2023

- 8:30-10:30 **Registration**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
- 9:00-9:30 **OPENING CEREMONY**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
- FOOD CHEMISTRY DIVISION AWARDS SESSION**
Moderators: Joana Amaral, Michael Murkovic
- 9:30-10:15 **Plenary Lecture 1**
Czedik-Eysenberg-Lecture
Serbian Academy of Sciences and art, Knez Mihailova 35, str.
Vitamins – food chemistry research vs information needed in nutrition research
Prof. Vieno Piironen
- 10:15-10:45 **Keynote Lecture 1**
Junior award talk
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
Improvement of olive oil flavor and bioactive composition by optimizing industrial extraction using taste sensor devices
Itala Marx
- 10:45-11:30 **Coffee break**
- POSTER PRESENTATIONS (T1 and T9)**
Faculty of Chemistry, Studentski trg 12-16, str.
- 11:30-12:30 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.
- T1-Food composition - quality and safety**
Hall 1-Main chemical amphitheater
- T9-Food contaminants**
Hall 2-Small chemical amphitheater Dräger
- 12:30-13:30 **Lunch**
Faculty of Chemistry - meeting room/ library, Studentski trg 12-16, str.
- 13:30-14:30 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.
- T1-Food composition - quality and safety**
Hall 1-Main chemical amphitheater
- T9-Food contaminants**
Hall 2-Small chemical amphitheater Dräger

14:30-15:30 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.
T8-Novel methods for food chemistry
Hall 1-Main chemical amphitheater
T5-Chemical reactions and interactions of food components
Hall 2-Small chemical amphitheater Dräger

15:30-16:15 **Coffee break**

POSTER PRESENTATIONS (T1 and T5)

Faculty of Chemistry, Studentski trg 12-16, str.

TOPIC: EMERGING CONTAMINANTS

Moderators: Tanja Cirkovic Velickovic and Irena Vovk

Faculty of Chemistry, Studentski trg 12-16, str.

16:15-17:00 **Plenary Lecture 2**

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Food and packaging – a symbiosis?

prof. Thomas Gude

17:00-17:30 **Keynote Lecture 2**

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Micro- and nanoplastics in food current analytical methods and challenges

Prof. Ralf Greiner

18:00 **WELCOME RECEPTION**

The Ilija M. Kolarac Endowment, Studentski trg 5, str.

Day 2: June 15, 2023

8:30-10.30 **Registration**

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

9:00-9:30 **Vendors slot**

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

PROANALYTICA

How do we overcome challenges between sampling and analysis?

Goran Đokić

SHIMADZU

Analytical solutions for food safety – a closer look in the analytical toolbox

Uwe Oppermann

TOPIC: FOOD AND HEALTH

Moderators: Hans-Jacob Skarpeid and Vieno Piironen

9:30-10:15

Plenary Lecture 3

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

A Foodomics study on the activity of bioactive compounds from plants, algae and agrifood by-products against Alzheimer disease

Prof. dr Alejandro Cifuentes

10:15-10:45

Keynote Lecture 3

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Overview on analytical methods for allergen control in foods and compliance with the proposed reference doses

prof. Linda Monaci

10:45-11:30

Coffee break

POSTER PRESENTATIONS (T4 and T8)

Faculty of Chemistry, Studentski trg 12-16, str.

11:30-12:30

ORAL PRESENTATION

Faculty of Chemistry, Studentski trg 12-16, str.

T4-Food and health, functional foods and ingredients

Hall 1-Main chemical amphitheater

T5-Chemical reactions and interactions of food components

Hall 2-Small chemical amphitheater Dräger

12:30-13:30

Lunch

Faculty of Chemistry- meeting room/ library, Studentski trg 12-16

13:30-14:30

ORAL PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T4-Food and health, functional foods and ingredients

Hall 1-Main chemical amphitheater

T5-Chemical reactions and interactions of food components

Hall 2-Small chemical amphitheater Dräger

14:30-15:30

ORAL PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T6-Chemical changes in food under processing and storage

Hall 1-Main chemical amphitheater

T7-Food adulteration, authenticity and traceability

Hall 2-Small chemical amphitheater Dräger

15:30-16:15

Coffee break

POSTER PRESENTATIONS (T6, T7 and T8)

Faculty of Chemistry, Studentski trg 12-16, str.

TOPIC: CHEMICAL CHANGES IN FOOD UNDER PROCESSING AND STORAGE

Moderators: Thomas Gude and Cristina Todasca

16:15-17:00

Plenary Lecture 4

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Process-induced reactions in food: Glycation, lipation and beyond
prof. Thomas Henle

TOPIC: FOOD SAFETY

17:00-17:30

Keynote Lecture 4

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Essential oils antimicrobial activity and their role in food safety
prof. Miroslava Kacaniova

20:00

CONFERENCE DINNER

Restaurant Velika Skadarlija, Skadarska 40d, str.

Day 3: June 16, 2023

8:30-10.30

Registration

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

9:00-9:30

Vendors slot

ANALYSIS

Proteomics in food - from farm to fork

Luka Mihajlovic, PhD

TOPIC: FOOD SUSTAINABILITY AND BYPRODUCTS VALORIZATION

Moderators: Livia Simon Sarkadi and Zuzana Ciesarová

9:30-10:15

Plenary Lecture 5

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Food Sustainability and byproducts valorization

Prof. Manuela Pintado

10:15-10:45

Keynote Lecture 5

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

We know how to extract proteins from rapeseed – NapiFeryn BioTech for food sustainability

prof. Anna Chmielewska

10:45-11:30 **Coffee break**

POSTER PRESENTATIONS (T3)

Faculty of Chemistry, Studentski trg 12-16, str.

