

*School of Engineering*

# **BuoyScout – An Autonomous Solution for Water Monitoring and Sampling**

*Invention Description*

*Despite current efforts, clean water has been a major environmental concern in Malaysia and many other developing countries. A proactive approach is needed to ensure the water quality is maintained to the required standards. BuoyScout is an unmanned surface vehicle (USV) designed to combat water pollution. It is equipped with sensors and an onboard autosampler to monitor and sample water at rivers, lakes, and reservoirs.*

## *Key Features*

- *It small and light Unmanned Surface Vehicle (USV)*
- *It has multi-hulls airboat design.*
- *Can be operated manually or autonomously to navigate rivers, lakes and reservoirs.*
- *It can monitor water quality and collected water samples at the designated times and locations.*

## *Advantages*

- *It can navigate shallow water and water with high concentration of vegetation.*
- *It can be deployed on areas that are difficult to reach.*
- *It can collect up to 10 water samples for laboratory analysis.*

## *Market Applications*

*Water quality monitoring and sampling - lakes, rivers and reservoirs.*

*This invention is Malaysian Patent Pending No. PI 2019006897.*

*Currently seeking commercial partner for licensing.*

## *Contact us*

*For enquiries on this invention, please contact*

*Darwin Gouwanda, Senior Lecturer*

*Surface vehicle, Sensors and Instrumentation*

 *darwin.gouwanda@monash.edu*