ENRICH
The 2nd European Robotics Hackathon
July 1st - 5th, 2019
NPP Zwentendorf, Austria

RADIOLOGICAL AND NUCLEAR THREATS.
REALISTIC ENVIRONMENTS.
A CHALLENGE FOR YOUR ROBOTS.

Details and registration:
www.enrich.european-robotics.eu
THE ENVIRONMENT
The Zwentendorf Nuclear Power Plant (NPP) was built but never put into operation. Here, areas are accessible which in other NPPs cannot be visited due to dangerous radioactivity. In Zwentendorf the plant was changed into a training centre for repairing and dismantling but also for critical incidents and disaster scenarios.

THE TASKS
ENRICH 2019 offers three tasks. In the exploration task robots have to create a 3D map of the scene and measure radiation. In the manipulation task pipes with radioactive coolant must be identified and valves closed to stop contamination. In the search and rescue task robots have to find missing workers and bring them back to a safe area.

THE CHALLENGES
Due to the radiation sources inside the scenario nobody can follow the robots. They have to work on their own. Expect the typical interior of a power plant: low or no light, closed doors, sharp turns, steep stairs and narrow passages. And expect major difficulties for any radio communication due to concrete walls and metal interiors.

A NEW ROBOTICS COMPETITION
The Fukushima disaster but also the decommissioning of nuclear facilities like in Sellafield or Murmansk have shown that the use of robots has clear advantages. There are many tasks too risky for humans to carry out. For radiological and nuclear (RN) scenarios specialized robot systems have to be developed, since no market-ready systems are available yet. Together with several partners, the European Robotics group transferred the well-established hackathon idea from software development into the robotics world.

ENRICH 2019, the 2nd European Robotics Hackathon, brings together roboticists and RN professionals. As usual for software hackathons, ENRICH will contain a contest element as well. A panel of judges selects winning teams for each task. However, our main goal is to foster the development of robotic solutions for the RN domain. So, if you are interested in an exciting event in a unique environment – you are cordially invited to attend!