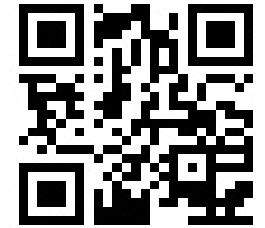




DOPAS



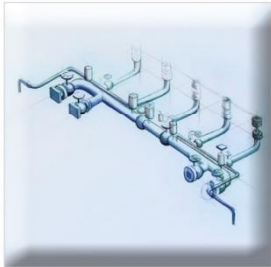
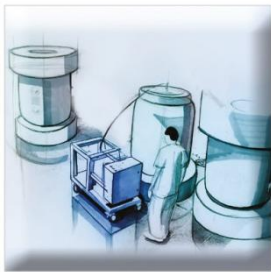
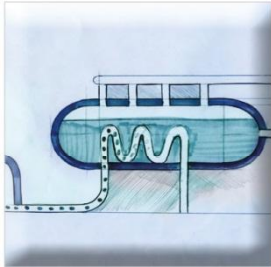
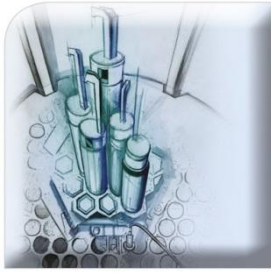
# DOPAS Training Workshop 2015

16 September 2015  
Venda Havlova

D3 0

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**UJV Rez**  
**Fuel Cycle and Waste management**  
**Division**  
**Fuel Cycle Chemistry Dpt.**  
**Activities**

Václava Havlová

ÚJV Řež, a. s.  
16.9.2015

## 2. ÚJV Řež, a.s.



**We are a company operating in the area of development, services, production and research on the top national and global level more than 57 years.**

**More than 1,000 persons employed by the ÚJV Group represent the potential from scientific capacities through technology specialists, designers to experienced production workers.**



VZU PLZEŇ





## 2. Main areas of activities

### .Energy

- Feasibility Studies
- Designing new NPP
- EIA
- Qualification of equipment for environmental conditions
- Engineering
- Author's supervision
- Diagnostics, measurement
- Supplies of equipment
- Safety documentation
- Technical support and maintenance of NPP
- Assessment of strength and service life
- Optimisation of fuel charges
- Non-destructive testing
- **Radioactive waste management**
- **Decommissioning**

### .Research and development

- Nuclear safety
- Component integrity
- Non-destructive testing
- Management of power plants ageing
- Material research and testing
- **Deep geological disposal**
- **Central analytical laboratory chemistry**

### .Radiopharmaceuticals

- Research and development of radiopharmaceuticals
- Production of radiopharmaceuticals
- Quality control laboratory, microbiological monitoring

## 4. Department of Fuel Cycle Chemistry

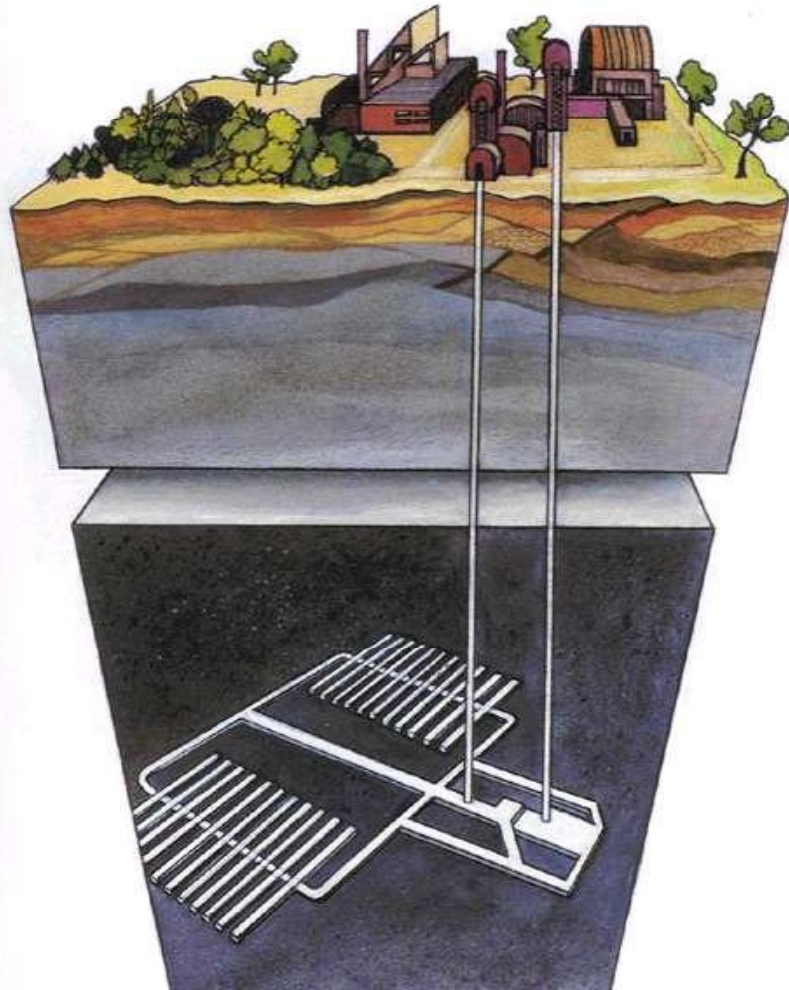


### Research and engineering support to the Deep Geological Disposal Project and for L&ILW Repositories

- Evaluation of migration properties of the rock environment, laboratory and in-situ experiments
- Evaluation of migration properties of materials of near field interactions and research of processes, laboratory and in-situ experiments
- Evaluation of the degradation degree of engineering barriers of radioactive waste repositories and research of processes
- Safety analyses and modelling
- SURAO support
- Analyses of new nuclear fuel cycles
- Communication with civil society on acceptability of radioactive waste repositories
- Use of nanomaterials for radionuclide retention
- CO<sub>2</sub> storage



# 4. Research and engineering support to the DGR Project and for L&ILW Repositories



- Lab and in-situ research
- Barriers development and testing:
  - Corrosion, diffusion , chemical interactions (near-by field /interactions as a source for far field interactions)
  - Anaerobic conditions
- Hydrogeology models, modelling
- Safety assessment, safety scenarios, multi criterial analyses
- Design (conceptual, basic, detail)
- Monitoring of releases and environment
- Support of SURAO:
  - National policy and strategy
  - Public meeting organization, moderating



# Revised programme for DOPAS TWS Day 3 in UJV Rez



- 8:30 – 8:35 Welcome, UJV department introduction
- 8:30 – 9:20 Andra's scientific programme /J. W.
- 9:35 - 10:30 Plugs as part of Nordic RD&D programmes/P.K.
- 10:30 – 10:50 REM Metric experiment / J.W.
- 11:00 – 11:40 The role of pH in the Czech plug system
- 11:40 – 11:50 Group division and introduction to the lab
- 11:50 – 12:50 Lunch break
- 12:50 – 15:15 Lab test (2 groups, switching each other)
- 15:15 – 15:45 Discussion on the exercises 3-4
- 16:00 Leave the building to catch the train at 16:22
- 17:00 Arrival at SURAO information office, Prague



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Thank you for your attention

