

# Future perspectives



**What major needs do we foresee?**

- Extended life time of the operating plants
  - Component compliance / aging management
  - Condition monitoring
- Components for SMR reactors
  - Similarity to currently operating plants
- ...?

**Competencies**

- Material lifetime analysis
- Material analysis (chemical, thermal, mechanical, electrical)
- Method development
- Failure / root-cause analysis
- Material selection / qualification
- Education of polymer properties and aging



**Tools**

- Heat aging, UV aging,
- FTIR, GC-MS, EDX, etc.
- DSC, TGA, microcalorimetry
- Tensile, bending and impact testing
- Electromagnetic measurement methods
- (Electron) microscopy



**Interest group input**

- Needs to be assessed in more detail level (i.e. system or component scale)



**Impact**

- Safe and economical operation of currently operating plants
- Knowledge on polymer solutions in SMRs