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D3.5: Report on 1st Summer School



### **Abbreviations**

CEC	Compounds of Emerging Concern
CSIC	The Spanish National Research Council
EU	European Union
GA	Grant Agreement
HRMS	High Resolution Mass Spectrometry
PST	Project Steering Team
TFNS	University of Novi Sad, Faculty of Technology Novi Sad
UNL	NOVA University of Lisbon
WB	Western Balkan
WP	Work Package



# TwiNSol-CECs, 101059867 WP3 Reinforcing research knowledge and skills of TFNS D3.5: Report on 1st Summer School



### **Table of content**

### Contents

1. EXECUTIVE SUMMARY	5
2. INTRODUCTION	6
3. PREPARATION OF THE 1 <sup>ST</sup> TWINSOL-CECS SUMMER SCHOOL	7
4. REALIZATION OF THE 1 <sup>ST</sup> TWINSOL-CECS SUMMER SCHOOL	9
ANNEX I	28
ANNEX II	30



D3.5: Report on 1st Summer School



### 1. Executive summary

This document reports on how the 1<sup>st</sup> Summer School within the Horizon Europe twinning project TwiNSol-CECs (GA 101059867) was prepared and organized at the project coordinating institution University of Novi Sad, Faculty of Technology Novi Sad (TFNS). It is deliverable D3.5 within the project Work Package (WP) 3 - Reinforcing research knowledge and skills of TFNS.

In the Introduction of the document, the objectives of two summer schools within TwiNSol-CECs are explained, with the tasks foreseen by the project work plan. Afterwards, the section 3 describes activities on the 1<sup>st</sup> School preparation, including the publication of the document on the procedures for registration and approval of the grants, and of the call for expressing the interest to attend the School. The section 4 presents the activities on the School realization, from the participants' registration and the project promotional materials distributed to the registered participants, to the theoretical and practical sessions, social events, and the questionnaire for evaluation of the School organization by the attendees.

The report on the 1<sup>st</sup> Summer School has been previously published on the project website after the acceptance of the Project Steering Team in order to publicly communicate on the project activities in timely manner; that report and other publicly available documents which were used for preparation of the deliverable D3.5 are listed at the end of this document. Annex I and II of D3.5 contain the program of the School and the assessment of the participants' answers in the questionnaire on the School realization.



D3.5: Report on 1st Summer School



### 2. Introduction

Within the TwiNSol-CECs project funded under Horizon Europe programme (GA 101059867), organization of two one-week TwiNSol-CECs Summer Schools at TFNS with presenters/trainers from the partner institution CSIC and UNL, and/or TFNS is planned within task 3.3 of WP3, consisting of the following subtasks:

- Subtasks 3.3.1 Meeting for preparation of summer schools,
- Subtask 3.3.2 Organization of summer schools.

TwiNSol-CECs Summer Schools are planned as an efficient way to spread the news on material and human capacities of TFNS within the academic community of the Western Balkan (WB) countries and to potential stakeholders. The Schools are planned to be open for PhD students and early-stage researchers not just from TFNS, but also from University of Novi Sad (UNS), other higher education and research institutions from Serbia, as well as from WB countries, in order to accomplish positive impact on rising institutional, national, and regional excellence in the field CECs' surveillance and innovative removal technologies. Additionally, in a limited number, schools' attendees may also be professionals working in companies engaged in environmental monitoring and protection, including senior researchers.

Originally, it is planned that these will be events in English as official language, and programs consisting of theoretical and practical lessons. The organizer of both TwiNSol-CECs Summer Schools is TFNS. The organization of the Schools is covered by the TwiNSol-CECs budget share of TFNS. Limited number of Grants for certain number of the attendees (grantholders) is also included in the project budget share of TFNS; originally, planned by the GA is to have the following number of attendees and/or grantholders for both schools in total: 5 attendees from Novi Sad, 10 attendees-grantholders from Serbia, and 10 attendees-grantholders from WB countries. The Committee for the Grant Approval is responsible for selecting the best ranking applicants as the grantholders.

According to GA, the main topic of the 1<sup>st</sup> School is expected to be analytical methodologies for determination of CECs in the environment (coupling of chromatography with mass spectrometry for target and non-target screening analysis, validation, harmonization).

