



IET International Travel Award Report

This IET International Travel Award supported my online participation in the 2022 edition of the International Youth Nuclear Congress (IYNC2022). The IYNC is a global non-profit organization connecting students and young professionals from various disciplines to explore applications of nuclear science and technology. The conference has been organised biannually since 2000, with the 2022 edition being held in Koriyama, Japan.

I was invited to participate in the conference as one of the six finalists in the international Innovation for Nuclear (I4N) Competition, representing I4N Europe. Previously, I had placed first in the regional I4N Europe Competition which was held in as part of the 2021 European Nuclear Young Generation Forum (ENYGF). The purpose of the I4N Competition is to reward innovative ideas focused on nuclear technologies or applications that can contribute to the United Nations (UN) Sustainable Development Goals.

Taking inspiration from my PhD research project, I presented a technology use case and commercialisation plan for a communication and positioning system which would enable the deployment of tetherless (wireless) Remotely Operated Vehicles (ROVs) used for inspection and monitoring tasks within the nuclear decommissioning sector. Apart from the technical aspects of this system, I was also given the opportunity to present a product roadmap as well as analyse the impact that wireless ROVs can have in the nuclear decommissioning sector within the context of the UN Sustainable Development Goals.

Overall, participating in the IYNC2022 conference and progressing to the international final of the I4N Competition has been a milestone in my progress as a researcher which allowed me to exhibit the achievements of my PhD as well as present my research outputs from a product development perspective. I am deeply grateful to the Institution of Engineering and Technology for their support through this international Travel Award which made participating in the IYNC2022 conference possible.

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