



## Radiation Search Operations using Autonomous UAVs and UGVs

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### Message from the Guest Editors

Dear Colleagues,

The use of autonomous agents in radioactive field surveys has numerous benefits, including an inherent capability to account for stochastic emissions and enhanced safety for first responders when using uncrewed systems. Onboard computational power on custom-designed drones is capable of providing rapid source localization and classification information to incident commanders when decision making is time critical. Scheduled surveys to detect anomalies in safety critical areas such as ports of entry or contaminated sites can be accomplished with minimal supervision using uncrewed aerial vehicles (UAVs) or uncrewed ground vehicles (UGVs). These are a few examples in radioactive material searches where autonomous uncrewed systems have a distinct advantage over manual search methods.

The aim of this Special Issue is to highlight new applications in radioactive material detection, localization and classification using uncrewed agents equipped with scintillation-type detectors or particulate samplers, depending on the use case.





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