

Ch—C

Elementary yours
Since 1994

**Custom
Synthesis &
Fine Chemicals**

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Ch-C, a Romanian family owned business, is national leader in the R&D and production of high purity organic and inorganic chemicals.

During the 30 years of activity in the production of chemicals, Ch-C has developed an anticipative attitude, designed to respond to market's challenges. Our products and services portfolio is focused on flexibility and the ability to translate the technology from the laboratory to the industrial scale.



Ch-C Divisions

Fine Chemicals

API intermediates,
non-pharma active
ingredients

Commodity Chemicals

Tailored made blends,
technical chemicals,
analytical reagents

Branded Chemicals

Water treatment chemicals,
disinfectants, cleaning
solutions for indoor & outdoor.

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A Family Business

„July 12, 1994. At first it was the idea, followed by a dream turned into reality. At first we were just the three of us and we worked only in Iași. Now, we have valuable partners all over Europe. I know it's all about hard work, perseverance, seriousness, innovation, consistency and longevity.

And I also know that Ch-C will be led by the next generations. This is what our father wanted 30 years ago, to create a company for generations.”



RADU-GABRIEL CIOBANU, CEO



Vasile
CIOBANU

FOUNDER, Co-Owner



Radu-Gabriel
CIOBANU

CEO, Co-Owner



Ștefan
CIOBANU

BUSINESS UNIT MANAGER,
Co-Owner

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Key Decision People

Currently, we have a team of 47 dedicated individuals at Ch-C, each contributing their expertise to our collective success. Notably, several of our employees have been with us for over 15 years, a testament to our positive work environment and commitment to professional development.

We take pride in our dynamic workforce, whose extensive experience and deep industry knowledge drive our innovations and lead us to new achievements. We're enthusiastic about the future and eagerly anticipate continued success through the dedication and expertise of our team



**Marian
ZGĂVÎRDICI**

Head of Production



**Cristian
LOGIGAN**

R&D Manager



**Ionuț-Marian
COLBEA**

R&D Business Development
Manager



**Geta
CIOBANU**

Regulatory Compliance
Officer



**Cristina
LOGIGAN**

Global Sales Manager



**Mirela
PASERE**

Supply Chain Manager



**Claudiu
VENIN**

Chief Financial Officer



**Elena-Lidia
MOȚCO**

Quality Assurance Coordinator

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After a fulfilling career in chemistry and many years spent working for two important chemical players in Romania (Antibiotice S.A. & Institute of Macromolecular Chemistry "Petru Poni"), Mr. Vasile Ciobanu has founded Ch-C. In the beginning, the main activity was the production and distribution of analytical reagents.

1994

1998

2002

Radu Ciobanu, the eldest son and recent graduate from the Faculty of Chemistry of Alexandru Ioan Cuza University Iași, joins his father and takes part in developing the family business.

Ch-C extended the manufacturing site in Iași, which has become, over the years, the company's headquarters with administrative offices, production area and storage halls.

The company obtained its first ISO 9001 certification which sets the criteria for a quality management system.

2003

The company focused on the production of customized chemical solutions with high added value and applicability in various industries and fields, from substances used for anti-hail equipment, to chemical products used for oil wells. Ch-C started to become a strategic partner for major national and multinational companies.

2007

2008

Ch-C started the dangerous chemical waste management by collecting historical chemical reagents from all over Romania, solving a real environmental problem and, at the same time, capitalizing on a new opportunity in the market.

Ștefan Ciobanu, the youngest son, joins his brother and father in the company's management, after the graduation from the Faculty of Chemistry of Gheorghe Asachi Technical University Iași.

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2013

Ch-C started a second business unit which is producing fine chemicals by multi-step synthesis, in the beginning for only one German customer.

2017

The third company business unit – the commercial chemicals division – was created, along with its first brand: Kloer. Kloer was launched in the biggest DIY chain stores in Romania and is the only Romanian brand of pool water products.