The school materials in the form of slide presentations and experimental procedure description (if applicable) will be prepared and distributed among the participants. Fulfilled questionnaires about the school organization will be evaluated in order to get the feedback for raising the performance and expectances of future similar events.



D3.5: Report on 1st Summer School



### 3. Preparation of the 1<sup>st</sup> TwiNSol-CECs Summer School

The members of the Scientific and Organizing Committees, chaired by the Project Coordinator, are presented in Table 1, together with the members of the Committee for the Summer School's Applications and Grant Approval. In accordance to the most appropriate dates for visit of trainer from CSIC, Dr. Nicola Montemurro, to TFNS, dates of the School was set to be at the beginning of July. It was agreed that a week before the School Dr. Montemurro arrive to TFNS for joint preparation of the practical sessions of the School, in parallel to the joint research with TFNS project team members. The final program of the School (Annex I) was agreed between TFNS and CSIC by e-correspondence and published before the start of the School<sup>1</sup>.

**Table 1.** Members of the Committees for the 1st TwiNSol-CECs Summer School (in alphabetic order) with Prof. Nataša Đurišić-Mladenović as a Chair of the event

Scientific Committee	Organizing Committee
Dr. Igor Antić, TFNS	Dr. Maja Buljovčić, TFNS
Dr. Marinella Farre, CSIC-IDAEA*	Dr. Ivana Lončarević, TFNS
Dr. Ferenc Kiss, TFNS	Dr. Nikola Maravić, TFNS
Dr. Dragana Lukić, TFNS	Prof. Dr. Biljana Pajin, TFNS
Dr. Marta Llorca, CSIC-IDAEA*	Dr. Sanja Panić, TFNS
Dr. Nicola Montemurro, CSIC-IDAEA*	Dr. Jovana Petrović, TFNS
Dr. Vesna Vasić, TFNS	Prof. Dr. Zita Šereš, TFNS
Dr. Jelena Živančev, TFNS	Prof. Dr. Dragana Šoronja-Simović, TFNS
	Jelena Šurlan, MSc, TFNS
Committee for Summer School Grant Approval	
Dr. Nicola Montemurro, CSIC-IDAEA*	
Dr. Jelena Živančev, TFNS	
Dr. Sanja Panić, TFNS	

Procedure<sup>2</sup> for selection of attendees to 1<sup>st</sup> TwiNSol-CECs Summer School and the school grants awarding within the TwiNSol-CECs project are prepared with the financial department of TFNS and accepted by the Project Steering Team (PST), followed by an announcement of the Call for expression of interest to attend the 1st TwiNSol-CECs Summer School<sup>3</sup> (March 29, 2023), containing all the necessary information on the School program and conditions for submitting the expression of the interest to attend the School. The deadline for receiving the applications was set to be April 20, 2023. However, as the available number of the participants and grants had not been fulfilled, during the meeting of the Organizing Committee on April 21, 2023, it was decided to extend the deadline till April 28, 2023, which was approved by PST. The Call and the information on its extension were announced

<sup>&</sup>lt;sup>1</sup> https://twinsol-cecs.com/images/documents/1st twinsol-cecs summer school program.pdf

<sup>&</sup>lt;sup>2</sup> https://twinsol-cecs.com/images/documents/news and events/procedure-1st twinsol-cecs summer school-final.pdf

<sup>&</sup>lt;sup>3</sup> https://twinsol-cecs.com/index.php/news-events/44-announcement-of-the-call



D3.5: Report on 1st Summer School



on the project website and the social media profiles. The Committee for the Summer School's Applications and Grant Approval evaluated all the timely-received applications according to the procedure accepted by PST; the accepted applicants were informed about the Call results. The Report<sup>4</sup> of the Committee was published in May 2023.

However, after the collection of Letters of Intent from the selected applicants till May 11, one vacancy arose after the withdrawal of one selected applicant from Western Balkan Country. In order to gather as many applicants as possible in accordance with the planned budget for the grants and in this way to have successful realization of the event as well as successful knowledge dissemination and promotion of the project itself, the Organizing Committee decided<sup>5</sup> to announce the Supplementary Call for One Grantholder from Western Balkan Country to attend the 1<sup>st</sup> TwiNSol-CECs Summer School (hereafter: Supplementary Call)<sup>6</sup>, with the same application procedure and conditions for the evaluation as the original Call.

