ACS Local Section Maryland

WEBINAR-1

December 14, 2022, 2:00 P.M.

UMBC CHEMICAL BIOCHEMICAL AND ENVIRONMENTAL ENGINEERING





Dr. Hui Chen (team lead) postdoctoral research associate at UMBC Dr. Blaney's lab. (Completed her Ph.D. in Chemistry at Stonybrook University)

Dr. Utsav Shashvatt postdoctoral research associate at UC Berkeley. (Completed his Ph.D. in environmental engineering at UMBC – Dr. Blaney's lab)

Mr. Michael Fleming Ph.D. candidate at UMBC, Dr. Blaney's lab (environmental engineering program)

Ms. Ouriel Ndalamba BS student in our lab at UMBC (chemical engineering major)

Ms. Kaylyn Stewart BS student in our lab at UMBC (chemistry major)

Circular Nutrient Economy

Recovering nutrients from waste streams for reuse as fertilizers

PANELISTS: Expert Environmental Engineers from UMBC

Overview

Nowadays, nutrient pollution such as eutrophication has become a major issue causing large scale harm to the environment. Therefore, it is necessary to understand how to mitigate the effects of nutrient pollution on the environment while sustainably recovering nutrients in valuable forms. Donnan dialysis can be a great strategy to recover nutrients from waste streams for reuse as fertilizers with minimal energy and chemical input. Learning the basics of Donnan dialysis is essential to apply this technology in larger scale waste streams treatment.

In this webinar, our panel of post-doc, graduate and undergraduate students from UMBC will discuss the applications of Donnan dialysis to achieve circular nutrient economy by recovering nutrients from waste streams as fertilizers. They are subject matter experts in environmental engineering who will give us a detailed explanation of how Donnan dialysis works and how to design sustainable nutrient recovery systems. The panel will present their current achievements in Donnan dialysis application in agricultural and municipal waste to address nutrient pollution.

Key Learning Objectives

- Importance of circular nutrient economy
- Basics of Donnan dialysis
- Current progress in Donnan dialysis technologies for nutrient recovery

Who Should Attend

- Analysts, technicians, engineers and chemists who are either currently involved in environmental issues
- Wastewater professions and farmers who are interested in employing new strategies to solve nutrient pollution
- Students and researchers working on environmental issues

Registration you may also register by e-mail:
mailto:beatricesalazar1@gmail.com? subject=Environmental Webinar - Maryland Community

WEBINAR-1 Information:

Date: December 14, 2022
Time: 2pm-3pm
Link: Circular Nutrient Economy
Webinar-1 ID: 921 9164 0078
Password: webinar-1

Contact:

Beatrice Salazar
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Lee Blaney
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Contact us:
Chemical, Biochemical and Environmental Engineering on my UMBC

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Worth remembering: Contact any of our panelists or moderator for any questions you may have related to the topic discussed above. Feel free to share this information with your colleagues