

## Synopsis of the workshop

The Blue Economy workshop titled ‘Fostering Collaboration between research and Industry for shell waste utilization towards the realization of a circular blue economy’ held at the Growth Hub, SETU Waterford Campus on Thursday 29<sup>th</sup> February 2024.

The workshop aimed at fostering a connection between research and industry within waste utilization and the blue economy. Its main themes included Knowledge sharing, problem identification, industry-research dialogue, collaborative ideation and networking. Its purpose was to communicate Ms Brakemi Egbedi’s research findings on shell waste utilization to stakeholders in the shellfish-processing sector. The workshop aimed to advocate for ongoing cooperation in providing alternative approaches for shell waste utilization for the realization of the circular blue economy in Ireland.

Through this workshop, Brakemi Egbedi a final year PhD student at SETU Waterford discussed her research on the use of waste shells in both its natural and modified state, as low cost adsorbents for the removal of nutrients and bacteria from both synthetic and industrial wastewater. The results of the study show very promising results especially with the use of the modified shells for the proposed application.

Prof. Brijesh Tiwari from Teagasc, gave a presentation titled Blue Economy, waste (shell) biorefinery and potentials in Ireland. Thanks to this presentation, various valorization strategies were explored and discussed. Ian Phillips (Managing Director) Anua Clean Air International Ltd. shared the success story of Anua Air- a company which has successfully utilized shell waste for the treatment of municipal and industrial odour and VOC air emissions. More information about this company can be found here: <https://anuacleanair.com/>

During the panel discussion with representatives from the shellfish industry (Sofrimar Ltd., Waterford Oysters, Bannow Bay and Dungarvan Shellfish Ltd (DSF)), questions regarding the sustainability and utilization of shell waste generated were discussed. This sparked a lot of interest among all researchers in attendance. The processors expressed willingness to cooperate with researchers who are interested in shell waste valorisation initiatives. Another waste product generated from oyster farmers was also identified.

After the presentation and panel discussion, all stakeholders expressed optimism in the valorisation potentials of waste shells and the potential of shell waste utilization to create a circular blue economy in Ireland. They hope to see the application of Brakemi’s research in field trials, which is a future recommended work for this project.

This workshop was sponsored by the ESAI in partnership with the EPA via the Grassroots Awards Scheme. The EPA/ESAI Grassroots Workshop Support Scheme provides funding to postgraduate and postdoctoral researchers to organise stand-alone workshops, in the broad environmental research area, that fall within the remit of the ESAI and EPA. For further information, contact: [www.esaiweb.org/funding---awards/grassroots-award-scheme/](http://www.esaiweb.org/funding---awards/grassroots-award-scheme/)

## Photo gallery



Brakemi Egbedi during her presentation



Prof. Brijesh Tiwari during his presentation on Blue Economy, waste (shell) biorefinery and potentials in Ireland



Ian Phillips sharing the success story of Anua Air International Ltd- a testament to the possibility of a developing a circular economy from shell waste.



Panel discussion with representatives from the shellfish industry (Chaired by Dr. Michael Kinsella SETU Waterford Campus)