Nonetheless, one more cancelation of previously accepted attendee occurred, far beyond the deadline for sending the Letter of Intent (in the middle of June 2023, two weeks before the School), so the Organizing Committee on the meeting held on June 19, 2023, discussed the situation. Keeping in mind that due to the lack of time to implement the prescribed procedure for the second supplementary call for expression of the interest of potential participants, the Committee decided to invite one researcher. Several colleagues from Bosnia and Herzegovina, the University of Belgrade, and the University of Niš, were contacted and they were informed about the vacancy and the conditions for applications. Because majority of invited researchers had already accepted obligations, only one researcher accepted the invitation, so the Organizing Committee did not have the obligation to evaluate and rank the potential participants, but accepted the application.

Finally, there were 10 grantholders whose place of residence is more than 80 km from Novi Sad, including those from Western Balkan countries other than Serbia, and there were 3 registered participants from the University of Novi Sad. There were 5 PhD students, 5 early-stage researchers, 2 senior researchers, and 1 expert. 2 participants came from North Macedonia, 1 from Bosnia and Herzegovina, and 1 from Montenegro; 4 were from University of Niš in Serbia, 2 from University of Belgrade, and 3 from University of Novi Sad. The School theoretical lectures held in the Blue Hall were opened for all interested researchers from TFNS. The lectures and practical sessions were delivered by TwiNSol-CECs researchers from the Institute of Environmental Assessment and Water Research of the Spanish National Research Council (CSIC) and TFNS.

cecs.com/images/documents/r33 1st summerschool committee on grant approvals may2023.pdf

<sup>&</sup>lt;sup>4</sup> https://twinsol-

<sup>&</sup>lt;sup>5</sup> https://twinsol-

cecs.com/images/documents/news and events/decision on the supplementary call for one grant - may 2023.pdf

<sup>&</sup>lt;sup>6</sup> https://twinsol-cecs.com/index.php/news-events/45-supplementary-call



D3.5: Report on 1st Summer School



### 4. Realization of the 1st TwiNSol-CECs Summer School

The 1<sup>st</sup> TwiNSol-CECs Summer School "Analytical Methodologies for Determination of CECs in the Environment" was organized by TFNS on July 02-06, 2023, as a part of activities planned within Work Package no. 3 "Reinforcing research knowledge and skills of TFNS" of the TwiNSol-CECs project (GA 101059867).

The Summer School was organized as a one-week scientific event in the Blue Hall of TFNS. The Summer School consisted of theoretical and practical lessons to provide additional knowledge for the attendees.

Main topics of the Summer School were:

- water stressors and challenges in front of the global water resources;
- conventional wastewater treatment and micropollutants;
- compounds of emerging concern (CECs);
- a regulatory perspective on CECs;
- sampling and analytical approaches for determination of the CECs environmental occurrence;
- suspect and non-target analysis;

The parallel topics important for creation of international research projects and multidisciplinary research teams on the latest challenges in front of the transition towards a toxic free environment, were also included in the School's program:

- experience in the Horizon Europe project how to prepare a successful project proposal
- Life Cycle Assessment: the most inclusive method to analyze environmental benefits and trade-offs resulting from complex systems.

During the first day registration, all grantholders and registered participants from University of Novi Sad obtained the promotional package consisted of backpacks, in which the following items were included: the Summer School program, glass water bottle, brochure of the project, pencil and notebook, USB; all items are marked at least with obligatory visual elements for identifying the funding source, EU, and the project itself. The registered participants signed the attendance lists each day; they were informed that by signing they granted the permission and gave the consent to TwiNSol-CECs team for the use of photograph(s) or electronic media images taken/made at the 1st TwiNSol-CECs Summer School for presentation under any legal use. Additionally by signing they also gave the consent to the project team to include their email addresses in the mailing list for receiving project information and invitations to project events. The participants also had an option to opt for not giving the personal data and photos to be used.

The breaks in the schools' program for refreshment and lunch during the five days of school, as well as the Official dinner, were covered fully by the project budget. There were also additional social events organized by TFNS such as Novi Sad tour with the professional tourist guide, and visit to some sights in the nearby town of Sremski Karlovci.



