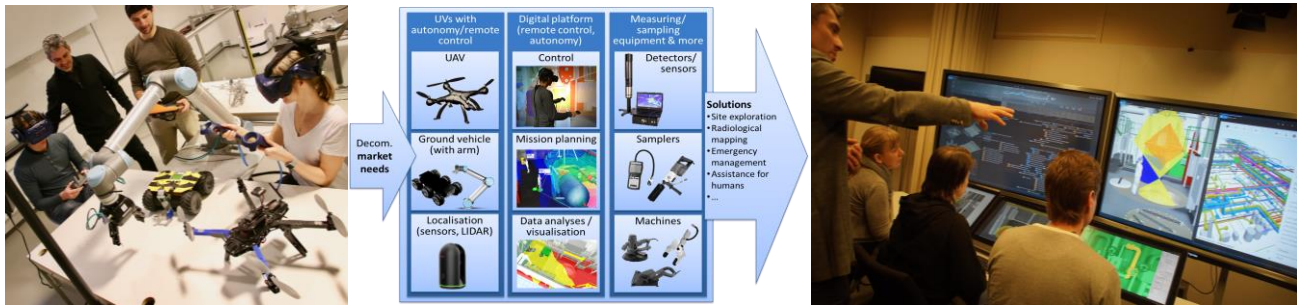


We are happy to invite you to a one day
Workshop focusing on
modular robotic solutions and holistic digital support
for nuclear decommissioning

18 June 2019, Thon Hotel, Halden, Norway



The workshop will be organized within the frame of two industrial innovation projects



RoboDecom – New modular robotic solutions for nuclear decommissioning in Norway and abroad

and



LiveDecom – Digital support for management of nuclear decommissioning in Norway and abroad

as a precursor to the workshop on
"Advanced methods for knowledge management, training and education for nuclear decommissioning"
19-21 June 2019, Thon Hotel, Halden, Norway

PROGRAMME	
9:00	Welcome by the owners and managers of the projects
	Presentation of RoboDecom and LiveDecom (by the project manager)
	Coffee break
	Presentations from Norwegian companies on strategic goals/interests
12:00	Lunch
	Presentations from Norwegian companies on strategic goals/interests (cont'd)
	Presentations from the companies from abroad on strategic goals/interests
	Coffee break
	Discussions on current gaps, challenges and opportunities related to holistic digital support and application of modular robotics in decommissioning
~ 16:00	Session closing

Workshop on
Advanced methods for knowledge management, training and education for nuclear decommissioning

19 – 21 June 2019
 Thon Hotel Halden, Norway

PROGRAMME

Tuesday 18 June 2019

Registration: 18:00 - 19:00

Wednesday, 19 June 2019

Registration: 8:15 - 9:00

Welcome and Opening Speeches

9:00	Welcome and Introduction to Halden Thor Edquist, <i>the Mayor of Halden, Norway</i>
9:25	Introduction to Norwegian Nuclear Decommissioning (NND) Pål Mikkelsen, <i>Director of NND, Norway</i>
9:50	Introduction to the Workshop and Practicalities Réka Szőke, <i>IFE, Norway</i>
10:00	Coffee break

Introductory Presentations

10:30	Session opening
10:35	Decommissioning Of Nuclear Facilities Current Decommissioning and IAEA Perspectives Christian Glorennec, <i>IAEA</i>
11:15	Digital innovation for knowledge management training and education István Szőke, <i>IFE</i>
11:55	Session closing
12:00	Lunch

Session 1: Training for Decommissioning – Part 1

Chairs: Jean-Michel Chabeuf (ORANO) and Jan Otto Porsmyr (IFE)

13:00	Session opening
13:10	Digital Training & qualification tools - Orano Experience Jean-Michel Chabeuf, <i>ORANO, France</i>
13:30	Training for Nuclear Decommissioning Niklas Bergh, <i>Westinghouse Sweden AB, Sweden</i>
13:50	Application of VRdose® at Leningrad NPP Pavel Vinnikov, Dmitry Vinnikov, <i>Leningrad NPP, Russia</i> and Jan Porsmyr, <i>IFE, Norway</i>
14:10	Best Practice in Training for Nuclear Decommissioning and Waste Management John Kettler, <i>Aachen Institute for Nuclear Training GmbH (AiNT), Germany</i>
14:30	3D Visualisation in KNPP radiation control: KNPP and IFE cooperation Alexey Burdin, <i>Kola NPP, Russia</i>
14:50	Competence and training for decommissioning: Some results from interviews and literature review Espen Nystad, <i>IFE, Norway</i>
15:05	Effectiveness of Virtual Reality for decommissioning training – Results from the Systematic Literature Review Sathiya Kumar Renganayagalu, <i>IFE, Norway</i>
15:20	Group photo

16:00 – 18:30 Moderators: Matt Mellor (CREATEC), István Szőke (IFE) and the Session Chairs