11:30-12:30 **ORAL PRESENTATIONS**

Faculty of Chemistry, Studentski trg 12-16, str.

T2-Food sustainability, including byproducts valorization

Hall 1-Main chemical amphitheater

T3-Novel foods

Hall 2-Small chemical amphitheater Dräger

12:30-13:30 **Lunch**

Faculty of Chemistry- meeting room/ library, Studentski trg 12-16

Vendors slot

Hallway, ground floor, Faculty for Chemistry, Studentski trg 12-16, str.

ANALYSIS

High resolution mass spectrometry in food analysis

Luka Mihajlovic, PhD

TOPIC: NOVEL METHODS FOR FOOD CHEMISTRY

Moderators: Irena Vovk and Joana Amaral

13:30-14:15 **Joint Session DAC-DFC EuChemS/Plenary 6**

Faculty of Chemistry, Studentski trg 12-16, str.

New analytical solutions for the global challenges of food safety

prof. Rudolf Krska

14:15-14:45 **Joint Session DAC-DFC EuChemS/ Keynote 6**

Faculty of Chemistry, Studentski trg 12-16, str.

Understanding food aromas: in the frontier between sensorial and analytical data

prof. Silvia Rocha

14:45-15:45 **ORAL PRESENTATIONS**

Faculty of Chemistry, Studentski trg 12-16, str.

T8-Novel methods for food chemistry

Hall 1-Main chemical amphitheater

Flash presentations

Hall 2-Small chemical amphitheater Dräger

15:45-16:45 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.

T8-Novel methods for food chemistry

Hall 1-Main chemical amphitheater

Flash presentations

Hall 2-Small chemical amphitheater Dräger

16:45-17:30 **Coffee break**

POSTER PRESENTATIONS (T2, T8 and T3)

Faculty of Chemistry, Studentski trg 12-16, str.

17:30 – 18:00 **CLOSING CEREMONY**
Faculty of Chemistry, Studentski trg 12-16, str.

Day 4, June 17, 2023

POST-CONGRESS TOUR:
Archaeological Park Viminacium

SCIENTIFIC PROGRAM

Day 1: June 14, 2023

8:30-10:30 **Registration**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

9:00-9:30 **OPENING CEREMONY**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Academician Zoran Popovic, Vice-President of SASA
prof. Dusan Sladic, President of Serbian Chemical Society
dr Marina Sokovic, Ministry of Science, Technological
Development and Innovations, Republic of Serbia
Prof. Tanja Cirkovic Velickovic, Congress Chair,
corresponding member of SASA

FOOD CHEMISTRY DIVISION AWARDS SESSION

Moderators: Joana Amaral, Michael Murkovic

9:30-10:15 **Plenary Lecture 1**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Czedik-Eysenberg-Lecture

Serbian Academy of Sciences and art, Knez Mihailova 35, str.

*Vitamins – food chemistry research vs information needed in nutrition
research*

Prof. Vieno Piironen

10:15-10:45 **Keynote Lecture 1**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Junior award talk

*Improvement of olive oil flavor and bioactive composition by
optimizing industrial extraction using taste sensor devices*

Itala Marx

10:45-11:30 Coffee break

POSTER PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T1 - Food composition, quality and safety

Moderators: Ivana Prodic and Petar Ristivojevic

Khalfalla Maha

A comparative study of Ca and Fe concentrations in Hungarian proso millet grains
(*Panicum miliaceum* L.) varieties

Valentina Nikolić

Chemical composition, antioxidant properties, and in vitro digestibility of flour and ground hulls of differently coloured oat varieties

Alžbeta Hegedúsová

Carotenoid profile of the pulp of selected musk gourd varieties

Hiroko Seki

Quality differences among tomato varieties

Grünwald, M.

Comparison of the nutritional composition of different cultivars of the edible variety of *Jatropha curcas* (L.) - An untapped protein source

Gracia Patricia Blanch

Study on the phenolic composition and antioxidant properties of white, yellow and black corn (*Zea mays* L.) foodstuffs.

Alena Vollmannova

Rediscovered fruit quince (*Cydonia oblonga* Mill.) as a food source of biologically valuable substances

Jinfeng Bi

Retention of anthocyanin and antioxidant activity in the presence of pectin in mixed juices for different processing methods

Kristi Kerner

Effect of blackcurrant skin ingredients on the physicochemical properties of pork meatballs

Jadranka Odović

Determination of total acidity of fruit juice

T9 - Food contaminants

Moderators: Ivana Prodic and Petar Ristivojevic

Janette Musilová

The risk of garden crops contamination grown in soils with an increased content of heavy metals

Eva Ivanišova

Uptake of heavy metals by selected species of the genus *Allium*

Olívia Pinho

Inhibition of acrylamide in biscuits by fibre supplementation

Beka Sarić

Effect of dry-heat treatment on acrylamide and HMF formation in maize flour

Sladana Žilić

Relation of free asparagine content in small-grain cereals and the generation of acrylamide in the cookies

Miloš Ilić

Sample preparation for isolation of microplastic particles from mussel samples

Tamara Mutić

Chemical characterization and quantification of microplastics particles from mussel samples based on Micro-FTIR spectroscopy