D3.5: Report on 1st Summer School



In accordance with the Summer School Program (in Annex I of the Report) at the beginning of the 1st TwiNsol-CECs Summer School, Prof. Biljana Pajin, Dean of TFNS, also having responsibility of the Project Manager for administrative, financial and legal issues, and the WP6 leader, gave a welcome speech to the participants, highlighting the importance of rising institutional, national, and regional excellence. Afterwards, Prof. Zita Šereš, Vice-dean for Science at TFNS and the Project Manager for the strategic issues, presented the importance of cooperation between universities, summarizing the achievements and capacities of the Faculty so far. Prof. Nataša Đurišić-Mladenović, TwiNSol-CECs Project Coordinator, pointed out the main goals and presented the consortium of TwiNSol-CECs project, underling the expected impact of TwiNS-CECs project. Afterwards Prof. Đurišić-Mladenović shared her experience in the Horizon Europe project, giving the participants valuable information how to prepare a twinning project proposal. After the lunch on the first day, the registered participants introduced themselves, emphasizing the motivation to participate in the Summer School. At the afternoon, Novi Sad City Tour for interested participants were organized.

On the second day of the Summer School, Dr. Vesna Vasić gave a presentation on "Water stressors and challenges in front of global water resources" presenting the global problems with the protection of water resource to the participants. Moreover, Dr. Dragana Lukić in the lecture "Conventional wastewater treatment and micropollutants" emphasized the challenges of the occurrence of micropollutants, including CECs, in wastewater and the efficiency of different wastewater treatments on the removal. In the lecture "Chemistry and the fate of contaminants of emerging concern in the environment", Dr. Igor Antić introduced the participants with the term "contaminants of emerging concern", informing them also about the ubiquitous presence of these contaminants in the environment. Dr. Jelena Živančev presented techniques for CECs analysis and explained the procedure for risk assessment during the lecture entitled "Contaminants of emerging concern in the environment: analysis, occurrence, effects and risks". Dr. Nicola Montemurro gave a lecture on "Fate of contaminants of emerging concern in crops and biota", introducing the participants with the translocation of the CECs from the water to biota. After the lunch, Dr. Jelena Živančev and Dr. Igor Antić introduced the participants with the equipment at disposal to the TFNS TwiNSol-CECs team for the CECs analysis.

The third day in Summer School started with lecture "Sampling protocols and measurement parameters for chemical analysis" when Dr. Igor Antić explained to the participants how to take representative samples of water and shared the experience on different sampling protocols. Dr. Jelena Živančev explained to the participants procedures for extraction of contaminants of emerging concern from water samples during the lecture "Extraction of contaminants of emerging concern from water samples". Dr. Nicola Montemurro presented the best extraction technique of CECs from solid samples in the lecture" Extractionn of contaminants of emerging concern from solid samples". At the practical session, Dr. Jelena Živančev and Dr. Igor Antić demonstrated to the participants solid phase extraction procedure, which is often used for extraction of CECs from water samples. At end of the day for, visit to Sremski Karlovci was organized for the interested participants.

During the fourth day of the Summer School, Dr. Nicola Montemurro presented the basic of mass spectrometry and explained analysis of CECs in the lecture "Mass Spectrometry Fundamentals". In the online lecture "Computer tools for identification of compounds using HRMS" by Frans Schoutsen, a product specialist at Thermo Fisher Scientific, the participants were introduced with dedicated



D3.5: Report on 1st Summer School



software for processing of high resolution mass spectra (Thermo Scientific™ Compound Discoverer™ purchased also within TwiNSol-CECs, see Deliverable 3.3). In the afternoon session, Dr. Nicola Montemurro and Dr. Igor Antić demonstrated to the participants how Compound Discoverer™ software for wide range screening of CECs by UHPLC-HRMS works. At the end of the day official dinner was organized in a restaurant near the Faculty.

On the last day of the Summer School, Dr. Ferenc Kiss in a lecture "Life Cycle Assessment: the most inclusive method to analyze environmental benefits and trade-offs resulting from complex systems" explained the role of Life Cycle Assessment for analysing environmental benefits and the carbon footprints of the complex systems, including those for removal of contaminants from wastewater. Afterwards, the participants had a chance to point out the most valuable information they got during the School, as well the comments regarding the CECs analysis. The participants were asked to complete the questionnaire on the School organization; the results of the questionnaire answers assessment are presented in Annex II. At the very end of the School, before the lunch, Prof. Nataša Đurišić-Mladenović wrapped up all the presented information during the School and handed out the certificates on the attendance to the participants.

