



A! Water Treatment Summer Course

Advanced drinking water treatment technologies

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General information

Description:

A! Water treatment summer course focuses on advanced drinking water treatment technologies. The course themes include new materials such as selective adsorbents in adsorption process, membrane technology and ion exchange reactors in practice, and advanced oxidation. The course is based on half-day lectures by the experts of the field, laboratory exercises, a final project presentation on the state-of-the-art, and an excursion to drinking water treatment plant. Aalto doctoral candidates researching the course themes give a short talk about their research. We practice interactive discussions, group work and reflection skills. The course provides a great platform for sharing experiences and networking with the experts and other doctoral candidates in the field. Prof. Julie Beth Zimmerman from Yale University and drinking water specialists in practice from Sweden and Finland will be among course guest teachers.

Dates:

1st of June – 5th of June, 2020

Location:

Tietotie 1 E, 02150 Espoo, Finland

Fees:

600€ for tuition fee students

Application:

<https://is.gd/anb2WE>

Contact:

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Learning aims of the course:

The course aims on understanding and practicing advanced water treatment, and through that provides 1) learning on new drinking water treatment technologies, 2) carrying out advanced treatment processes in Aalto´s water laboratory, and 3) networking to create a national and international expert platform.

Adsorption, ion exchange, membrane, advanced oxidation and other technologies of water treatment to remove pollutants of concern such as natural organic matter and microbes will be taught during morning lectures by water treatment experts from Sweden and Finland. We have a special guest Prof. Julie Zimmerman from Yale University talking about sustainable and green chemicals and processes for water treatment.

The course includes laboratory exercises on three main topics: adsorption batch and column experiments for lake water purification with novel materials developed in Aalto´s Water and Environmental Engineering Group such as green biochar, membrane filtration pilot, and advanced oxidation for disinfection. All the participants will practice these three themes within three lab groups during afternoon sessions. The groups are assigned to prepare a final project presentation on the state-of-the-art of the studied themes. There will be an excursion to the Pitkäkoski drinking water treatment plant.

We will practice developing interactive, teamwork and reflective skills. Aalto´s doctoral candidates researching the course themes will shortly present their breakthrough research in the course. The course provides a great platform for sharing experiences and networking with the experts and other doctoral candidates in the field.

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Basic information

Name	A! Water Treatment Summer Course
Credits	3 ECTS
Date	1 st of June – 5 th of June, 2020
Application period	17 th of February – 26 th of April, 2010
Fees	600€ for tuition fee students
Study language	English
Eligibility	<input type="checkbox"/> High school <input type="checkbox"/> Bachelors <input checked="" type="checkbox"/> Masters <input checked="" type="checkbox"/> Doctoral <input checked="" type="checkbox"/> Professionals
Course website	https://www.aalto.fi/en/events/a-water-treatment-summer-course

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Basic information

Day	Content	
Monday	9.00 – 12.00	Adsorption
	12.00 – 16.00	Lab exercise
Tuesday	9.00 – 12.00	Advanced Oxidation
	12.00 – 16.00	Lab exercise
Wednesday	9.00 – 12.00 process	Ion Exchange/other
	12.00 – 16.00	Lab exercise
Thursday	9.00 – 12.00	Membrane technology
	12.00 – 16.00 plant	Excursion to treatment
Friday	10.30-14:00	Final project presentation

Socializing activities:

Besides the learning objectives of the course, we have also planned socializing and networking activities such as introduction coffee session, a Helsinki city walk-through event, BBQ evening in Otaniemi campus, and course dinner.

Join us to have a great summer water week in Aalto University!



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Apply now!

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Aalto University

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