2018

The company's exclusive partnership on multi-step synthesis ended, therefore Ch-C started working with new customers, developing successful new projects, especially in the Western Europe and Israel.

This is the year when Radu Ciobanu takes over the management of the company and fulfills one of his father's wishes: to create a company for generations.

2019

In the context of regionalization and the idea of securing the supply chain, Ch-C has focused on becoming a reliable supplier for companies in Western Europe, especially for those in the pharmaceutical industry. Therefore, Ch-C has started the process of implementing GMP procedures.

2020

2021

Ch-C started expanding the R&D department and developed more custom synthesis products with own know-how and multi-step synthesis reactions.

The company developed Dr. Chemical, a commercial brand of professional disinfectants, efficient against Coronavirus. Due to the lack of disinfectants in Romanian hospitals and institutions, Ch-C stepped in and donated a large part of our production, in the context of the COVID-19 pandemic.

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2022

Ch-C România develops and implements its first proprietary molecule (API) on an industrial scale. The company also begins implementing GMP procedures.

2023

In the context of regionalization and securing the supply chain, Ch-C România focuses on becoming a trusted supplier for Western European pharmaceutical companies. It successfully launches the first pharmaceutical molecules developed in-house and implements them on an industrial scale.

Ch-C România celebrates 30 years since its founding and records remarkable achievements across several divisions:

Obtains the first internationally certified audit authorized by a leading pharmaceutical industry firm.

Launches the first European project in chemistry with industrial scaling, in collaboration with a consortium of companies and the National Research Institute "Petru Poni" from Iași, as the project leader.

2024

Initiates a strategic partnership with a preastigious Israeli company in the Flavours & Fragrances industry, with a €1,000,000 investment.

The Commercial Division of Ch-C România launches two new product lines: "KLOER Home & Garden" and "KLOER SPA".

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Company Culture

Philosophy

In order to create sustainable partnerships and optimise resources, Ch-C has developed a value chain that reflects a highly customer-oriented policy. From specialised demand analysis and flexibility in translating the laboratory technology through pilot scale up to production line, to responsible management of environmental problems and people's safety.

Mission

Our mission is to provide the highest quality services and products, thus gaining customer confidence. With our experience and expertise in the field, we are able to develop a sustainable company, oriented both towards partners and the community at large.

Vision

The company's vision is to assert ourselves on the European and international markets through reliability and continuous ascent. It keeps us focused on what matters the most: to become Eastern European market leaders in terms of engineering and production of high purity organic and inorganic products.

Main Goals

We are focusing on attracting key partners to develop custom synthesis products and produce fine chemicals with high added value, but also having an active presence on the European and Israeli market by creating enduring partnerships with targeted industries: pharmaceutical, cosmetics, food, electronics, dyes, agrochemicals, flavors & fragrances, solar power, veterinary pharmaceuticals.

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Sustainable Partnerships


For Ch-C, sustainable partnerships are built on common values: respect for quality, accountability, transparency and flexibility. We invest in partnerships that create value around us and increase the quality of life for community.

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Advantages in doing business with Ch-C

- ✓ Multipurpose plant
- ✓ Flexibility
- ✓ Total transparency
- ✓ 3 shifts / 7 days a week
- ✓ Own maintenance unit
- ✓ Cost optimisation
- ✓ Specialised workforce



Moreover, we have been proudly collaborating with two of the most prestigious universities in Iași, in order to facilitate the delivery of learning opportunities for the chemistry faculties' students.

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R&D Specialized workforce

Ch-C has a highly dedicated and talented Research and Development team, which is eager to be challenged with the most interesting projects. The flexibility and openness for innovation are the main pillars that make our team a reliable partner.