Selected photos took during the 1st TwiNsol-CECs Summer School are available hereafter.



# TwinSol-CECs, 101059867 WP3 Reinforcing research knowledge and skills of TFNS D3.5: Report on 1st Summer School







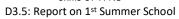
Part of the promotional materials prepared for the registered 1<sup>st</sup> TwiNSol-CECs Summer School participants



Posters at the TFNS entrance and in front of the TFNS Blue Hall announcing the 1<sup>st</sup> TwiNSol-CECs Summer School



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At the registration desk during the registration of participants at the the very beginning of the 1st TwiNSol-CECs Summer School







Welcome speech of Prof. Biljana Pajin, Dean of TFNS, on opening of 1st TwiNSol-CECs Summer School



Prof. Zita Šereš, Vice Dean for Science of TFNS presented TFNS during the opening ceremony of the 1<sup>st</sup> TwiNSol-CECs Summer School







Presentation of TwiNSol-CECs project by Prof. Nataša Đurišić-Mladenović







Lunch breaks of the 1<sup>st</sup> TwiNSol-CECs Summer School









Lectures of Dr Vesna Vasić (up) and Dr Dragana Lukić (down)









Lectures of Dr. Igor Antić (up) and Dr. Jelena Živančev (down)





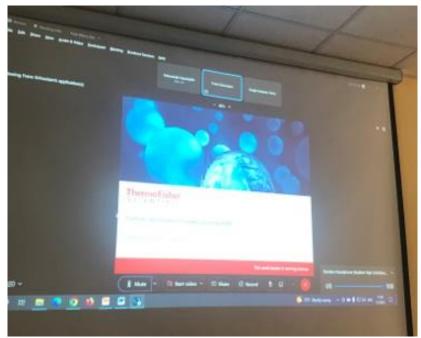




Lectures of Dr. Nicola Montemurro







Online presentation by Frans Schoutsen



Lecture of Dr. Ferenc Kiss on Life Cycle Assessment as a valuable tool for carbon footprint assessment of complex systems







Introduction of the participants at the 1st TwiNSol-CECs Summer School









Novi Sad City Tour (up) and visit to Sremski Karlovci (down) with the grantholders of the 1st TwiNSol-CECs Summer School









Presentation of the TFNS capacities for CECs monitoring







Registered participants in lab coats prepared within TwiNSol-CECs with the obligatory visual elements

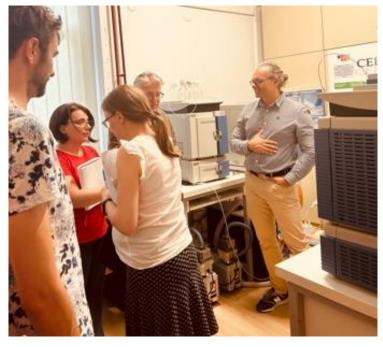




Details from practical sessions on sample preparation of the 1<sup>st</sup> TwiNSol-CECs Summer School









Details from practical sessions on software tool for HRMS processing



# TwiNSol-CECs, 101059867 WP3 Reinforcing research knowledge and skills of TFNS D3.5: Report on 1st Summer School





Official dinner for the registered participants, lecturers, and the Organizing Committee members



At the very end of the 1st TwiNSol-CECs Summer School after the certificates award



D3.5: Report on 1st Summer School









Statements about the 1st TwiNSol-CECs Summer School given for TFNS and the project YouTube canals by Prof. Nataša Đurišić-Mladenović, Dr. Nicola Montemurro, and Dr. Jelena Živančev https://www.youtube.com/watch?v=IIIcXITgZIA&t=163s



# TwiNSol-CECs, 101059867 WP3 Reinforcing research knowledge and skills of TFNS D3.5: Report on 1st Summer School



### The list of public project documents available at the TwiNSol-CECs website used for preparation of the Deliverable 3.5

Announcement of the Call for expression of interest to attend the 1st TwiNSol-CECs Summer School. <a href="https://twinsol-cecs.com/index.php/news-events/44-announcement-of-the-call">https://twinsol-cecs.com/index.php/news-events/44-announcement-of-the-call</a>

Call for expression of interest to attend the 1st TwiNSol-CECs Summer School. <a href="https://twinsol-cecs.com/images/documents/news">https://twinsol-cecs.com/images/documents/news</a> and events/1st twinsol-cecs summer schools - call.pdf

