



Research Programs



Introduction

Within research program services, SPECIFIC POLYMERS bring its expertise in functional building-blocks, monomers, polymers and material synthesis for R&D services of large companies. The different points characterizing research program services are:



Understand project scope & customer's objectives



Reply to customer wishes and/or propose innovative alternatives



Plan and prioritize the research with the customer



Synthesize & deliver targeted (macro) molecules for customer testing



Interact with the customer and adapt the research plan



Provide detailed R&D reports

Research programs are most of the time divided in several **Work Packages** (WP) which gather the research strategies that can answer to on specific objective. All scientific strategies are laid down conjointly between SPECIFIC POLYMERS and our customers. In addition to the customer's ideas and strategies, we can put forward alternative ideas based on our experience (breakthrough innovation, cross-fertilization).

Research Programs Content

Research Programs can contain several kind of R&D services:

State-of-the-art Services: In depth analysis of the literature to define the most suitable scientific strategies to work on. SPECIFIC POLYMERS has access to a large database of scientific papers and patents in the field of organic chemistry, polymer science and material science.

Custom Synthesis services: Evaluation of synthesis feasibility - Reproduction of known synthetic pathway from scientific articles or patents - Design of innovative (macro)molecules - Optimization of synthetic pathway for scale-up production perspectives.

In any cases, the objective of SPECIFIC POLYMERS is to provide a sufficient quantity of product, thus our customers can **evaluate the developed product in their own application**. Synthetic strategies will be defined depending on the quantity needed by the customers and in adequation with targeted Technology Readiness Level in the project (i.e. upstream research vs. industrial research).

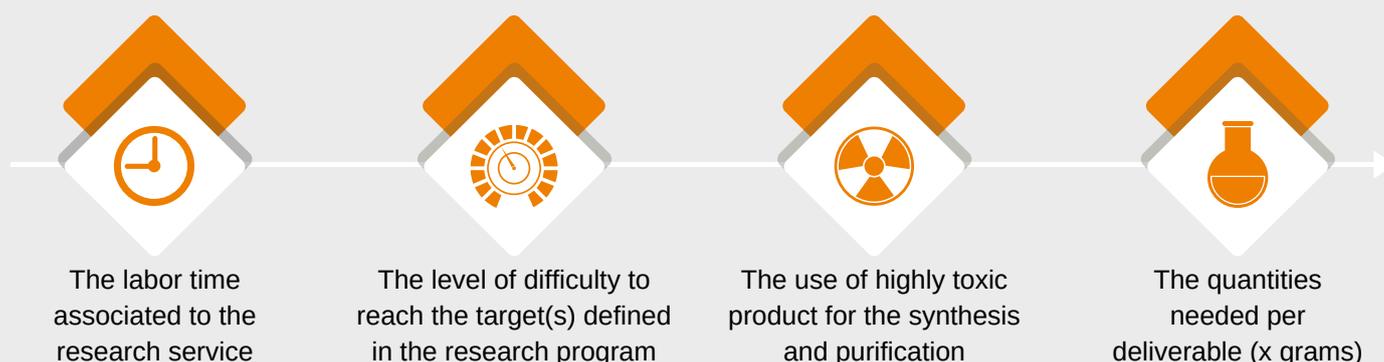
Delivery of SPECIFIC POLYMERS R&D products: In the scope of a research program, it is possible to dedicate a part of the experimental credits to the synthesis of R&D product already existing in our portfolio of functional molecules and macromolecules without any additional quotation and order.

Physico-chemical analysis services: SPECIFIC POLYMERS owns high technology analytical equipments which allow us to understand the structure-performance-properties relationships. In addition, SPECIFIC POLYMERS is also working in close collaboration with trusted partners (industrial or academics) able to perform complementary analysis (GCMS, LCMS, Elementary Analysis, DLS, Triple Detection SEC, Rheometry, Mechanical testing, etc.).

Project Framework

Every collaboration starts with the signature of a **Non-Disclosure Agreement (NDA)** that protects the technical and scientific information shared by both parts. In a scope of a research program, all the research performed by SPECIFIC POLYMERS is achieved in response to a specific request from the customer.

In the scope of a research program, SPECIFIC POLYMERS is selling Experimental Credits (EC) that correspond to an offset number of experimentations planned to reach defined objectives. The Experimental Credit is calculated by the researchers on the basis of the following parameters:



Project Monitoring

Research Programs are medium to long term collaboration (6 to 12 months) in which various innovative solutions can be explored in order to solve out one or several problematics from the customer. Regular meeting are organized between SPECIFIC POLYMERS researchers and the customers to exchange on the progresses of the project, the possible difficulties encountered during the period and on the work perspectives for the next period. Since SPECIFIC POLYMERS researchers are not necessarily expert in the customer field of research, the understanding of the customer application and corresponding specification always helps to be more efficient in the research performed in our laboratories.