VACUUM TECHNOLOGIES



ACTIVITY DESCRIPTION

- Study and development of complex vacuum systems for accelerator and experimental facilities, including functional analysis of associated automation
- Simulation and measurements of low pressure gas fluxes
- Operation and maintenance of numerous vacuum systems (pumps, valves, sensors) in radioactive environment

Turbopumping system on the Low Energy Transfer Beam Lines of SPIRAL2

PERMANENT STAFF

3 engineers 3 technicians

EQUIPMENT

- Leak detectors, residual gas analyzers
- Simulation tools (MOLFLOW+, MOVAK3D)
- Characterization benches for outgassing
- Over 400 pumps (roughing pumps, turbo pumps, cryogenic pumps), 600 gauges and 600 vacuum valves



Roughing pump system of the 50 m3 vacuum chambers of GANIL cyclotrons

VALORISATION & TECHNOLOGY TRANSFER

• Leak measurements for industrial equipment

VARIOUS VALORISATION POTENTIALITIES

- Expertise or review of existing vacuum systems
- Design of vacuum systems for industrial application
- Design of high-vacuum systems for accelerator projects
- Material characterization under vacuum (outgassing)
- Leak measurements and residual vacuum analysis in existing systems
- Training of industrial company employees
- Organization of workshops on vacuum topics











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