

## Polymer Laboratory Weekly Meeting Summary – 15.11.2024

### ➤ **General information:**

- Jean-Sebastien presents DC breakdown voltage of various FDM 3D printed materials.
- Training and commission on the PEEK 3D printer done this week. Practice to be done to achieve requirements.
- Next POLAB meeting, Christian's presentation to summarize properties of PEEK and ULTEM and their applications.
- Christmas lunch at "Bois Joly" next week.
- Please answer to Gregory Maury for the "Go kart party".

### ➤ **Operation & Services:**

- BORIS tube: next week, reflection on the impregnation system to use.
- 3DP: various parts in Accura 25, PLA and PETG. First prints using the new miniFactory Ultra 2 in ULTEM 9085 and PEEK.
- Septa coils: 1 coil per week until the end of the year. Seven coils to be impregnated.
- Reception of machined flanged in GFRP to be impregnated.
- Bounding of thermal sensors.
- eRMC #106: reception of the coil next week for impregnation.
- CHiC: impregnation of the winded inner former mock-up to be performed in the following weeks.
- Creation of a ticket to attach the 3d printers rack on the wall and floor.
- IMPREGNATOR: first impregnation test to be performed in the following weeks.

### ➤ **Projects (R&D):**

- DMA analysis of gamma-irradiated samples.
- Building of functional accessories for Cryocooler setup.
- Impregnator test procedure being prepared.
- Ongoing work on setup for impulse tests.
- Samples prepared for complementary microFTIR analyses for ITER HV wire study.
- Definition of tests for study on capacitor ageing in quench protection systems.
- Samples prepared for electrical tests on irradiated PEEK samples as part of ageing study.
- Second trial of modified Nb3Sn reaction cycle for desizing completed.
- 3-Axis gantry for automated plasma treatments has been received. Work on assembling components ongoing.
- Procurement of mica samples for insulation studies in progress.