Andreea Lavinia Mocanu

Investigation of acrylamide and HMF formation in biscuits produced by different ingredients

Malgorzata Starowicz

Reducing acrylamide exposure of consumers by a cereals supply-chain approach targeting asparagine (ACRYRED)- COST ACTION 21149

11:30-12:30

ORAL PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T1-Food composition, quality and safety - HALL 1, Main chemical amphitheater

Moderators: Jelena Trifkovic and Petras Rimantas Venskutonis

11:30-11:45

Luisa Calcinaï

Assessment of chemical modifications on the reduction of the allergenic potential of legume based proteins

11:45-12:00

Dias A.L.S

Dark matter revealed: the brown or black color of fine chocolates probed by polyphenol metabolomics and molecular networking

12:00-12:15

Naz Erdem

An approach on how to modulate recipe to reduce sugar in biscuits

12:15-12:30

Marlene Walczak

Methylated lysine derivatives in food

T9-Food contaminants - HALL 2, Small chemical amphitheater Dräger

Moderators: Thomas Gude and Jelena Mutic

11:30-11:45

Maja Krstić Ristivojević

Tropomyosin quantification in seafood samples-right choice of standard makes a difference

11:45-12:00

Bram Miserez

Detection of food contact chemicals from inks and adhesives in food

12:00-12:15 **Zuzana Ciesarová**
Asparaginase treatment of fruit additives enriching biscuits

12:15-12:30 **Jane K. Parker**
Acrylamide formation in protein fortified flour and bread

12:30-13:30 Lunch
*Faculty of Chemistry - Hallway, ground floor,
Studentski trg 12-16, str.*

T1-Food composition, quality and safety - HALL 1, Main chemical amphitheater

Moderators: Zuzana Ciesarová and Dusanka Milojkovic-Opsenica

13:30-13:45 **Barbara Siegmund**
Corky off-flavour in garlic? The presence of haloanisoles in garlic as serious problem for food industry

13:45-14:00 **Custódio Lobo Roriz**
Chemical and bioactive profile of five fig fruit varieties

14:00-14:15 **Andreia S. Ferreira**
Alternatives to the titanium dioxide (E171) whitening colorant in foods

14:15-14:30 **Mihajlo Jakanovski**
Microgreens and germs: The gleam of next-generation super foods - manipulations in production technologies and future strategies for maintaining the shelf life and quality of products

T9-Food contaminants - HALL 2, Small chemical amphitheater Dräger

Moderators: Jelena Radosavljevic and Jane Parker

13:30-13:45 **Zita E. Martins**
From Data mining to Meta-analysis: Presence of mycotoxins in food

13:45-14:00 **Nikola Gligorijevic**
Binding and corona formation of ovalbumin to polystyrene and polyethylene terephthalate microplastics under neutral and acidic conditions

14:00-14:15 **Ana Sánchez-Arroyo**
*Enzymatic detoxification of ochratoxin A:
Aspergillus niger vs. Alcaligenes faecalis ochratoxinases*

14:15-14:30 **Miguel A. Faria**
Combined synergic exposure to food contaminants: A matter of concern?

14:30-15:30 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.

T8-Novel methods for food chemistry - HALL 1, Main chemical amphitheater

Moderators: Malgorzata Starowicz and Irena Vovk

- 14:30-14:45 **Mónica Costa**
*Improving protein extraction from *Chlorella vulgaris* using combined mechanical/physical and enzymatic pre-treatments*
- 14:45-15:00 **Joana Costa, Caterina Villa, Isabel Mafra**
Single-tube nested real-time PCR as an efficient tool to quantify allergenic tree nuts in processed foods
- 15:15-15:30 **María Vergara-Barberán**
Determination of protein biomarkers by on-line aptamer affinity solid-phase extraction capillary electrophoresis-mass spectrometry. From biomedicine to food science

T5-Chemical reactions and interactions of food components - HALL 2, Small chemical amphitheater Dräger

Moderators: Maja Krstic-Ristivojevic and Livia Simon Sarkadi

- 14:30-14:45 **Alicja Tymczewska**
Chitosan films enriched with rapeseed cake extract obtained using a deep eutectic solvent
- 14:45-15:00 **Franziska Hanschen**
The role of amines in glucosinolate hydrolysis in Brassica vegetables
- 15:00-15:15 **Leon V. Bork**
Non-Enzymatic Browning Reactions of Phenolic Compounds – Formation of Melanin-like Colorants
- 15:15-15:30 **Friederike Manig**
Saliva – a suitable matrix to study the metabolic transit of food components and metabolites

15:30-16:15 Coffee break

POSTER PRESENTATIONS
Faculty of Chemistry, Studentski trg 12-16, str.

