



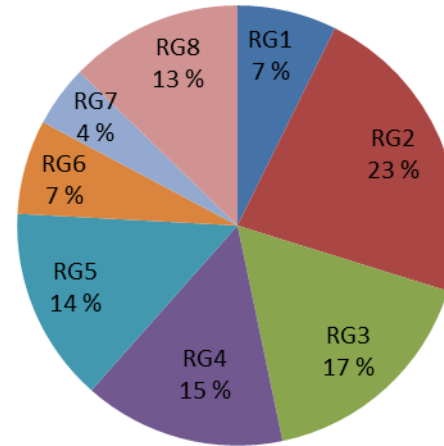
## SAFIR2022 Reference Groups

- RG1 Overall safety and organisation
- RG2 Plant level analysis
- RG3 Reactor and fuel
- RG4 Thermal hydraulics
- RG5 Mechanical integrity
- RG6 Structures and materials
- RG7 Severe accidents
- RG8 Research infrastructure

## SAFIR2022 Volume in 2019-2020

- Annual volume 6,3-6,8 M€: 32-35 research projects and 43-46 person years.
- In addition, funding for the VTT Centre for Nuclear Safety infrastructure jointly by SAFIR2022 and KYT2022.
- The funding organisations: Finnish State Nuclear Waste Management Fund (VYR) with 4,2-4,4 M€ (annual), VTT with 1,2-1,3 M€, LUT University, Aalto University, FMI, FIOH, NKS, SSM, Halden Reactor Project, Fennovoima, Fortum, TVO, others.

## Person years in 2020 (total 43 py)



## Results in 2019-2020

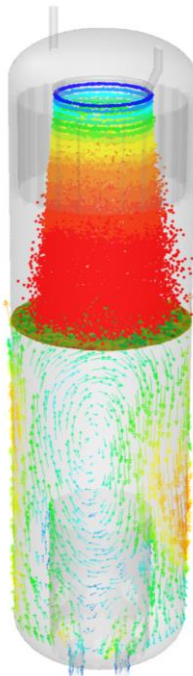
- 431 publications and other reports including 48 scientific journal articles and 77 conference articles
- 23 higher academic degrees, 10 doctors.

## SAFIR2018 Results in 2015-2018

- 1095 publications and other reports including 166 scientific journal articles and 236 conference articles
- 44 higher academic degrees, 18 doctors.



The new VTT Centre for Nuclear Safety has hot cells for research and testing of radioactive structural materials from nuclear power plants.



CFD model of VVER-440 pressurizer.

# KYT2022

## Finnish Research Programme on Nuclear Waste Management 2019-2022 – KYT2022

### KYT2022 Follow up groups

SR1 Buffer/rock interface

SR2 Canister

SR3 Release barrier interactions and microbiology

SR4 Safety factors

SR5 Host rock studies

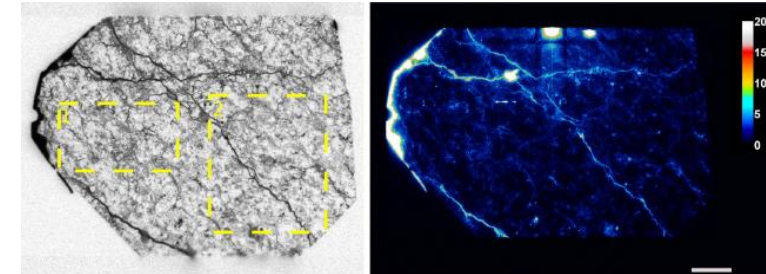
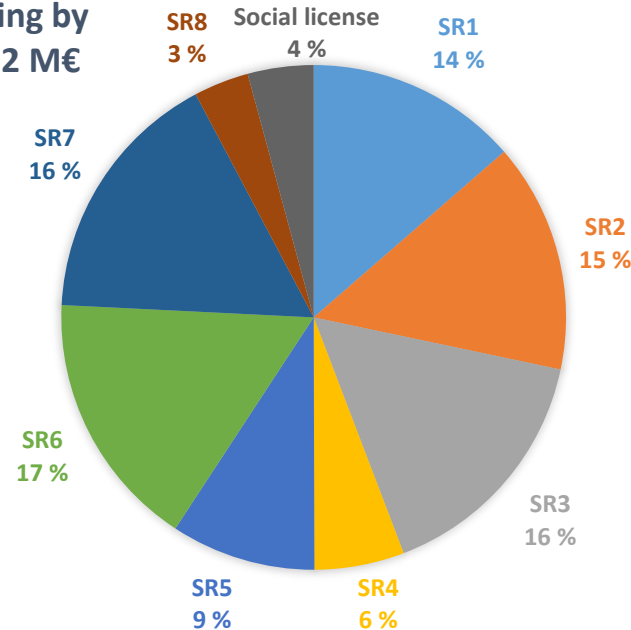
SR6 Other safety research

SR7 Low and intermediate waste management

SR8 Alternative technologies

+ Social science research, SOLID

### KYT2022 funding by topic in 2020 (2 M€ total)



*Autoradiographs of studied rock samples (Juuso Sammaljärvi / RASK)*

### KYT2022 Volume in 2019-2020

- Annual volume approximately 2 M€, ~38 research projects and 24 person years.
- In addition, funding for the VTT Centre for Nuclear Safety infrastructure jointly by SAFIR2022 and KYT2022.
- Participating research organisations: VTT, Aalto University, Helsinki University, Jyväskylä University, University of Eastern Finland, Tampere University, Turku University, Geological Survey of Finland

### Results in 2019-2020

- 116 publications and other reports including 29 scientific journal articles and 79 conference articles
- 3 higher academic degrees, 4 doctors.

### KYT2018 Results in 2015-2018

- 215 publications and other reports including 61 scientific journal articles and 236 conference articles
- 16 higher academic degrees, 12 doctors.

KYT2022 Annual report 2020 on the website: <http://kyt2022.vtt.fi/>