

# Sustainable and resilient social system for healthy nature

**R&D Project Title :** An Ultra-Environmentally Adaptive Mini-Robotics System for Finding Survivors in Inaccessible Areas during Disasters

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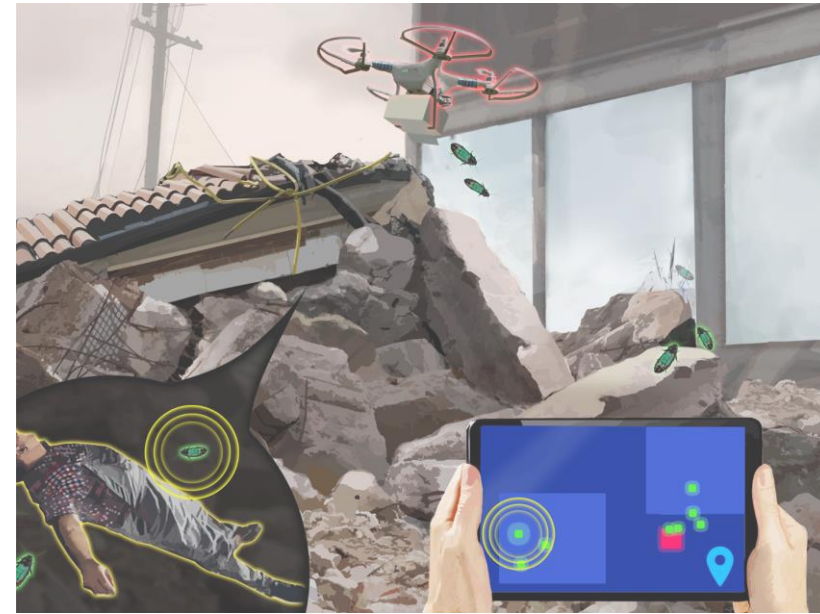
**R&D Team :** RIKEN, Nanyang Technological University (Singapore)



## Summary :

We fabricate mini-robots equipped with small devices consisting of sensors, control units, etc., and dispatch them to a simulated disaster site. By giving external commands to the mini-robot swarm, we will develop a technology to penetrate through the gaps in the rubble of collapsed buildings and quickly find survivors.

In the past, disaster rescue dogs and miniature robots equipped with sensors determined the presence of survivors from the outside of a collapsed building, but the information obtained from the outside was limited and inaccurate, and did not lead to a significant reduction in the time required to detect survivors. However, by upgrading the mini-robot technology possessed by us, the above problems will be cleared.



Mini-robots at Disaster Sites