

# Fine chemistry process development

Outsourcing the development and optimization of synthetic routes



The research and development of synthetic routes is often a complex and costly process which includes many stages and which can sometimes overload an organization's resources. To expedite the development of a new production process, companies in the [fine chemistry, pharmaceutical and biotechnology industries](#) can outsource part or all of it.

## Our solution

Applus+ Laboratories offers a complete service for the development and optimization of synthetic routes which includes:

- New synthetic routes design
- Optimization of established/existing synthetic routes
- Customized synthesis of organic compounds
- Development of non-infringing routes. Intellectual property preliminary analysis (patents)
- Critical parameters definition
- Use of DOE (Design of Experiments) techniques
- Process and product risk assessment
- Solid state studies.

Our expertise and our facilities allow us to participate in all the stages of the development of chemical processes

- Fine chemistry process development
- Scale-up of chemical processes
- Analytical methods development and validation



- Production under GMP

Applus+ Laboratories performs all its projects with the support of a highly qualified analytical department. Each of the compounds supplied by our team has the supporting analytical documentation needed to ensure its identity as well as its purity.

We assign a project manager to each project who establishes a permanent link between your organization and Applus+ experts.

Applus+ Laboratories has worked for over 15 years with companies in the fine chemicals, pharmaceutical and biotechnology industries offering services from the research stage to the product marketing stage.

We work under global reference standards (FDA and EMEA). We apply the highest criteria of confidentiality.

### **Benefits**

- Speed up the development time and expand your company's product portfolio
- Increase performance and productivity,
- Collaborate with a scientific team focused on industrial production
- Optimize staff and structural costs