



Aphra Leavy

Water and Wastewater Process Optimisation Manager

For Mullingar native Aphra, a busy mum of three girls, *“Science and engineering are about improving our everyday lives and having a positive impact on the environment, our health, and our quality of life which is especially important now as we all try to navigate through a global pandemic together.”* She added, *“I have three daughters and that is one of the reasons why I am keen to highlight the importance of International Women’s Day and the important role that women play in science and engineering in Ireland.”*

Aphra holds degrees in Agricultural Science (University College Dublin) and Civil Engineering (University of Ulster) and a post graduate Diploma in Environmental Protection (Sligo Institute of Technology) and her job as Irish Water’s Water and Wastewater Process Optimisation Manager is to help ensure the water and wastewater treatment plants across the country are working efficiently and are compliant with regulatory standards.

Speaking about her job, she says, *“Every day is different and brings a new challenge. Every treatment plant is different and there are so many water and wastewater processes involved. I see myself and my team as problem solvers - we analyse treatment processes and implement measures to optimise the operation of the plant whether it be wastewater or water treatment.”*

Speaking about why science and engineering interested her as a career, Aphra says, *“I have always been more interested in STEM subjects rather than languages. I love solving problems, finding the root cause of the problem and coming up with innovative solutions.”*

“In terms of wastewater, we treat approximately 1.6 billion litres of wastewater every single day, returning treated effluent safely to the environment. Every time we improve the quality and efficiency of our wastewater treatment processes we are helping to safeguard the environment.”

Aphra highlights that, *“The treatment of drinking water is complex and we treat 1.7 billion litres every single day through a complex treatment processes making it safe for use. This water is used for drinking, cooking, washing, bathing, industry – we use water in so many ways. Water is precious and we all have a role to play in conserving water by only using what we need.”*

As we celebrate International Women’s Day, Aphra advises girls who have an interest in STEM, *“to follow their dreams and to believe that they have a massively important role in making the world a better place through careers as scientists, engineers and mathematicians.”*

Irish Water is committed to gender equality, with 40% of the senior management team being female. In order to encourage more women to progress within the organisation, Irish Water and its parent company Ervia launched its Diversity and Inclusion Programme in 2019. The programme has moved at pace since then and now includes a number of support groups, including the iBelong Women’s Network.