

Polymer Laboratory Weekly Meeting Summary – 01.08.2024

➤ **General information:**

- Roland's presentation "POLAB at ICEC/ICMC 2024".
- Reminder: when working with chemicals, especially thermoset resins, please write on bucket/pot what is inside, which will help to put in in the trash. Preferably, please try to cure the resin so it is solid when putting in the trash. Otherwise, we'll need to do chemicals characterization before putting to the trash, which is a process that take time and is costly.

➤ **Operation & Services:**

- SMC109: degazing in progress, to be impregnated with POLAB Mix next week.
- MQXF cable: waiting for Kirtana because strange results (air is going through for one side but not from the other) will doing the leak test of the mold.
- Impregnation of a MgB2 cable with Translux 150 (TD150) for the souvenir of the SC link for the CERN 70th Anniversary.
- Quality control of CTD-101K for LMF section (viscosity + DSC tests) done. Results are according to specifications.
- Maintenance of the Telstar on the mixing tank and its pipes done by Cedric. Plus, oil change of the pumps.
- Casting of the first resistor with Araldite F (CERN-Reference) + Dolomie + red dye done.
- 3D printing:
 - Assembly and testing of the second Prusa FDM 3d printer + printing tests done.
 - Winding jigs in PLA for CHIC project.
 - Ultra polymers FDM 3D Printer: call for tender to be send tomorrow.

➤ **Projects (R&D):**

- Report prepared for ITER study on post-curing effects on wet-winding samples.
- DC Breakdown tests on 3D Printed PEEK with carbon fibre reinforcement.
- Short-beam bending tests on irradiated polymer samples.
- LN2 tensile tests on polymer foils.
- TGA and density analysis of composite samples for study on volume fraction calculation.
- TSB samples prepared for ITER thermal cycle study.