R&D and Kilo-Lab Equipments

- ✓ Jacketed glass reactors (from 1 – 100 liters) completely equiped, temperature range of operation: -20C to +200 C
- ✓ Vacuum pumps up to 0.1 mbar
- ✓ Laboratory fractional distillation column system with automatic reflux ration divider
- ✓ Vacuum dryer
- ✓ Autoclave of SS with stirring
- ✓ Rotaevaporators
- ✓ Centrifuge
- ✓ Filter

R&D „Software”

- ✓ Designing long-term, cost-effective processes for fine chemicals and APIs Intermediates
- ✓ Development of Highly Complex Processes from Route Discovery to Large Scale Synthesis
- ✓ Scale-up of Robust Processes
- ✓ Expertise in Process Optimization
- ✓ Design and Development of new Routes of Synthesis and implementation of new synthetic methodologies for 2nd Generation Processes
- ✓ Troubleshooting externally-developed processes by scale-down
- ✓ Technology Transfer -in/out
- ✓ Micro technologies
- ✓ Handling High Potency APIs intermediates & non-pharma active ingredients

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Quality Control & Analytical Capabilities

We ensure a high and consistent quality for all processes and products through a comprehensive quality management strategy, based on the ISO 9001 international standard.

The R&D analytical department offers in-house development of new analytical methods, followed by validation and the transfer of analytical methods.



Chemical and instrumental analysis

- ✓ HPLC, UPLC with DAD UV detector
- ✓ GC, Headspace-GC with FID and ECD detectors
- ✓ AAS with flame techniques
- ✓ UV-VIS
- ✓ IR & NMR (off-site access)
- ✓ Potentiometric titrator
- ✓ Thermobalance (for LoD determination)

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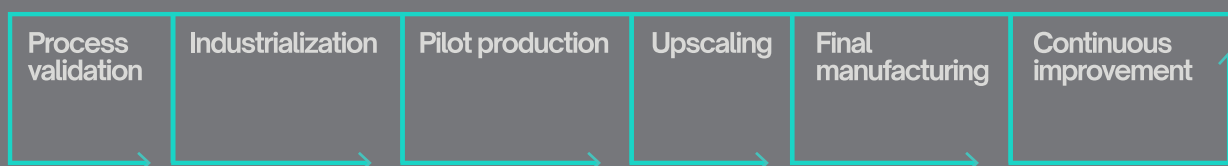
INQUIRY & RESEARCH



LAB WORK



PRODUCTION



Customer satisfaction is our key driver

Additional services:

- ✓ Supply Chain Management & Procurement
- ✓ Warehousing
- ✓ Logistics & Transportation
- ✓ Reach Registrations
- ✓ Support to Regulatory Filings
- ✓ Intellectual Property Assessments
- ✓ Legal Support / Dedicated legal permits