T1-Food composition, quality and safety - HALL 1, Main chemical amphitheater

Moderators: Jelena Trifkovic and Petras Rimantas Venskutonis

Rafaela Santos

Characterization of physicochemical properties of a Portuguese miso

Milena Šenk

Role of soybean - millet intercropping and bio-fertilizer in managing potential bio-availability of essential elements

Mladen Rajaković

Phytochemical composition of hydro-ethanolic extracts from *Cucumis metuliferus* E. Mey. fruit peels

Jane El Maghariki

A Low Atherogenic Index Olive Oil: Its Lipid Profile, Polyphenol Content, and Antioxidant Activity “

Malgorzata Starowicz

Changes of volatiles, free fatty acids and antioxidant profiles in gluten-free sponge cakes with the powdered cocoa bean shell (CBS)

Vojin Cvijanović

The influence of integral and organic growing systems on sugar content in selected tomato types and cultivars

A. López-López

Desalting process of directly brined table olives

Steva M. Lević

Experimental design and the desirability function in the estimation of overall food quality

Nevena Momirović

The sugars content of parental and new perspective descendant strawberry genotypes – potential approach for the future selection process

Teodora Cvanić

Phytochemical composition and antioxidant activity peel crude extract of *Cucumis metuliferus* (E. Mey. Ex. Naudin) from Fruška gora

Katalin Patonay

Mints producing thymol isomers – New chemotypes in five Hungarian *Mentha longifolia* (L.) L. accessions involved to experimental cultivation

Irena Vovk

HPTLC—MS/MS analyses of phenolic compounds in bee pollen botanically originated from *Hedera helix*

Danijel D. Milinčić

Biocompounds from mushroom aqueous and polysaccharide extracts

Vesna Dragičević

Some antioxidants and dietary fibre in various small grains (cereals)

T5 - Chemical reactions and interactions of food components

Moderators: Ivana Prodic and Petar Ristivojevic

Fernanda Cosme

Effect of Fining with Chitosan and k-Carrageenan on Protein Stability, Macromolecular, and Phenolic Composition of White Wines

Sophie Poppe

Oxidative stability of selenomethionine

TOPIC: EMERGING CONTAMINANTS

Moderators: Tanja Cirkovic Velickovic and Irena Vovk

- 16:15-17:00 **Plenary Lecture 2**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
Food and packaging – a symbiosis?
prof. Thomas Gude
- 17:00-17:30 **Keynote Lecture 2**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
Micro- and nanoplastics in food current analytical methods and challenges
Prof. Ralf Greiner
- 18:00 **WELCOME RECEPTION**
The Ilija M. Kolarac Endowment Studentski trg 5, str.

Day 2: June 15, 2023

8:30-10:30 **Registration**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

9:00-9:30 **Vendors slot**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
PROANALYTICA
How do we overcome challenges between sampling and analysis?
Goran Đokić

SHIMADZU
Analytical solutions for food safety – a closer look in the analytical toolbox
Uwe Oppermann

TOPIC: FOOD AND HEALTH
Moderators: Hans-Jacob Skarpeid and Vieno Piironen

9:30-10:15 **Plenary Lecture 3**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
A Foodomics study on the activity of bioactive compounds from plants, algae and agrifood by-products against Alzheimer disease
Prof. dr Alejandro Cifuentes

10:15-10:45 **Keynote Lecture 3**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.
Overview on analytical methods for allergen control in foods and compliance with the proposed reference doses
prof. Linda Monaci

10:45-11:30 Coffee break

POSTER PRESENTATIONS
Faculty of Chemistry, Studentski trg 12-16, str.

T4 - Food and health, functional foods and ingredients
Moderators: Maja Krstic-Ristivojevic and Danijela Kostic

Dorota Napiórkowska
Chromium Nanoparticles Support the Pro-Healthy Regulation of Liver Lipid Metabolism and Inflammation in Obese Rats when Combined with the Abandonment of High-Fat/Low-Fiber Diet

Xiaolu Zhou
Bamboo shoot dietary fiber alleviates gut microbiota dysbiosis and modulates liver fatty acid metabolism in mice with high-fat diet-induced obesity

Natália Čmíková

Mentha × piperita L. var. *officinalis* forma *rubescens* Camus antimicrobial activity in vitro and in situ

Cristina Martínez-Villaluenga

Anticancer activity of hydrolysed wheat bran mediated through macrophages stimulation

Bartosz Fotschki

Diet with raspberry polyphenols and prebiotic enhances liver lipid metabolism and regulates synthesis of bile acids in obese rats

Xiangrong Fang

Health Effects and bioavailability of Omega-3 fatty acids

Natalia Platosz

Chokeberry and red cabbage anthocyanins selectively cross the blood-cerebrospinal fluid barrier

Lukáš Kolarič

The use of β -cyclodextrin for decreasing the cholesterol content in cereal products

Ana Sousa

Antimicrobial activity of red wine phenolic and non-phenolic fractions

Zhijia Wua

IgE recognition and structural analysis on disulfide bonds crosslinked allergens aggregation in roasted peanut

Ana Cristina Ferrão

Microbiological and chemical composition of some Portuguese hazelnuts

Ítala M.G Marx

Chemical characterization of *Cistus ladanifer* L. phenolic extract and its antifungal activity against *Botrytis cinerea*

José Pinela

Fatty acid profile and indices of atherogenicity and thrombogenicity of fish by-product oil for pet food formulations

Zuzanna Gralak

Determination of selected parameters and compounds in fermented food

T8 - Novel methods for food chemistry

Moderators: Ivana Prodic and Petar Ristivojevic

Rocío Galindo-Luján

MALDI-TOF-MS for protein profiling and classification of food.
Application to quinoa grains

Paula Dominguez-Lacueva

Spectrofluorimetric characterization of ozonated olive oils

Sandra Vuković

Determination of antioxidant properties of turmeric spice extracts prepared by ultrasound assisted (UAE) and classical solvent extraction (CSE)

De Ancos

Green extraction of phenolic compounds and carotenoids from pulp and peel of mango criollo by ultrasound assisted extraction with deep eutectic solvents

