

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**



BOOK OF ABSTRACTS



**South-West University „Neofit Rilski“
Bachinovo education center, Blagoevgrad, Bulgaria
15-18.07.2026**

**Patronized by
Prof. Dr. Nikolay Marin
Rector of the South-West University “Neofit Rilski”**

<https://www.ceepus.info/>

<https://www.swu.bg/>

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**



BOOK OF ABSTRACTS

Published by:

University Publishing House “Neofit Rilski” -

Blagoevgrad, Bulgaria, September 2026

ISBN 978-954-00-0463-1

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**

ORGANIZING COMMITTEE:

Chairman:

Assoc. Prof. Petranka Petrova, South-West University "Neofit Rilski",
Bulgaria

Prof. Vesna Stankov Jovanović, University of Niš, Serbia

Deputy Chairman:

Assoc. Prof. Elitsa Chorbadzhiyska, South-West University "Neofit Rilski",
Bulgaria

Assist. Prof. Dr. Boyka Stoykova, South-West University "Neofit Rilski",
Bulgaria

Antoniya Stoymirska, PhD student at South-West University "Neofit
Rilski", Bulgaria

Participance:



**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526
Conference Program**

15.07.2026

12:00-14:00

Arrival and accommodation of participants

13:00 – 16:00

Registration

16:30-18:30

Workshop 1 Environmental sampling and analysis

18:45 – 19:00

Opening Ceremony

Central Auditorium of Conference Center
Chairman: Assoc. Prof Radoslav Chayrov, PhD

19:00-21:00

Welcome cocktail

16.07.2026

08:00-09:00

Breakfast

09:30-11:00

Workshop 2 Environmental sampling and analysis

11:30-13:00

Workshop 3 Environmental sampling and analysis

13:00-14:00

Lunch

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**

14:00-14:30

Plenary Lecture 1

**Green Analytical Chemistry Principles1,
V.Stankov Jovanović**

14:30-15:00

Plenary Lecture 2

**Green Analytical Chemistry Principles 2,
Elma Omeragić**

15:00-15:30

Plenary Lecture 3

**Smart Sample-Preparation Strategies 1,
Violeta Ivanova Petropulos**

15:30-16:00

Plenary Lecture 4

**Smart Sample-Preparation Strategies 2,
Katarzyna Kalinowska-Wichrowska**

16:00-16:30

Coffee break

16:30-17:00

Plenary Lecture 5

**Sample preparation can make or break sensory panel
Malgorzata Korzeniowska**

17:00-18:00

Discussion

18:00-19:00

Coordination meeting

20:00-22:00

Official dinner

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**

17.07.2026

08:00-09:00

Breakfast

09:00-09:30

Plenary Lecture 6

**Food Safety and Quality Assessment 2,
Simona Vicas**

09:30-11:00

Students’ presentations

11:30-12:00

Coffee break

12:00-13:00

Discussion

13:00-14:00

Lunch

14:00-14:30

Plenary Lecture 7

**Environmental Monitoring and Pollution Control 1,
Jelena Nikolić**

14:30-15:00

Plenary Lecture 8

**Environmental Monitoring and Pollution Control 2,
Mihaela Badea**

15:00-15:30

Plenary Lecture 9

**Instrumental Analysis & Data Interpretation 1,
Violeta Ivanova**

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**

15:30-16:00

Plenary Lecture 10

**Instrumental Analysis & Data Interpretation 2,
Nicoleta Cioatera**

16:00-16:30

Discussion

16:30-17:00

Coffee break

17:00-19:00

Students’ presentations

19:00-20:00

Dinner

18.07.2026

08:00-09:00

Breakfast

09:00-10:00

Discussion

10:00-10:30

Coffee break

10:30-12:30

Round table

12:30-13:00

Lunch

13:30-14:30

Closing ceremony

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**



Oral Presentations

POSTER SESSION

**Summer School and International Symposium
„Smart Sample Preparation: The Heart of Green Analytical,
Food and Environmental Chemistry” within the CEEPUS
network RS-1816-03-2526**

Nettle seed extracts exhibited higher polyphenolic and flavonoid contents, as well as stronger antioxidant activity than nettle root extracts.

Keywords: Urtica dioica, polyphenols, flavonoids, maceration, ultrasonic- assisted extraction, natural antioxidants

**Determination of aroma profile of grape brandies applying GC-
FID technique**

GC-FID analysis of aroma in brandy

Elena Bogeveva¹, Rajko Vidrih², Nataša Poklar Ulrih², Klemen Bohinc³, Violeta Ivanova-Petropulos¹

¹*Faculty of Agriculture, Goce Delcev University, Stip, Republic of North Macedonia
Biotechnical Faculty, University of Ljubljana, 1000 Ljubljana, Slovenia
Faculty of Health Sciences, University of Ljubljana, 1000 Ljubljana, Slovenia*

Elena Bogeveva: elena_bogeveva@yahoo.com, [ORCID: 0000-0002-2965-9584](https://orcid.org/0000-0002-2965-9584)

ABSTRACT

The GC-FID technique was applied to analyze the aroma profile in 52 grape brandies from various varieties, produced in domestic conditions in the Republic of N. Macedonia. The following compounds have been identified and quantified in the samples: acetaldehyde, 1-butanol, isobutanol, hexanol, 2-methyl-1-butanol, methanol, 1-propanol, 2-phenylethanol, ethyl acetate, ethyl lactate, isoamyl acetate and propyl acetate. Separation of the compounds was performed on an HP 6890 N gas chromatograph (Agilent Technologies, Palo Alto, CA, USA) using the column ZB WAX (30 m x 320 µm x 1 µm). The applied temperature program was as follows: 40 °C 1 min., ramp 4 °C/min., final temperature 184 °C, total time 37 min. Ethyl acetate was the dominant compound within the group of esters. Among the alcohols, 1-propanol (which serves as an indicator of contamination) and 2-methyl-1-butanol (which contributes to a fruity aroma) were present in relatively high amounts. Moreover, 2-methyl-1-butanol was the most prevalent compound in the aromatic Temjanika grape brandy.

Keywords: grape brandy, aroma compounds, GC-FID.