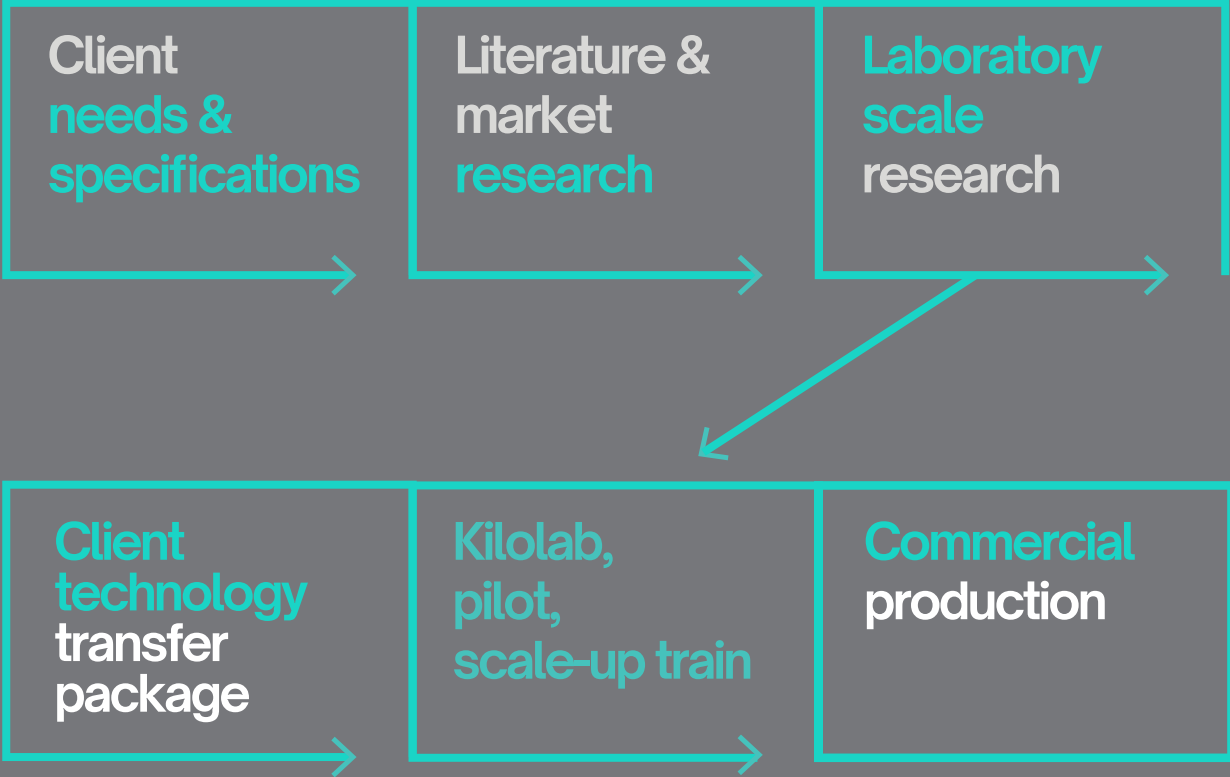
Ch-C's project management is based on continuous support and improvement in order to meet the customer's expectations.

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CDMO

Process



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Manufacturing Site

Ch-C is located in the industrial area of Iași, Romania, covering 10.000 sqm, with the possibility of expanding the facilities.

