



SECOND ANNOUNCEMENT

LEADING EDGE SUMMER COURSE FOURTH EDITION

MANAGEMENT OF MICROPOLLUTANTS IN THE URBAN WATER CYCLE

JULY 03rd - 07th, 2023, GIRONA, SPAIN

ORGANIZED BY:





Universitat de Girona Institut de Medi Ambient

SUPPORTED BY:





DESCRIPTION AND GOALS OF THE COURSE

This short, intensive and highly specialized course is focused on priority and emerging micropollutants in wastewater (including sludge) and waste systems (including biowaste, green waste, manure...). Aspects related to sources, analysis, occurrence and fate in water and wastes, treatment technologies (process, microbiology) and ecotoxicological impact of micropollutants will be tackled. Students will be able to (i) identify the bottlenecks in the micropollutant management and where future research efforts are needed and (ii) propose emerging technological solutions knowing advantage/disadvantage and select the best option according to their own context.

This 4th edition will focus on (i) risks of contaminants release, (ii) predictive modeling of the fate of contaminants and pathways of transformation, (iii) new non-targeted chemical analysis methods and their contribution to risk assessment, (iv) the paradigm shifts in the plant of the future no longer designed to treat but to reuse wastewater, enhance energy and recover nutrients.



OF MICROPOLLUTANTS IN THE URBAN WATER CYCLE





The course will be in English and will include:

- Lectures given by senior researchers and guests speakers
- Group exercises
- Presentation of the participant's research topics and discussion with senior researchers
- Technical visit

Total hours: 24 hr (theoretical and practicum). This will be confirmed by a certificate of participation, but it will not have ECTS equivalents.

July 2023	Monday, 3 rd	Tuesday, 4 th	Wednesday, 5 th	Thursday, 6 th	Friday, 7 th
08:30 10:00	Welcome & round table	Modelling	Fate of chemicals	Source separation & recovery	Exercises group (presentation)
	Break	Break	Break	Break	Break
10:30 12:00	Polishing Treatment (water)	Life cycle assessment	Fate of chemicals (exercise)	Exercises (group)	Summary, course evaluation and closure
	lunch break	lunch break	lunch break	lunch break	-
13:30 15:00	Sludge/soil	Toxicity	Non-target analysis		
	Break	Break	Break	Technical	
15:30 17:00	Flash presentations by / participants	Flash presentations by / participants	Flash presentations by / participants	visit	

Schedule (projected)

Speakers: Marta CARBALLA (SP), Ralph ROSENBAUM (SP), Benedek PLOSZ (UK), Dominique PATUREAU (F), Mira PETROVIC (SP), Jean-Marc CHOUBERT (F), and other famous speakers.

Maximum number of participants: 20-25

Fees: Not determined yet (depending on sponsorship, with a maximum of 400 € including VAT)

Social program (to be determined): Previous edition included a farewell dinner and a guided historical tour.



IMPORTANT DATES

- February 1st, 2023: Opening application for participation
- April, 30th, 2023: Submission of applications (closure)
- May, 15th, 2023: Selection and announcement of participants



APPLICATION FOR REGISTRATION



The course is oriented to PhD students who wants achieve a higher degree of specialization in the field of micropollutants, but also to other students or professionals specifically interested in these topics and with a limited amount of time.

To participate, you first need to submit your application on the website of the summer course (<u>https://lesc-muwc.workshop.inrae.fr/</u> section "submit your application"), with a file including:

- a cover letter with a statement of interest of up to 1-page
- a CV including a list of publications or conference presentations
- a 1-page description of your research topic

Selection of participants will be carried out by organizers, according to the CV, the letter of interest, the research topic, and gender / country balances.



PRACTICAL INFORMATION

Venue: Girona (Spain), Faculty of Sciences (15 minutes walking from city center). Girona is located 100km far from Barcelona, 60km from France and 30km from Costa Brava

Getting to the summer course:

- by train (Adif Girona railway station along Madrid <-> French border high-speed line AVE)
- by Air (Girona-Costa Brava airport, Barcelona-ElPrat Airport, Perpignan-Rivesaltes airport)
- by road (bus, cars).

Accommodation (to be paid by participants): A residence for students is available on the campus for ~30€/night (to pay directly by participants)

Weather: https://www.weatheravenue.com/en/europe/es/cataluna/gerona-weather.html

Tourist office: <u>https://www.girona.cat/turisme/eng/index.php</u>

Public transport: https://www.girona.cat/bus/cat/index.php



Dominique PATUREAU and Jean-Marc CHOUBERT (INRAE) Ignasi RODRIGUEZ-RODA and Maite PIJUAN VILALTA (ICRA, University of Girona) <u>sc-lescmuwc@lists.irstea.fr</u>