

Polymer Laboratory Weekly Meeting Summary – 26.09.2024

➤ **General information:**

- Installation of the new high performance 3D printer in November. Therefore, the desks and the persons in the office R-015 will be moved to the office in the 927 1st floor the 1st of November, so the 3D printing machines can be installed in R-015.
- Presentation of Dante about his master's thesis topic entitled: "Towards novel electrical insulation systems for Nb3Sn high field magnets". [EDMS 3168202](#)
- Presentation of Julia about the irradiation test campaign performed on several materials in the STERIS facility (gamma-ray). Samples were tested in DMA, short beam... [EDMS 3140874](#)

➤ **Operation & Services:**

- TREFLE 96 parts produced out of the 200 for first quality control.
- FSI heads to bond with Eccobond for BE, 96 connectors in total to glue.
- Filling test with Resoltech in a 6m length tube for the building 180.
- Protodune cut should arrive next week for bonding. This time, the gluing will be performed vertically with Eccobond 286.

➤ **Projects (R&D):**

- DMA studies on quench heater materials and irradiated polymer samples.
- Short beam tests on irradiated polymer samples
- Flexural tests on quartzel composite samples for desizing study
- Preparation of samples for thermal desizing process trial
- Ageing of polyurethane pads still ongoing for PU jacks task force. New tensile samples will be added shortly.
- Report completed on the study of the adhesive strength through T-peel tests of Kapton double sided with epoxy glue for electrical insulation of HTS cables.
- Potential aging study of butyl rubber sealant used in capacitors for the quench heater power supplies, with the aim to define a lifetime.