DOCUMENT ON PROCEDURES FOR SELECTION OF ATTENDEES TO 1 st TwiNSol-CECs SUMMER SCHOOL AND THE SCHOOL GRANTS AWARDING within the TwiNSol-CECs project (Grant Agreement 101059867). <a href="https://twinsol-cecs.com/images/documents/news">https://twinsol-cecs.com/images/documents/news</a> and events/procedure-1st twinsol-cecs summer school-final.pdf

REPORT of the Committee for the 1 st TwiNSol-CECs Summer School's Applications and Grant Approval. <a href="https://twinsol-cecs.com/images/documents/r33">https://twinsol-cecs.com/images/documents/r33</a> 1st summerschool committee on grant approvals may2023.p df

Supplementary call for one grantholder to attend The 1st TwiNSol-CECs Summer School. https://twinsol-cecs.com/index.php/news-events/45-supplementary-call

Program - 1 st TwiNSol-CECs Summer School "Analytical Methodologies for Determination of CECs in the Environment" 02-06 July 2023. <a href="https://twinsol-cecs.com/images/documents/1st\_twinsol-cecs">https://twinsol-cecs.com/images/documents/1st\_twinsol-cecs.com/images/documents/1st\_twinsol-cecs.summer\_school\_program.pdf</a>

REPORT - 1 st TwiNSol-CECs Summer School "Analytical Methodologies for Determination of CECs in the Environment". <a href="https://twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs">https://twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_3\_1st\_twinsol-cecs.com/images/documents/r3\_s\_1st\_twinsol-cecs.com/images/documents/r3\_s\_1st\_twinsol-cecs.com/images/documents/r3\_s\_1st\_twinsol-cecs.com/images/documents/r3\_s\_1st\_twinsol-cecs.com/images/documents/r3\_s\_s\_twinsol-cecs.com/images/documents/r3\_s\_twinsol-cecs.com/



D3.5: Report on 1st Summer School



### Annex I

#### 1st TwiNSol-CECs Summer School

### Analytical Methodologies for Determination of CECs in the Environment

### University of Novi Sad, Faculty of Technology Novi Sad (TFNS) Novi Sad, 02-06 July 2023

### **Program**

#### 2 July 2023 Sunday

	2 July 2023 Sunday	
10,30-11,00	Registration of participants	
11,00-11,10	Welcome speech, Prof. Biljana Pajin, Dean ((TFNS, Novi Sad, Serbia)	
11,10-11,25	Presentation of TFNS, Prof. Zita Šereš, Vice-Dean for Science (TFNS, Novi Sad, Serbia)	
11,25-11,40	Presentation of TwiNSol-CECs project, Prof. Nataša Đurišić-Mladenović (TFNS, Novi	
	Sad, Serbia)	
11,40-12,10	Coffee break	
12,10-13,00	Experience in the Horizon Europe project – how to prepare a successful project	
	proposal, Prof. Nataša Đurišić-Mladenović (TFNS, Novi Sad, Serbia)	
13,00-14,30	Lunch	
14,30-16,00	Introduction of the attendees and motivation to participate in the 1st TwiNSol-CECs	
	Summer School (5 min per attendee, follow by QA)	
16,00	Novi Sad City Tour	
	3 July 2023 Monday	
10,00-10,30	Water stressors and challenges in front of global water resources, <b>Dr Vesna Vasić</b>	
	(TFNS, Novi Sad, Serbia)	
10,30-11,00	Conventional wastewater treatment and micropollutants, Dr Dragana Lukić (TFNS,	
	Novi Sad, Serbia)	
11,00-11,30	Chemistry and the fate of contaminants of emerging concern in the environment, <b>Dr</b>	
	Igor Antić (TFNS, Novi Sad, Serbia)	
11,30-12,00	Coffee break	
12,00-12,30	Contaminants of emerging concern in the environment: analysis, occurrence, effects	
	and risks, <b>Dr Jelena Živančev</b> (TFNS, Novi Sad, Serbia)	
12,30-13,00	Fate of contaminants of emerging concern in crops and biota, <b>Dr Nicola Montemurro</b>	
	(CSIC-IDAEA, Barcelona, Spain)	
13,00-14,30	Lunch	
14,30-17,00	Practical lessons	
4 July 2023 Tuesday		

