

Polymer Laboratory Weekly Meeting Summary – 31.10.2024

➤ **General information:**

- Cedric obtaining quotes for SMT Section T-Shirts.
- Christmas lunch will be planned in November.
- Power cut tomorrow morning.

➤ **Operation & Services:**

- ERM C 105 (impregnated with POLAB-Mix) coming out of oven, has finished curing. Same preparation as ERM C 106.
- Sample of ERM C 104 near pole with fibers sent to Chemical Lab for DSC testing.
- CTD Check also performed at Chemical Lab for LMF.
- Septa – 2 are currently in progress, (numbers 7 and 8), will be impregnated simultaneously.
- Next two SMC coils will be using ESC, following this we will attempt a wax impregnation.
- Impregnator test planned over the next two weeks.
- Protodune bonding finished, feedback on leak tests at cold was good. Surface preparation and gluing process being prepared to upload on EDMS.
- 3D Printing:
 - Many SLA requests
 - Receiving PEEK FDM machine next month.
 - Discussions with HLC-B for calorimeter. They require a flame retardant, radiation-resistant supports required.
 - Inquiry on the hygroscopicity of Accura resins.

➤ **Projects (R&D):**

- Impregnation of S2-Glass de-sized with modified Nb₃Sn cycle completed (EDMS 3180119)
- Solvent washing (in ultrasonic bath) tests conducted on S2 Glass for desizing study.
- Immersion tests of hardener (d230 at 60C) for 1 week for ITER being performed, in order to perform FTIR analysis.
- Irradiations in liquid Helium (epoxies, waxes, cryogenic adhesives, 3D-Printed materials) in progress.
- Framework for cryocooler setup being built.