

# Feasibility Study of Visual and Measurement Technology for Innovative Approach

## < Createc Ltd >

### Purpose and Goal

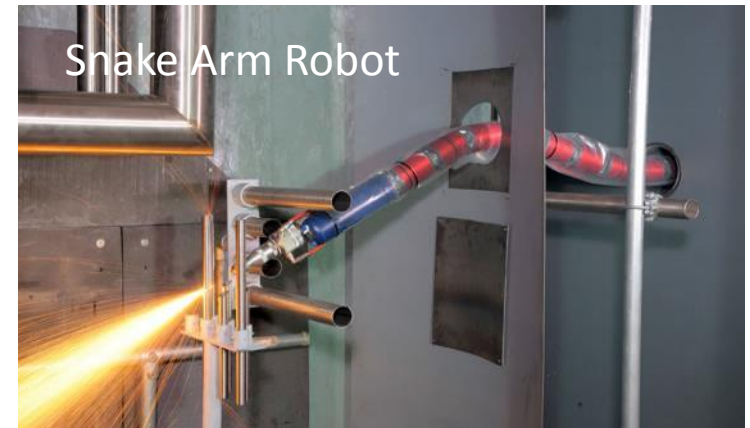
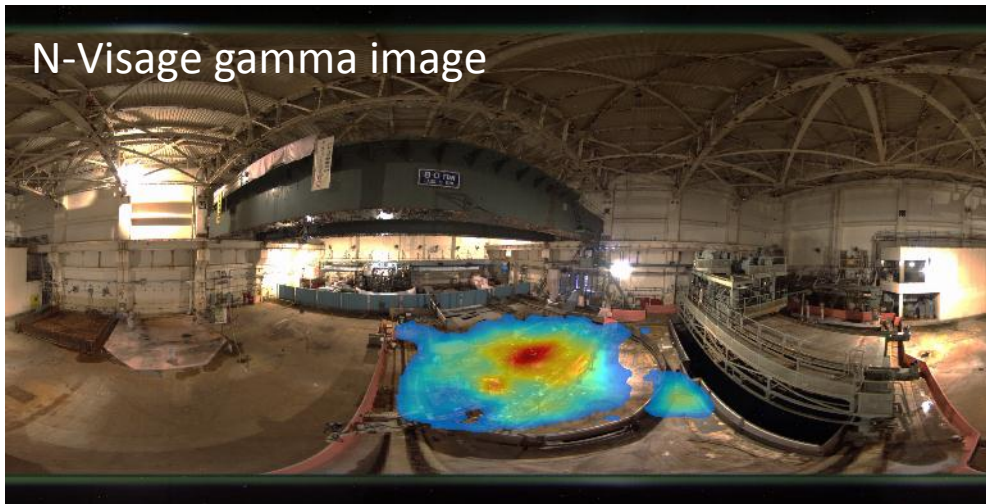
Project objective: to demonstrate the feasibility of gamma imaging and 3D laser scanning for fuel debris location.

Strengths of proposal: based on basic N-Visage principle, already proven at Fukushima.

System will be: small, light weight, flexible deployment, and have high radiation tolerance.

### Overview and Feature

Our project will utilise Createc's established N-Visage gamma camera deployed using a snake arm robot from OC Robotics



The focus of the project is to show:

1. Maximum dose rate
2. Small, fast system
3. Integral laser scanner using existing laser sensor
4. Active deployment as part of imaging process

## Output so far/Output expected

- Review of sensor options complete
- Viable options for laser sensor and radiation sensor identified
- Results so far are promising
- Next phase is to demonstrate radiation hardness through measurement and simulation



Laser sensor module



Optical fibre scintillators



Silicon diode dosimeters

## Overall Schedule

