



CONTRACT RESEARCH ORGANIZATION

LABORATORY // PILOT // SCALE-UP

It starts with
an unknown
path.

We turn it into
a process.

Every breakthrough starts with a question.

We turn that question into a scalable solution.

CRO LABORATORY

Creating Bonds Together –Turning Ideas into Reality

WHY WEYLICHEM CRO

Not every project starts with a defined process.

Sometimes, the real challenge is finding the right path in the first place.

It starts earlier than most think

Creating Bonds Together – Turning Ideas into Reality.

At WeylChem, this ambition starts long before production – in our CRO laboratories.

Custom Research is not a preliminary step. It is the base for everything that follows.

Why CRO matters

Traditional project management is built for execution. It works best when timelines, costs and quality targets are defined, based on proven chemistries and established technologies.

But what if the path does not yet exist?

This is where CRO creates value: at the stage where routes are still open, feasibility must be explored and innovation is still possible.

Our approach

We don't think in isolated steps. We think from the final result backwards.

- Early involvement
- Close collaboration with customers
- Direct connection to production

From the very first idea with industrial implementation in mind.



WHAT WE PROVIDE

From undefined challenges to validated solutions.

Our CRO services create clarity, structure and direction – from the very beginning.

Our services



Custom Synthesis

Literature-based route development

Developing new synthetic routes –
from idea to validated foundation

Route selection and up-scaling



Consulting

Solving challenges – Development of practical solutions

Analysis of existing processes

Application-focused adjustments



Route Optimization

Rethinking existing processes –
Increasing efficiency & enhancing quality

Risk-Reducing Development from an application
perspective

Economic optimization



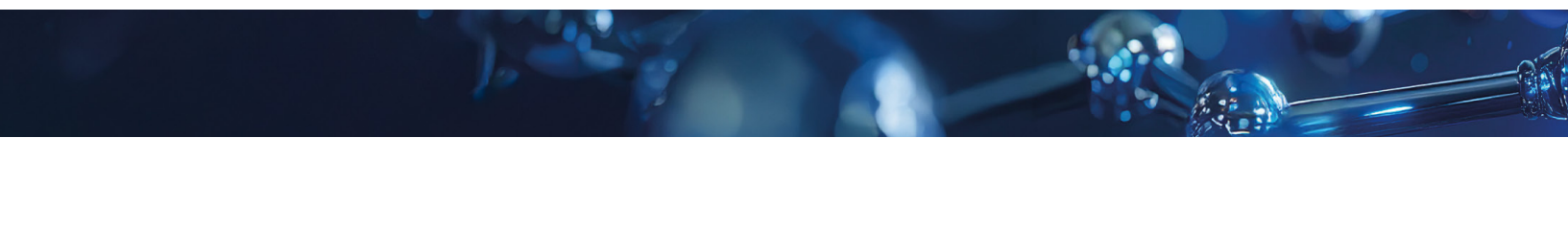
Additional capabilities

Lab and piloting services

Sampling

Analytical services & method development

Safety and environmental studies



TECHNOLOGY & EXPERTISE

Innovation needs more than ideas – it needs the right tools.

Our laboratories combine advanced chemistry with real industrial relevance.



Broad chemistry expertise

Organic synthesis

Metal-organic chemistry

Sulfur chemistry

Phosphorus (PCl_3) and silane chemistry

Hydration, oxidation and handling of various hazardous gas reactions

Polymerizations

Handling of highly reactive substances (Cl_2 , Br_2 , H_2S , TiCl_4 , RMX)



Technological capabilities

Temperature range: $-78\text{ }^\circ\text{C}$ to $+250\text{ }^\circ\text{C}$

Pressure reactions up to 30–40 bar

Loop reactor (20 L) for hydration processes gas reactions (loop reactor, autoclave)

Continuous and batch-Distillation (thin-film evaporation, high separation efficiency)

Automated reactor systems (EasyMax)



Analytical capabilities

Chromatography (HPLC, GC-FID, UHPLC, GC-MS)

Titration methods and standard analytics

Advanced analytics (e.g. NMR, ICP-OES) in cooperation with external partners

Method development by our analytical experts

What makes the difference

Our strength is not only technology.

It is how we connect it to industrial implementation.



SELECTED PROJECTS

Real impact starts with real challenges.

These examples show how early-stage research turns into tangible results.

Methane Reduction Project (Agriculture)

Development of a scalable lab process for an active compound to reduce methane emissions

Successfully completed CRO project

2 kg of qualification material produced and later approved

Basis for further scale-up established

Turning sustainability into measurable results

Epoxy Systems for Aerospace

Development of synthesis routes based on green raw materials

Application in high-performance materials

Handling of complex and hazardous chemistry

Making complexity manageable



FROM LAB TO PRODUCTION

The real difference is what happens next.

At WeylChem, research is not the end – it is the beginning of implementation.

Seamless integration

What sets WeylChem apart is the connection between:

Custom Research (CRO)

Industrial implementation (CDMO)

Our promise

From the first idea
through development and scale-up
to commercial production

Everything within one integrated system

What this means for you

Faster implementation through connected
development and execution

Fewer interfaces – one trusted partner

Greater reliability and long-term success.

**It starts in the lab.
But it doesn't end there.**

Let's turn your idea into reality.



CRO LAB



CREATING **BONDS** TOGETHER –
TURNING **IDEAS** INTO REALITY

THE TEAM

Get in touch with our CRO experts:

Dr. Julian Scherr, Global Head of Project Portfolio
Julian.Scherr@weylchem.com

Tobias Theiss, R&D Chemist

Dr. Aravinda Kumar, R&D Chemist