Tuba Esatbeyoglu

Citrus sinensis: Comparative Untargeted Metabolic Profiling Using Liquid Chromatography-Mass Spectrometry and Multivariate Data Analysis to Uncover Authenticity

Dunja Malenica

Optimization of ultra-sound assisted extraction and conventional solvent extraction of TPC and DPPH from sea buckthorn pomace and hempseed hull

11:30-12:30 ORAL PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T4-Food and health, functional foods and ingredients - HALL 1, Main chemical amphitheater

Moderators: Jelena Radosavljevic and Hans-Jacob Skarpeid

11:30-11:45 Monika Pischetsrieder

Neurobiological regulation of food intake: Unbiased identification of food bioactives by virtual screening

11:45-12:00 Petras Rimantas Venskutonis

*Development of functional ingredients from guelder rose (*Viburnum opulus L.*) fruit pomace and their application for increasing nutritional value of bread*

12:00-12:15 Disca Vincenzo

Prebiotic effect of enzymatic treated cocoa bean shells (CBS): a static in-vitro digestion

12:15-12:30 Michael Murkovic

Recent results on heat induced carcinogens – formation of furfuryl alcohol during roasting of coffee

T5-Chemical reactions and interactions of food components - HALL 2, Small chemical amphitheater Dräger

Moderators: Michael Murkovic and Elizabet Janic Hajnal

11:30-11:45 **Seda Yildirim-Elikoglu**
Effect of phenolic compounds on the activity of proteolytic enzymes during cheese making and ripening

11:45-12:00 **Sandra Grebenteuch**
Formation of volatile methyl ketones during lipid oxidation

12:00-12:15 **Clemens Kanzler**
Colorants of the Maillard reaction: formation and structure of food melanoidins

12:15-12:30 **Karel Cejpek**
Development of α -dicarbonyl compounds from oligosaccharides

12:30-13:30 LUNCH
Faculty of Chemistry- Hallway, ground floor, Studentski trg 12-16

T4-Food and health, functional foods and ingredients - HALL 1, Main chemical amphitheater

Moderators: Jane Parker and Vieno Piironen

13:30-13:45 **Juana Frias**
Promoting Innovation Of Fermented Foods (Pimento) - Cost Action Ca20128

13:45-14:00 **Fernanda Machado**
Polysaccharides hypocholesterolemic potential: from structure to function

14:00-14:15 **Laura Quintieri**
Widening potentials of whey proteins and a look towards unexplored application fields

14:15-14:30 **Marta Mesías**
Acrylamide bioaccessibility in cereals, potatoes and chips. Effect of the food matrix and colonic fermentation

T6-Food sustainability, including byproducts valorization - HALL 2, Small chemical amphitheater Dräger

Moderators: Ivana Prodic and Malgorzata Starowicz

13:30-13:45 **Rafael Mascoloti Spréa**
*Chemical characterization and bioactive properties of industrial residues from walnut oil production (*Juglans regia L.*)*

13:45-14:00 **Andrea Fuso**
Hydrothermal treatment for hemicellulose extraction: investigation of

temperature effect on fibre structure and study of degrading compounds in hazelnut shells

14:00-14:15 **Leichtweis M.G.**
Sustainable use of pumpkin: characterization of the pulp and valorisation of by-products in obtaining preservative extracts

14:15-14:30 **Sofia F. Reis**
Brewer's Spent Yeast as a source of Vegan and Clean Label Additives for Mayonnaise Formulations

14:30-15:30 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.

T6-Chemical changes in food under processing and storage - HALL 1, Main chemical amphitheater

Moderators: Cristina Todasca and Jelena Radosavljevic

14:30-14:45 **Lars Störmer**
Formation of the Lipation product 2-Amino-6-(3-methylpyridin-1-ium-1-yl)-hexanoic Acid (MP-Lysine) during Roasting of Peanuts

14:45-15:00 **Zongyao Huyan**
Different Levels and Pattern of Lipid-Derived Gut Microbial Metabolites after Fermentation of Different Lipid-rich Foods

15:00-15:15 **Xiyu Jiang**
Retention of anthocyanin and antioxidant activity in the presence of pectin in mixed juices for different processing methods

15:15-15:30 **Simone Angeloni**
UHPLC-MS/MS quantification of acrylamide in various foodstuffs: formation and strategies of mitigation

T7-Food adulteration, authenticity and traceability - HALL 2, Small chemical amphitheater Dräger

Moderators: Irena Vovk and Petar Ristivojevic

14:30-14:45 **Carla Egido**
Classification, characterization, and authentication of honey by HPLC-UV fingerprinting and chemometrics. Application to the detection of honeys adulterated with syrups.

14:45-15:00 **Kristína Kukurová**
Slovak-Austrian cooperation in honey quality assessment

15:00-15:15 **Liliana Grazina**
*Authentication of ginkgo-containing foods: real-time PCR detection of *Styphnolobium japonicum* as a potential adulterant*

15:15-15:30 **Alba Tres**
Sesquiterpene chromatographic fingerprinting: lights and shadows for the geographical and varietal authentication of olive oils

15:30-16:15 **Coffee break**

POSTER PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T6 - Chemical changes in food under processing and storage

Moderators: Maja Krstic-Ristivojevic and Danijela Kostic

Sara Marçal

Functional mango peel powders: what is the impact of different drying methods on their phytochemical composition and antioxidant activity?

