

FIRST ANNOUNCEMENT

LEADING EDGE SUMMER COURSE  
FOURTH EDITION

# MANAGEMENT OF MICROPOLLUTANTS IN THE URBAN WATER CYCLE

JULY 03<sup>rd</sup> – 07<sup>th</sup>, 2023, GIRONA, SPAIN

ORGANIZED BY:



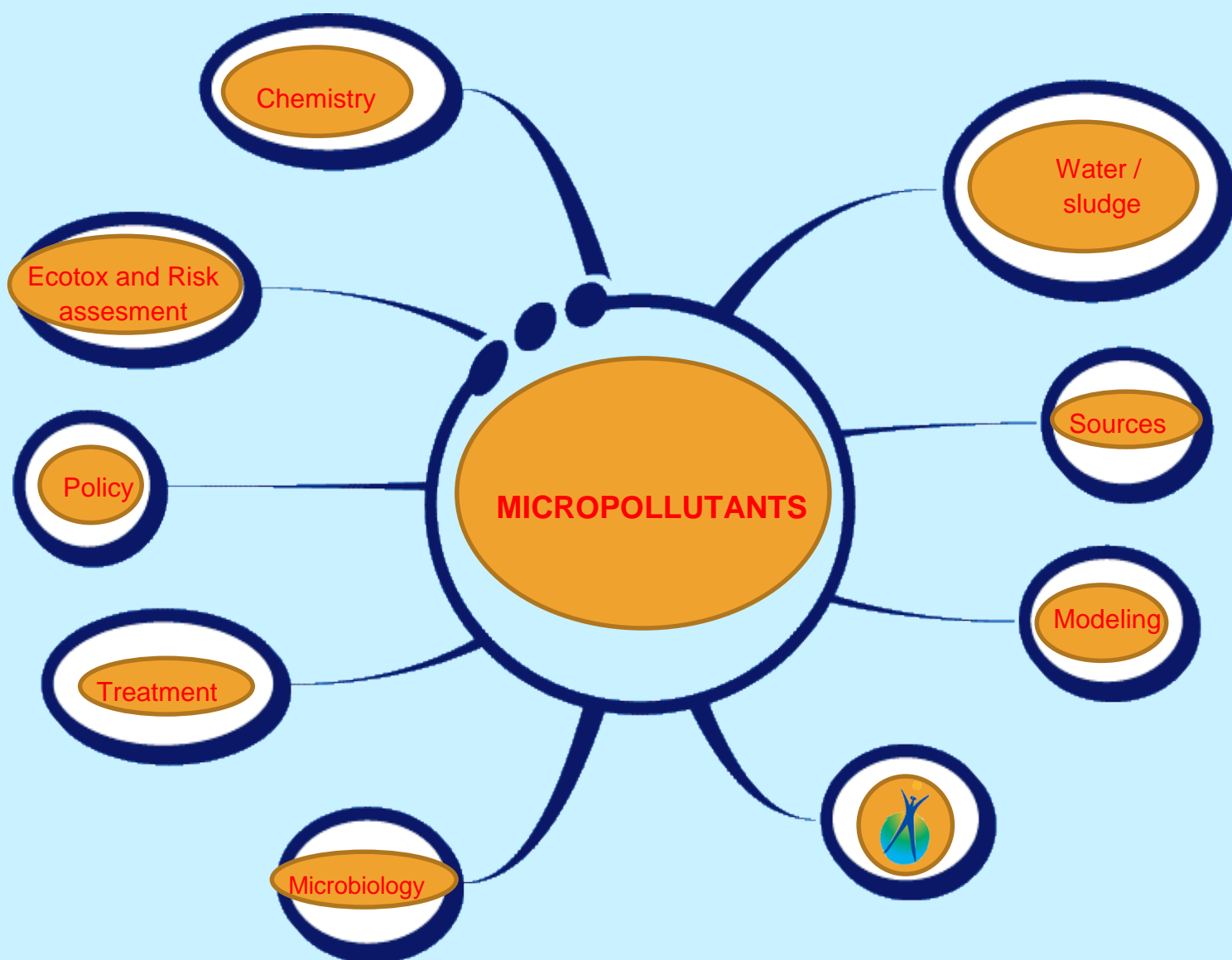
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## DESCRIPTION AND GOALS OF THE COURSE

This short, intensive and highly specialized course is focused on priority and emerging micropollutants in wastewater (including sludge) and wastes systems (including biowastes, green wastes, manures...). 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 4<sup>th</sup> 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.



SUMMER COURSE MANAGEMENT  
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## DETAILED ACTIVITIES



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.

### Schedule (projected)

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

**Speakers:** Marta CARBALLA (SP), Benedek PLOSZ (UK), Dominique PATUREAU (F), 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 want to 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 upload 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, on the website of the summer course (not available yet).

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-El Prat Airport, Perpignan-Rivesaltes Airport)
- by road (bus, cars).

**Accommodation** (to be paid by participants): Hotel or residence on the campus

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

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

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



## CONTACTS

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