



## APT Innovations – Biomedical Project Testing Reduction Microbial Counts in Water

APT Innovations approached Ulster University to investigate the water quality issues in touring caravans and motorhomes and measure how their water drainage product, Floe, could help combat these issues.

Funded by an Invest NI Innovation Voucher, APT Innovation wanted Ulster's Biomedical team to investigate the reasons why the water from the taps inside these vehicles (which had not been used for a period of time) often tasted unpleasant, looked discoloured and contained suspended particles.

Professor Ibrahim Barat from the School of Biomedical Science investigated a series of water samples and found significant microbial counts in the water systems of caravans and motorhomes which had not been active for some time. As well as potential health hazards, increased microbial counts could contribute to the bad taste or scent in the water, water discolouration and presence of suspended matter. However the application of a complete purging plan using the Floe system removed stagnant water and debris and decreased microbial counts >99.9%, which could be of great benefit to users.

Jason Paul, Owner of APT Innovations says *"I am delighted with the results of this project and the work that the team at Ulster University have done. This research is very important for two reasons. Firstly, we knew our Floe product was effective, but this research means we are able to measure and add scientific value to demonstrate how effective our Floe product is.*

*Secondly, the product was seasonally based, it provided a solution to draindown the vehicle during winter to help protect against burst pipes and stagnant water. This research means that Floe has considerable more value, improving the water quality, and this now moves from a seasonal product to an all year round solution. This is a real game changer. We are now selling our Floe product in 12 countries and are making significant inroads to selling it throughout the US and also Canada."*

Professor Banat adds *"we are always pleased to be able to provide practical scientific support to industry both locally and nationally and seeing a significant benefit in the short term for small industries is always gratifying."*