Albert Gashi

Effect of High Hydrostatic Pressure on Free Amino Acid and Biogenic Amines in Sausages During Storage

Latife Betül Gül

Effect of different drying techniques on the physicochemical and techno-functional properties of sesame protein isolate

Vesna Jovanović

The effect of food processing and packaging of clams on the content of tropomyosin

Aleksandra Stojićević

Chemical and colour changes of flavored cold-pressed sunflower oil during long-term storage conditions

Zhang Meili

Effect of stir-frying on the flavor characteristics of oat flour and dough formation

Degenek Jovana

The effect of kombucha as a non-conventional starter culture on the chemical composition and free amino acid profile of fresh cheese

Lama Ismaiel

Impact of High-Pressure Processing technology on lipid oxidation and antioxidants in Sardines (*Sardina pilchardus*)

Theresa Käubler

Canned versus home-made: Maillard reaction products in complex food samples

Dana Urminská

The effect of enzymatic oxidation, so called tea fermentation, on the antioxidant activity of commercial bagged teas

Yosra Zbiss

Effect of variety on physicochemical properties of coated chestnuts along short storage

Jihong Wu

A critical insight into the changes of aroma-active compounds during fruits and vegetables processing

Osman Gül

Effects of high hydrostatic pressure treatment on structural and techno-functional properties of sesame protein from sesame cake

Anna Průšová

α -Dicarbonyl compounds in honeys and honey-related products

T7 - Food adulteration, authenticity and traceability

Moderators: Maja Krstic-Ristivojevic and Danijela Kostic

Marko Ilić

Legume authentication method based on free amino acid composition

Maja Bensa

Food fraud in Europe - a 5 year overview

T8 - Novel methods for food chemistry

Moderators: Ivana Prodic and Petar Ristivojevic

María del Pozo

Synthesis and characterization of ReS₂-CB[n]-0D nanodots Development of an analytical method for Ponceau-4R determination.

Mihajlo Kulizić

Application of a flow injection system with carbon paste/copper Schiff base composite electrode on the ascorbic acid determination

Dušan Vasić

Raman spectroscopy as a tool for chemical characterisation of 12 Serbian fruits “

Liliana Grazina

Targeted UHPLC-MS/MS and DNA-based methods: a complementary approach for the botanical authentication of ginkgo-containing food supplements

TOPIC: CHEMICAL CHANGES IN FOOD UNDER PROCESSING AND STORAGE

Moderators: Thomas Gude and Cristina Todasca

16:15-17:00

Plenary Lecture 4

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Process-induced reactions in food: Glycation, lipation and beyond
prof. Thomas Henle

TOPIC: FOOD SAFETY

17:00-17:30

Keynote Lecture 4

Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Essential oils antimicrobial activity and their role in food safety

prof. Miroslava Kacaniova

20:00

CONFERENCE DINNER

Restaurant Velika Skadarlija, Skadarska 40d, str.

Day 3: June 16, 2023

8:30-10:30 **Registration**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

9:00-9:30 **Vendors slot**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

ANALYSIS

Luka Mihajlovic, PhD

Proteomics in food - from farm to fork

**TOPIC: FOOD SUSTAINABILITY AND BYPRODUCTS
VALORIZATION**

Moderators: Livia Simon Sarkadi and Zuzana Ciesarová

9:30-10:15 **Plenary Lecture 5**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

Food Sustainability and byproducts valorization

Prof. Manuela Pintado

TOPIC: NOVEL FOODS

10:15-10:45 **Keynote Lecture 5**
Serbian Academy of Sciences and Arts, Knez Mihailova 35, str.

We know how to extract proteins from rapeseed – NapiFeryn BioTech for food sustainability

prof. Anna Chmielewska

10:45-11:30 Coffee break

POSTER PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T3 - Novel Foods

Moderators: Jelena Mutic and Mirjana Radomirovic

Maria P. Spínola

Impact of 15% *Arthrospira platensis* (Spirulina) inclusion combined with/without enzymes on breast's meat quality in broilers

Nuno Mateus

Effect of alginate-based edible coatings enriched with *Origanum vulgare* L. essential oil on the shelf-life of biological apples

Aistė Galinskaitė

Nisin-Loaded Fucoidan Particles: Preparation and Characterization

Yuanying Ni

Production and functional characteristics of low-sodium high-potassium soy protein for the development of healthy soy-based foods”

Ivana Buljeta

Cellulose/saccharide delivery systems of raspberry phenolics

Ina Ćorković

Microencapsulation of volatile compounds from chokeberry juice into alginate/pullulan hydrogel beads

Tatiana Bojňanská

Application of organic sunflower cake to composite flour and effect on the properties of the dough and the fiber content of the bread

Sanja Stojanović

Obtaining of FOS by controlled hydrolysis of inulin with *Aspergillus welwitschiae* FAW1 endoinulinase

Sana Ben-Othman

Use of oil-seed proteins for the microencapsulation of chokeberry and sea-buckthorn pomace extracts

José M. Pestana

Effect of 15% Spirulina incorporation with commercial peptidases supplementation on colour and sensory breast meat profile in broilers

Marija Pavlović

Highly active endo-pectinase from *Aspergillus tubingensis*: A novel enzyme for fruit processing