10,00-11,00 Sampling protocols and measurement parameters for chemical analysis, **Dr Igor Antić** (TFNS, Novi Sad, Serbia), Dr Nicola Montemurro (CSIC-IDAEA, Barcelona, Spain)





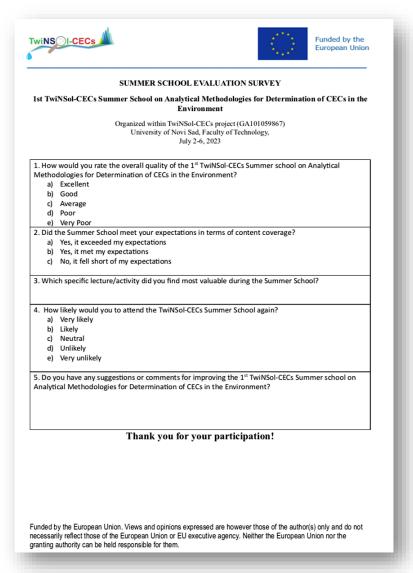
11,00-11,30	Extraction of contaminants of emerging concern from water samples – Part I, Dr Olga Gómez-Navarro (CSIC-IDAEA, Barcelona, Spain), <b>Dr Jelena Živančev</b> (TFNS, Novi Sad, Serbia)	
11,30-12,00	Coffee break	
12,00-12,30	Extraction of contaminants of emerging concern from water samples – Part II, Dr Olga Gómez-Navarro (CSIC-IDAEA, Barcelona, Spain), <b>Dr Jelena Živančev</b> (TFNS, Novi Sad,	
	Serbia)	
12,30-12,50	Extraction of contaminants of emerging concern from solid samples, <b>Dr Nicola</b>	
	Montemurro (CSIC-IDAEA, Barcelona, Spain)	
12,50-14,30	Lunch	
14,30-17,00	Practical lessons	
17,00	Visit to Sremski Karlovci	
	5 July 2023 Wednesday	
10,00-10,30	Mass Spectrometry Fundamentals – I part, <b>Dr Nicola Montemurro</b> (CSIC-IDAEA,	
	Barcelona, Spain)	
10,30-11,00	Coffee break	
11,00-11,30	Mass Spectrometry Fundamentals – II part, <b>Dr Nicola Montemurro</b> (CSIC-IDAEA, Barcelona, Spain)	
11,30-12,30	Computer tools for identification of compounds using HRMS, Frans Schoutsen (Thermo	
	Fisher Scientific, Netherlands) online presentation	
12,30-14,00	Lunch	
14,00-16,00	Practical lessons	
19,00	Official dinner	
6 July 2023 Thursday		
10,00-10,45	Life Cycle Assessment: the most inclusive method to analyze environmental benefits and trade-offs resulting from complex systems, <b>Dr Ferenc Kiss</b> (TFNS, Novi Sad, Serbia)	
10,45-12,00	Presentations of the attendees	
12,00-12,15	Questionnaire on the School organization	
12,15-12,30	Certificates award	
12,30-12,45	School Wrap-up	
12,45-14,15	Lunch with coffee	



D3.5: Report on 1st Summer School



### Annex II Questionnaire on the 1<sup>st</sup> TwiNSol-CECs Summer School



### Assessment of the completed questionnaires

17 questionnaires were completed.

- 1. Question: All the participants answered **"YES"** rated as EXCELLENT the quality of the Summer School.
- 2. Question: 15 participants answered that the Summer School exceeded their own expectations, while 2 participants felt that their expectations are met by the Summer School
- 3. Question: different answers, sometimes multiple, were obtained on "Which specific lecture/activity did you find most valuable during the Summer School?":
  - 9 participants singled out the presentation on sampling and/or sample preparation, 3 mentioned that all the presentation were valuable, 3 mentioned the presentation on preparation of the Horizon Europe, 1 on chemistry and fate of CECs, 1 the presentation on MS



D3.5: Report on 1<sup>st</sup> Summer School



fundamentals, 3 on specially dedicated software for HRMS spectra assessment, 2 mentioned practical sessions as the most valuable.

- 4. Question: 15 participants answered that very likely they would attend the TwiNSol-CECs Summer School again, 1 answered as "likely", while 1 as "neutral"
- 5. Question: There was no suggestion for improvement of the TwiNSol-CECs Summer School, as all the given comments praised the organization of the School.