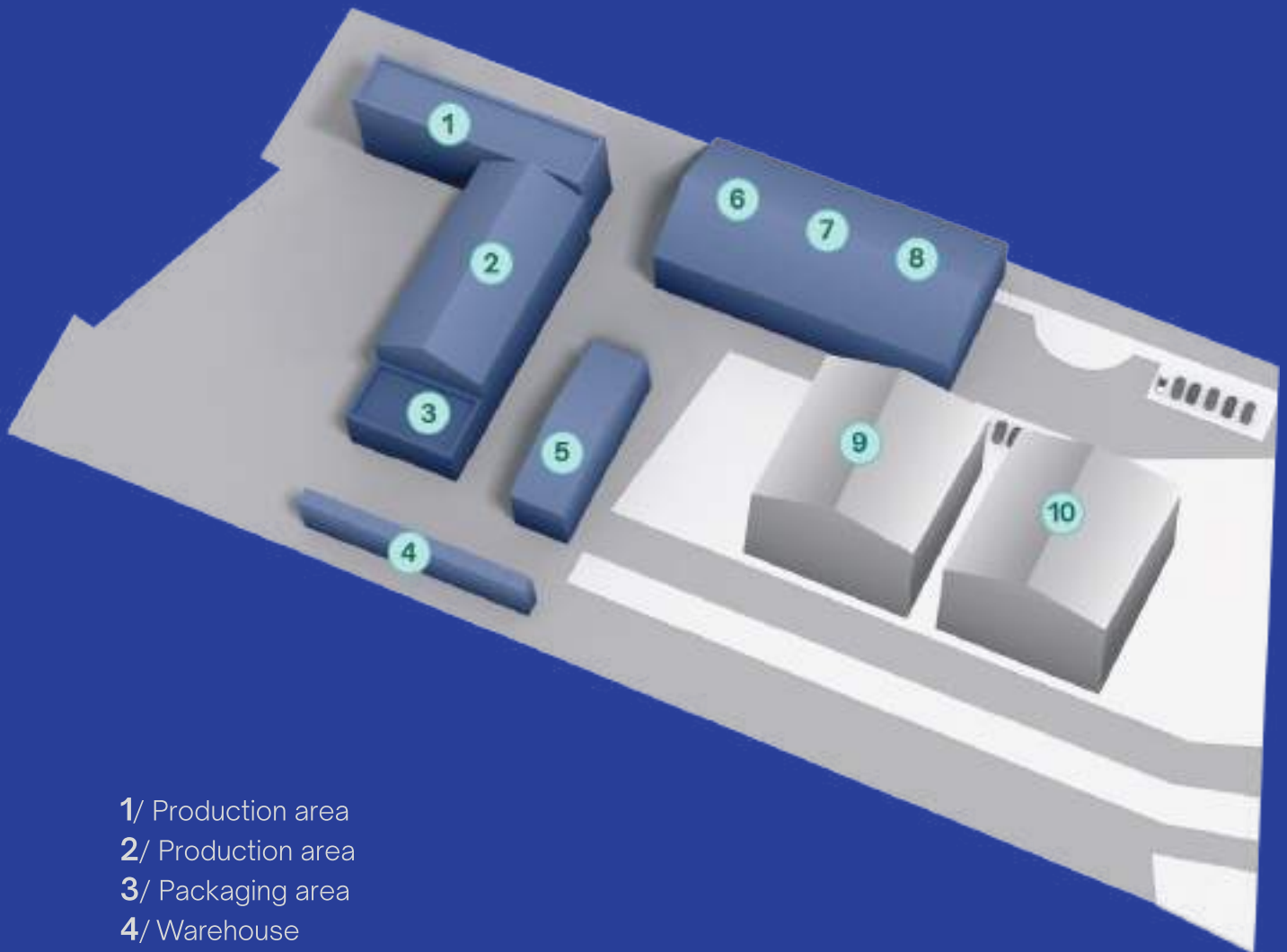
Industrial plant, analytical lab, waste treatment

- ✓ Very flexible equipment configuration and plant set up adapted to each product campaign
- ✓ The manufacturing equipment is designed to have multipurpose reaction trains and dedicated manufacturing equipment
- ✓ Ability to handle complex chemistry
- ✓ Capturing new emerging technologies
- ✓ Focus on Health, Safety & Environment
- ✓ Global QA Compliance

Total area
10.000sqm

Production area
870 sqm
extending up to 1.780 sqm

Storage area
450 sqm
extending up to 1.050 sqm



- 1/ Production area
- 2/ Production area
- 3/ Packaging area
- 4/ Warehouse
- 5/ Warehouse
- 6/ Quality control area
- 7/ R&D and pilot area
- 8/ Office area
- 9/ New production area
- 10/ New warehouse

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Production Equipment

Our know-how and the various range of capacities make us a reliable supplier for your products.

We can perform multi-stage synthesis on a multi-ton scale using various types of reactors and a total volume of 60 m³. Ch-C can guarantee production of up to 100 tons per product within the multi-purpose plant's wide range of capabilities.

Total capacity of production

+10.000 tons/yr
for custom formulating

+100 tons/yr
for custom synthesis

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Capacities

150 L – 4800 L

Glass-lined
reactors

550 L – 6500 L

Stainless steel
reactors

1000 L

Stainless steel
autoclave

5 - 7 m

Fractional distillation
column system

0.5 barg

High vacuum
pump

**Temperature range from
-10°C to 300°C**

up to 400 L	Stainless steel centrifuges
100 kg - 500 kg	Rotary, Fluid bed, Tray Driers
9 MM/yr	Bottling filling line
360.000/yr	Canister filling line

