

R&D Internship

At DuFor we are constantly improving our product portfolio by creating polyesters that are designed for recycling. One of the topics of improvement, is the design for recyclable trays and films for disposable packaging. Currently, films typically consist of a combination of less recyclable resins. Developing a full polyester product will improve the mechanical properties of the film and tray and specifically enhance the recyclability.

Secondly, PET is typically not used for 3D printing solutions. We develop recyclable polyesters with improved properties designed for 3D printing.

During this internship you will:

- ✓ Set up and perform experiments on twin screw extruder
- ✓ Set up and perform experiments on SSP (Solid State Polycondensation) unit
- ✓ Analyze and report findings, observations and recommendations for future experiments
- ✓ Set up methodology for rheological analysis and DMA (dynamic mechanical analysis)
- ✓ Set up methodology and test various compounds for 3D printing and analyzing

Techniques and methods:

- ✓ Melt flow rate (viscosity)
- ✓ DSC (Differential Scanning Calorimetry)
- ✓ TGA (ThermoGravimetric Analysis)
- ✓ 3D printing
- ✓ DMA (Dynamical Mechanical Analysis)
- ✓ Twin Screw Extrusion, compounding
- ✓ Solid State Polycondensation

You will be working in a small research minded team with lots of freedom for experimenting. The final project can be defined and limited together.

Internship compensation included.



If you have any questions please contact
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