Speed presentations and discussions on Holistic Digital Support and Modular Robotics for decommissioning - with coffee and small bites

19:15	Aperitif & Welcome Drink at Thon Hotel
19:30	Dinner

Thursday, 20 June 2019

Session 1: Training for decommissioning – Part 2

Chairs: : Ilona Heldal (Western Norway University) and Michael Nicholas Louka (IFE)

9:00	<p>Dismantling technology demonstration for decommissioning nuclear power plants by Mixed Reality system</p> <p>Makoto Terauchi, <i>Tsuruga Comprehensive Research and Development Center</i> and Tsutomu Irie Shinji Ozaki, <i>Japan Atomic Energy Agency (JAEA), Japan</i></p>
9:20	<p>3D Digital Simulation Applied to Support Nuclear Facilities Decommissioning Knowledge Management, Training and Education</p> <p>Luc Ardelier, Vincent Testard and Paola Ontiveros, <i>OREKA Solutions, France</i></p>
9:40	<p>Training Emergency Preparedness for Meeting New Risks: Examining the Role of Virtual Simulations for Firefighter Preparedness</p> <p>Ilona Heldal, <i>Western Norway University of Applied Sciences, Bergen, Norway</i> and Cecilia Hammar Wijkmark, <i>Swedish Civil Contingencies Agency, Karlstad, Sweden</i></p>
10:00	<p>Real time radiological simulations for decommissioning training</p> <p>Tom-Robert Bryntesen, <i>IFE, Norway</i></p>
10:20	Session closing
10:30	Coffee break

Session 2: Information management for decommissioning

Chairs: Jesús de Paz Sierra (Ingecid) and John Kettler, (AiNT)

10:50	Session opening
11:00	<p>An intelligent instrument to aid the decommissioning and general operation of nuclear plant: The N-Visage Recon</p> <p>Alan Shippen and Matt Mellor, <i>CREATEC, UK</i></p>
11:20	<p>Digital Progress Documentation for Decommissioning</p> <p>Franz Borrmann, <i>Institut für Umwelttechnologien und Strahlenschutz, Germany</i></p>
11:40	<p>BIM/3D management and training Software for Nuclear Power Plants decommissioning</p> <p>Jesús de Paz Sierra et. al, <i>Ingecid, Investigación y desarrollo de proyectos S.L., Spain</i></p>
12:00	Lunch

Thursday 20 June

13:00	New Advances in AQUILACOSTING Decommissioning and Waste Management Cost Estimation Software DANIŠKA Dušan, <i>WAI s.r.o, Piešťany, Slovakia</i> , DANIŠKA Vladimír, <i>Piešťany, Slovakia</i> , FAJURALLY Najah, <i>Kinectrics Inc., Toronto, Ontario, Canada</i> and ZUBČÁK Peter, <i>WAI s.r.o, Piešťany, Slovakia</i>
13:20	PUG³ Software for the Support of Clearance Measurements Tobias Hein, Jörg Kaulard and Stefan Wörlen, <i>Brenk Systemplanung GmbH, Germany</i>
13:40	Group discussion Moderator: Michael Nicholas Louka (IFE), Jan Porsmyr (IFE) and the Session Chairs
15:00	Session closing

15:30 – 17:30

Demo session - with coffee and small bites (at IFE)

Taxis from Thon Hotel to Fredriksten Fortress at 19:15

19:30	Aperitif & Welcome Drink in Kongshallene (Fredriksten Fortress)
19:45	18th century style dinner in Kongshallene

Friday, 21 June 2019

Session 3: Knowledge management for decommissioning

Chairs: Franz Borrmann (Institut für Umwelttechnologien und Strahlenschutz) and István Szőke (IFE)

9:00	Session opening
9:10	Digitalization & AI Tomas Nordlander, <i>Digital Systems Research Director, IFE, Norway</i>
9:40	Practice of psychological social survey as a fundamental information of decommissioning in knowledge management Yasuyoshi TARUTA, <i>Fugen Decommissioning Engineering Center, Japan Atomic Energy Agency, (JAEA) & Research Institute of Nuclear Engineering, University of Fukui (RINE)</i> , Qiao ZHAO, Shigeto KOBAYASHI, Takashi HASHIMOTO, <i>Japan Advanced Institute of Science and Technology (JAIST)</i> and Yukihiro IGUCHI, <i>Fugen Decommissioning Engineering Center, Japan Atomic Energy Agency, (JAEA) & Research Institute of Nuclear Engineering, University of Fukui (RINE)</i>
10:00	Pilot Program in Decommissioning Knowledge Management using SOUL by Tecnatom Joaquín Toubes Tova, <i>Tecnatom S.A, Spain</i>
10:20	Coffee break
10:40	Group discussion Moderators: Franz Borrmann (iUS), István Szőke (IFE)
12:00	Session closing
12:10	Meeting summary and closure of the workshop (all chairs)
13:00	Lunch /Meeting adjourned