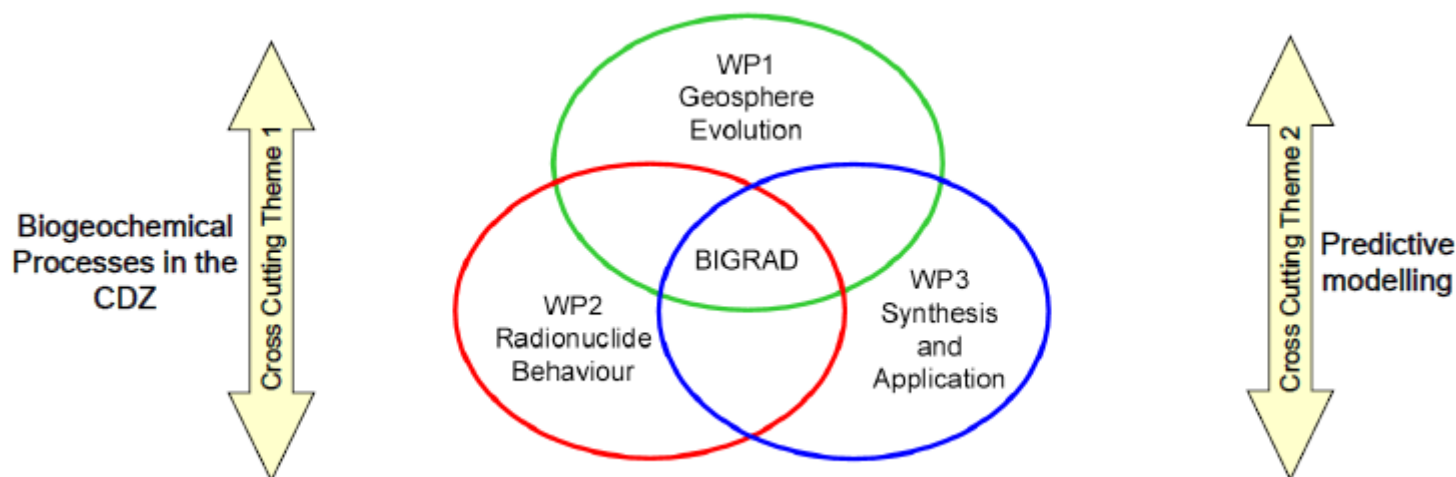
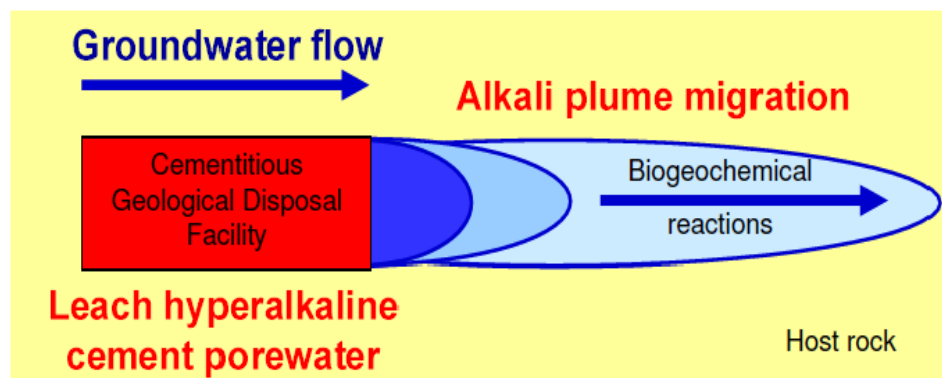


