

Polymer Laboratory Weekly Meeting Summary – 23.05.2024

➤ **General information:**

- Regarding the remodeling of new offices on the first floor of the polymer laboratory, they were approved by the section and the group leader. Security officials at CERN will come in the coming weeks to definitively validate this remodeling works.
- It is possible that next Monday, Arnaud Devred will come to the laboratory to show it to officials working in an institute working on superconducting technologies. So, please keep the offices and the work area clean and tidy.
- Christian is cleaning the mechanical and DMA rooms and need help, so if you have time, please let him know.

➤ **Operation & Services:**

- The impregnation of a MQXF wire for Kirtana has been done. Another cable will be impregnated but for Katerina this time, using MY750 + D400.
- Impregnation tests for the NCM section are ongoing.
- Encapsulating in Araldite F + Dolomie for one power converter on going. If the result is satisfying, a serie of 100 pcs will be done.
- 3D Printing :
 - A series of 64 pcs to do in PLA for the CRAB project
 - 100 small protective boxes for humidity sensors were done in PLA
 - Manufacturing of multiple parts in Accura 25
- The manufacturing of the silicone pins for the LMF section are still ongoing
- BORIS tube: impregnation preparation is ongoing. Pending validation by project managers to complete the impregnation.

➤ **Projects (R&D):**

- Mechanical testing (Compression/Impact/short beam test) of waxes, epoxies and thermoplastics.
- Chemical ageing tests on thermoplastic polyimide-insulated wires.
- PU accelerated ageing study in progress.
- DMA study of 3D Printed polymers and epoxies with different manufacturing parameters.
- Electrical tests on polyimide films for study on quench heater materials.
- Thermogravimetric analysis of fibre samples for desizing study.