Subject(s) covered during this period:

- Improvement in the productivity of crystallized grades on one of the production lines
- Solvent quality improvement /purification

General objectives of this period in company:

The work-study position would be supervised by the process engineer from the SPOL service who is responsible for the subjects listed below:

The Orgasol unit is a polymer manufacturing unit (polyamide 6/12 and copolyamide) of which one of the raw materials is produced on the Mont site (Lactame 12). Orgasol applications cover a very wide field, ranging from aeronautics, 3D printing and also cosmetics. This production unit is located in the Arkema Mont factory in the Pyrénées Atlantiques. The unit is made up of 3 batch production lines and additional workshops operating continuously, using numerous unit operations: polymerization, liquid/solid separation, drying, transport and sieving of powder, decantation, distillation.

1) Improvement in the productivity of crystallized grades on one of the production lines

Analysis of available data on the production of crystallized grades on the factory's production lines.

In collaboration with the project team (researcher based at CERDATO, research center, in Normandy, production engineer, process engineer), propose the necessary modifications to existing recipes (new distillation parameters, speed of temperature reduction before injection of the catalyst, etc.) to improve the productivity/efficiency of some crystallized grades. Management of industrial tests in order to validate the new recipe.

2) Solvent quality improvement /purification

Participate in a Working Group to improve solvent quality (presence of impurities). Propose technical solutions to achieve the targeted objectives -> equipment design, project monitoring in accordance with Arkema methodology, participation in equipment consultation, industrial trials follow-up.

3) During the work-study period, one or two technical improvement topics may be requested.

Targeted skills:

- The expectations are :
- - Technical skills, very good knowledge of physicochemical processes
- - Autonomy, Rigor, Curiosity, Appropriation and in-depth study of subjects, relational quality and teamwork