Marina Ristović

Highly active xylanase used in juice clarification

Liene Jansone

Valorisation of sauerkraut processing by-products

Sérgio Sousa

Development of an innovative laminated dough with half-fat content

Maria P. Spínola

Impact of 15% *Arthrospira platensis* (Spirulina) inclusion combined with/without enzymes on breast's meat quality in broilers

Mila Č. Lazović

Potential application of green extracts rich in phenolics for innovative functional foods: Natural deep eutectic solvents as medium for isolation of biocompounds from berries”

Soraia Santos

Edible flowers: a novel antioxidant source to enhance food stability

Višnja Kosić

Stable, environmentally friendly and inexpensive biocatalysts for obtaining important ingredients applicable in the food industry

Andreia Riberio

Hydroxyapatite Pickering emulsions loaded with olive leaf extract as an innovative alternative to traditional mayonnaise-like food sauces

Ana Catarina Costa

Fermented VegAlgae: Development and characterization of fermented seaweed products through lactic fermentation and ultrasounds approach

11:30-12:30 ORAL PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T2-Food sustainability, including byproducts valorization - HALL 1, Main chemical amphitheater

Moderators: Livia Simon Sarkadii and Dusanka Milojkovic-Opsenica

11:30-11:45 Giovanni Caprioli

Spent coffee ground and coffee silverskin: possible use as nutraceuticals and ingredients for fertilizer products

11:45-12:00 Ana Catarina Costa

Chemical and functional characterization of innovative and healthy fermented plant-based products from sustainable land and sea vegetables

12:00-12:15 Cristina N. Duarte

Chemical characterization and bioactive properties of winemaking residues towards their possible exploitation

12:15-12:30 Elizandra Ardohain

PreVineGrape: Development of a biofungicide against grapevine pathogens using plants and food agro-industry bio residues

T3-Novel foods - HALL 2, Small chemical amphitheater Dräger

Moderators: Jane Parker and Elizabet Janic Hajnal

11:30-11:45 Manuel A. Coimbra

Food industry clean label strategies provided by carbohydrates

11:45-12:00 Soraia P. Silva

Development of a novel food ingredient from pine nut skin with prebiotic activity

- 12:00-12:15 **Carla S.S. Teixeira**
Identification of potentially bioactive peptides from house cricket (Acheta domesticus) by in silico gastrointestinal digestion
- 12:15-12:30 **Zsanett Bodor**
Utilisation of lentils as valuable raw materials in gluten-free products

12:30-13:30 Lunch

Vendors slot

Hallway, ground floor, Faculty for Chemistry, Studentski trg 12-16, str.

ANALYSIS

High resolution mass spectrometry in food analysis

Luka Mihajlovic, PhD

TOPIC: NOVEL METHODS FOR FOOD CHEMISTRY;

Moderators: Irena Vovk and Joana Amaral

- 13:30-14:15 **Joint Session DAC-DFC EuChemS/Plenary 6**
Faculty for Chemistry, Studentski trg 12-16, str.
New analytical solutions for the global challenges of food safety
prof. Rudolf Krska
- 14:15-14:45 **Joint Session DAC-DFC EuChemS/ Keynote 6**
Faculty for Chemistry, Studentski trg 12-16, str.
Understanding food aromas: in the frontier between sensorial and analytical data
prof. Silvia Rocha

14:45-15:45 **ORAL PRESENTATIONS**
Faculty of Chemistry, Studentski trg 12-16, str.

T8-Novel methods for food chemistry - HALL 1, Main chemical amphitheater

Moderators: Joana Amaral and Slavica Razic

- 14:45-15:00 **Cemile Yilmaz**
Method development for endocannabinoid analysis in fermented foods
- 15:00-15:15 **Arlorio Marco**
HS-GC-IMS: a new rapid strategy to fingerprint volatile compounds in foods: quality and integrity applications
- 15:15-15:30 **Caterina Villa**
An innovative nanoplate digital PCR approach for the quantification of allergenic sesame in foods

Flash presentations I - HALL 2, Small chemical amphitheater Dräger

Moderators: Danijela Kostic and Zuzana Cieasarova

- 14:50-14:55 **Ancuta Nartea**
Profiling of carotenoids and tocopherols of a new food ingredient based on sea fennel industrial by-product
- 14:55-15:00 **Fernando Gonçalves**
Impact of wood sticks on phenolic compounds and sensorial quality of Touriga Nacional Portuguese red wine
- 15:00-15:05 **Katarzyna Włodarczyk**
Microwave treatment as a promising strategy to develop functional milk alternatives obtained from by-products of the oil industry
- 15:05-15:10 **Carlos S. H. Shiraishi**
*Fig (*Ficus carica* L.) leaves as a source of bioactive compounds: A sustainable approach to valorization of fig bioresidues*
- 15:10-15:15 **Cláudia Nunes**
Marine polysaccharides valorisation as functional ingredients in food products
- 15:15-15:20 **Diana Melo Ferreira**
Innovative olive pomace extract as a source of phenolic compounds with antitumoral activity for functional foods
- 15:20-15:25 **Stanislav Baxa**
MERS-SARS-COVID-NEXT- can food help?
- 15:25-15:30 **Wiem Chtioui**
*Plant extracts as natural agents against *Botrytis cinerea* infection*

ORAL PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T8-Novel methods for food chemistry - HALL 1, Main chemical amphitheater

Moderators: Joana Amaral and Slavica Razic

- 15:45-16:00 **João Siopa**
Chemical characterisation of biscuits melanoidins using shotgun proteomics
- 16:00-16:15 **Victoria Samanidou**
Capsule phase microextraction: A green sample preparation strategy for food matrices