# The BIGRAD Consortium 2010 – 2014/5

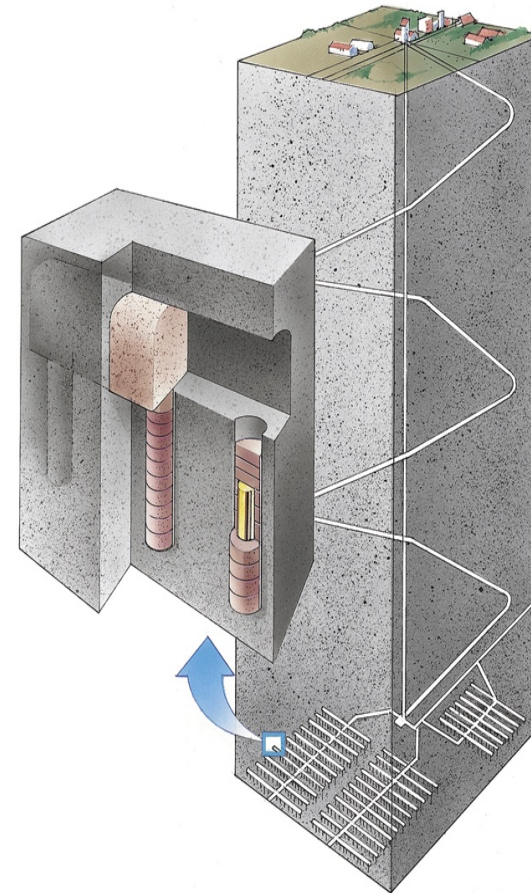


# Biogeochemical Gradients and Radionuclide Transport



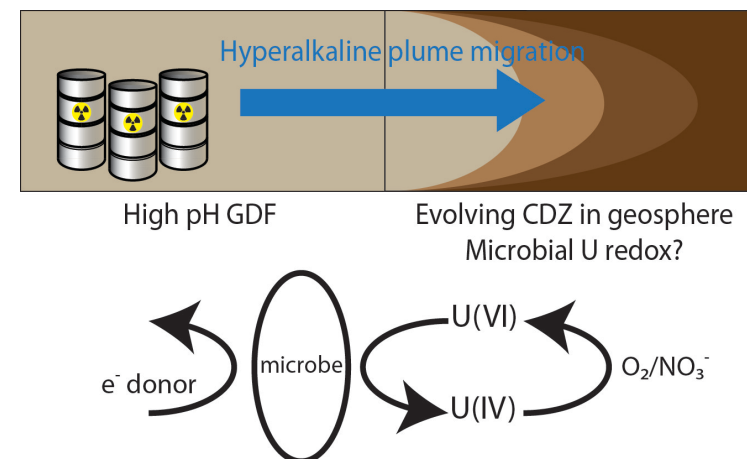
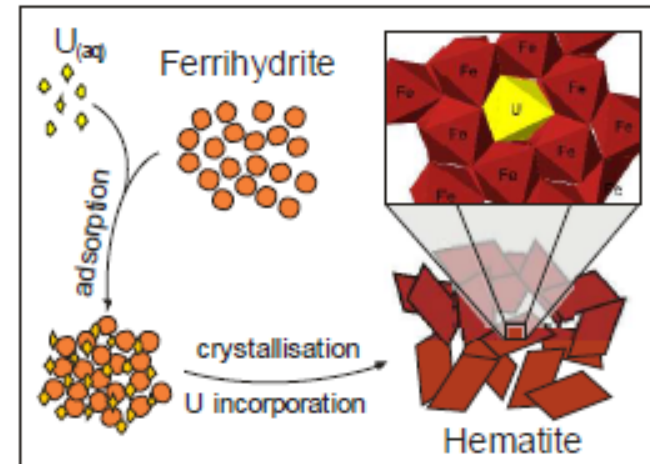
# Technical Outputs

- 20+ manuscripts to date
- 100+ oral presentations to date
- 11+ researchers including 2 PhD graduates – all in continued employment in nuclear environmental sciences or related
- Significantly raised UK academic research profile in geological disposal



# Selected Technical Developments

- Evolution of rock over 15 years
- Bulk impacts on column behaviour & column transport studies
- Radionuclide behaviour – mineralogy, complex ternary systems
- Geomicrobiology – exists at pH 11 and is impacting on isosaccharinic acid degradation by microbes
- Biogeochemistry – impacts on mineralogy and radionuclide behaviour - modelling



## **Some Broader Outputs**

- People – researchers in academia (UK, USA), consultancy (AMEC, NNL), regulation (ONR, Environment Agency)
- International presence – 25+ contributions at Migration 2013, IGDTP Conference with RWM – 20+ contributions
- Capability – facilities (DIAMOND SLS), people network (academic, regulators, implementers, researchers)
- Technical knowledge and translation to meaning for safety cases (UK, France) (ongoing)