Irish Water Scientist Agnieszka Wojdowska celebrates Science Week 2020
The science of water and wastewater

For Polish native Agnieszka Wojdowska, science is about improving our everyday lives as she explains her role as a Water and Wastewater Optimisation Specialist with Irish Water.

Agnieska holds a Master's Degree in Environmental Protection and her job is to ensure the water and wastewater treatment processes at treatment plants across the Greater Dublin Area are working efficiently and are compliant with regulatory standards.

Speaking about her job, she says, "Every day is different and brings a new challenge for which science is the solution. Each treatment plant is different, some designed and built many years ago and with different technologies. This coupled with changing weather and environmental conditions, makes my job very interesting as each plant needs an individual approach."

"In terms of wastewater, we treat approximately 1.6 billion litres of wastewater on a daily basis through natural and chemical processes to make it safe to return to our rivers and lakes. Every time we improve the quality and efficiency of our wastewater treatment processes we are helping to safeguard the environment."

Speaking about why science interested her as a career, Agnieszka said, "When I was a little girl, I loved science experiments. I would always get chemistry kits for my birthdays and my father even built me a small laboratory at home. When I was about ten I remember pretending to treat water from a nearby river using a sock and sand filter system."

Agnieska highlighted that, “Of course, treating drinking water is much more complex than that. Irish Water treats 1.9 billion litres of drinking water every single day for drinking, cooking, washing, bathing, industry – we use water in so many ways. We take raw water and put it through a complex treatment process so you can use it safely. There is a finite amount of drinkable water and it’s a precious gift. It is important that we conserve water and be mindful of our water use. In doing so we can all help to protect the environment we live in.”