16:15-16:30 **Marcela Segundo**
Contributions of analytical methods to unveil bioactive compounds in food matrices

16:30-16:45 **I.M.P.L.V.O. Ferreira**
Data mining and machine learning methods to predict food contaminants exposure

Flash presentations II - HALL 2, Small chemical amphitheater Dräger

Moderators: Maja Krstic-Ristivojevic and Malgorzata Starowicz

15:45-15:50 **Tolgahan Kocadağlı**
Design of Functional Food Ingredients through Bioprocessing to Address Food and Mood

15:50-15:55 **Sónia S. Ferreira**
Salt pan waters can be exploited as a source of functional food and feed ingredients

15:55-16:00 **Qun Shen**
Dietary supplementation with foxtail millet improves glycemic control in subjects with impaired glucose tolerance

16:00-16:05 **Carlos Guerreiro**
Understanding polyphenol adsorption to oral models as a secondary mechanism for astringency

16:05-16:10 **Tamara Lujic**
Investigation of structural changes in ovalbumin induced by two types of MPs and its impact on protein digestibility

16:10-16:15 **Kamil Brzuzy**
Optimization of sample preparation conditions for determination of free amino acids in fermented food

16:15-16:20 **Kahina Slimani**
Sampling method and quantification of quaternary ammoniums biocides on agri-food surfaces

16:20-16:25 **Ecem Evrim Çelik**
Effects of sprouting and fermentation on the formation of acrylamide and 5-hydroxymethyl formation in relation to free asparagine and reducing sugar concentrations in wholemeals

16:45-17:30 Coffee break

POSTER PRESENTATIONS

Faculty of Chemistry, Studentski trg 12-16, str.

T2 - Food Sustainability, including byproducts valorization

Moderators: Jelena Mutic and Mirjana Radomirovic

Elena Peñas

Chickpea flours as a high nutritional quality ingredient for healthy bakery innovation

Joaquín Gómez-Estaca

On the valorization of coffee by-products: functionality of lignin from silverskin and parchment for nanoparticle production

Felipe Alves

The use of natural edible coatings to preserve chestnuts

Mafalda Alexandra Silva

Application of Cucumis melo L. peel flour in bakery products

Susete Pinteus

Valorization of Ficus carica L. orchards subproducts: evaluation of antioxidant properties of fig tree leaves obtained by different green extraction approaches

Maria Jorge Campos

Ficus carica L. 'Dauphine' leaves as source of antimicrobial compounds

Isabel M. Martins

Biovalorisation of agricultural by-products obtained through green extraction methodology

Nevena Dabetic

Recovery of phenolic compounds from grape pomace after different defatting processes

Rui M. V. Abreu

Fig Residue as a Novel Source of Bioactive Molecules: A Sustainable Integrated Project

Khemiri, S

Chemical and functional characterization of clean-label food emulsion with microalgae added to the aqueous phase

Maria Inês Dias

Lipid profile of fish by-product oils obtained by ultrasound-assisted extraction

Ana Peleja

Development of an ice cream enriched in derivatives of winemaking by-products

T8 - Novel methods for food chemistry

Moderators: Ivana Prodic and Petar Ristivojevic

Carmen Quintana

Mos2 Quantum Dots- based optical sensing platform for the analysis of synthetic colorants. Application To Quinoline Yellow Determination.”

Elena Casero

2D-ReS2 & diamond nanoparticles-based sensor for the simultaneous determination of sunset yellow and tartrazine in a multiple-pulse amperometry FIA system

Aysegul Besir

A novel spectrophotometric method based on Seliwanoff test to determine 5-(Hydroxymethyl) furfural (HMF)

T3 - Novel Foods

Moderators: Jelena Mutic and Mirjana Radomirovic

Elena Ungureanu

Synergistic action of ZnO nanoparticles and essential oil on the antimicrobial and functional properties of biopolymer films

Daniele Bobrowski Rodrigues

Development of functional Flavoured water through the incorporation of chestnut Flower Extract: Evaluating Bioactive Potential and Stability

Lillian Barros

Oxidative stability of fish by-product oil added of bioactive acorn extract during accelerated storage conditions

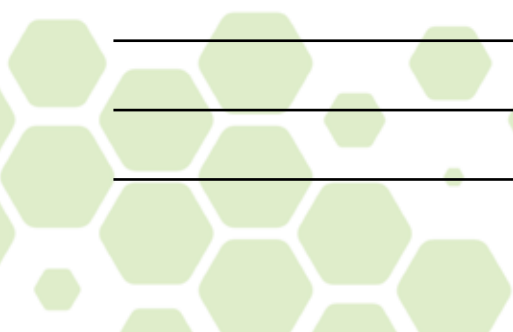
17:30 – 18:00 **CLOSING CEREMONY**

Faculty of Chemistry, Studentski trg 12-16, str.

Day 4, June 17, 2023

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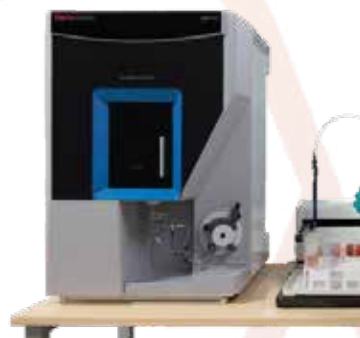


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