

Seminars AY 2023-2024 “Sustainable water production, treatment and reuse”

This seminar was organized for the first time in AY 2017-2018 and has now been organized 3 times (AY 2017-2018, 2019-2020 and 2021-2022). The course is organized as a collaboration between the UGent-Evides Chair of Industrial and Circular Water Technology and CAPTURE.

Contact: dr. ir. Marjolein Vanoppen, marjolein.vanoppen@ugent.be

Keywords: industrial water treatment, drinking water, process water, innovative technologies and applications

Positioning: Advanced course to familiarize the students with actual full-scale practices and show them how basic concepts are applied in practice in line with regulation

Advised prior knowledge: basic knowledge of water treatment technologies

Target group: environmental technology, chemistry and bio-process technology, land and water management, PhD students (Doctoral Schools)

Content:

Subject	Speaker	Affiliation
Public perception of drinking water and how to influence it	Verolien Cauberghe	UGent
Corrosion: basic principles and consequences in the water industry	Geert Potters	AMA
Life Cycle Assessment in the water world	Lieselot Boone	UGent
Innovative solutions for water challenges worldwide	Jacob Bossaer	BOSAQ
Innovative membrane technologies	Michel Caluwé	Waterleau
Protein production from waste streams	Siegfried Vlaemick Simon De Corte	UAntwerpen UGent
Sorption minerals and materials in water treatment	Arslan Ahmad	Sibelco
Wastewater reuse for cooling towers: the Waterkracht project	Niels D'Haese Joost Van der Spurt	Ekopak
Water utilities in the North Sea Port	Karen Polfliet	North Sea Port
Excursion (TBD)		

Proposal planning: planning as a weekly class of 2 hours in between other courses. In the first semester, the students who chose the topic will be contacted and an appropriate moment for the lectures will be planned based on their availability. If necessary, the lectures will be captured on video and shared through Ufora.

Additional activity: 1 day excursion to an industrial site, to be determined in collaboration with the company and planning to be determined in agreement with the students.

Evaluation: Group task with peer assessment; the students will be assigned a group task for which they will prepare a short paper. The groups will present their papers and will review each other's papers and presentations. The final grade will take into account the delivered work and the quality of the peer review given and received, and will be determined by the course responsible. Exact content of the assignment is to be determined together with the students during the first lecture. This way of working not only broadens the knowledge of the students regarding industrial applications of novel technologies, but also their sense of organization and responsibility and their writing and presentation skills.