

Deputy Head: Dr I.E. Stamatelatos, Physicist (MSc, PhD), Researcher A' ion(at)ipta.demokritos.gr



2106503712



2106533431

### **Large Scale Experimental Facilities at RRL**

- Nuclear Research Reactor 5 MW power
- Neutron Scattering Facilities
  - Neutron diffractometer, Sample Environment: Closed cycle cryostat (8 - 300 K), Furnace (300 – 2000 K)
  - X-ray reflectometer (under installation)
  - Small and Ultra Small Angle Neutron Scattering Apparatus (to be installed)
- Nuclear Analytical techniques
  - Systems for gamma spectrometry analysis
  - Prompt gamma neutron activation analysis using isotopic neutron sources
- Irradiation facilities
  - Thermal neutron column
  - Fast neutron irradiation facility
  - In core neutron irradiation facility
  - Pneumatic sample conveyor (rabbit)
  - $\gamma$  flux irradiation facility
  - High temperature irradiation rig (under development)

### **Other Experimental Facilities at RRL**

- Small Angle X-ray Scattering apparatus
- Detector electronics laboratory
- Radiation Protection laboratory
- Radioactive sample laboratory
- Sample preparation laboratory (furnaces, balances, cutting and polishing equipment)
- Machine shop