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Chlorination	Amination/ Deamination processes	Acylation and Alkylations by Eco-Friendly Methods
Heterocyclic Compounds (synthesis and processing)	Indoles synthesis (Fischer, Leimgruber- Batcho etc.)	Redox Reactions
Acetal synthesis	Spirobisindanes synthesis	Conventional chemical transformations
Bromination	Grignard reaction	Alcohol protection with Methoxymethyl ethers (MOM)

Sulfonation reactions	Oxidative Transformations at Carbon, Nitrogen and Sulfur atoms	Epoxides Chemistry (synthesis and processing)
Cycloaddition processes: Sigmatropic and Thermal Rearrangements (Claisen)	Williamson ether synthesis	Hazardous chemistries
Diazotization and Azo Coupling	Wolff-Kishner Reduction	Nitrogen and Oxygen Methylation and Demethylation
Amino Acids Protection and Derivatization	Metal Hydride Reductions	Catalyzed Esterifications (in melt)

*Lab Scale

**Kilo Lab

***Industrial Scale

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Technologies

- ✓ High temperature (up to 300 °C) and high pressure (< 20 at) processes
- ✓ Crystallization Engineering – Large Scale Reactive
- ✓ Crystallization
- ✓ Nanoparticles handling

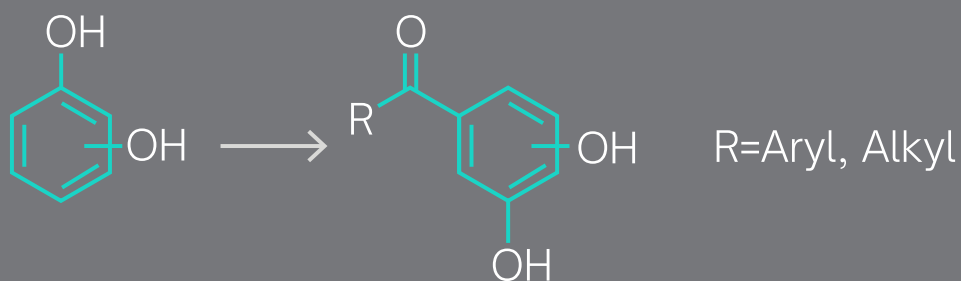
Ch-C is licensed to produce fine chemicals employing methods that priority do not exclude the use of any chemical as a raw material.

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Chemical Reactions

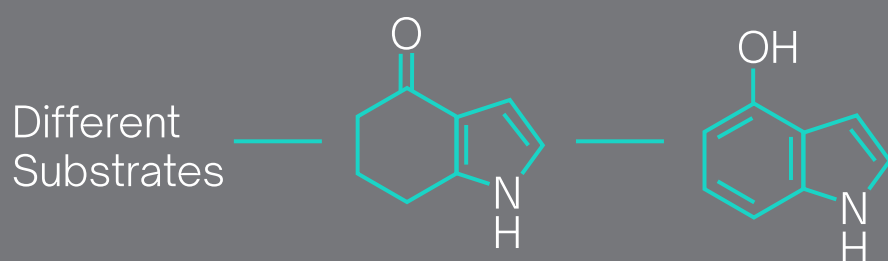
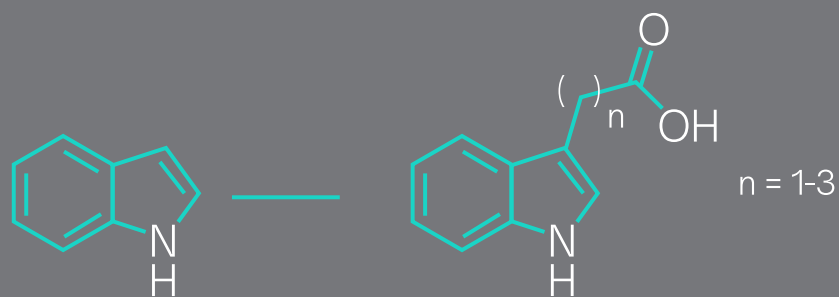
ARYL AND ALKYL KETONES



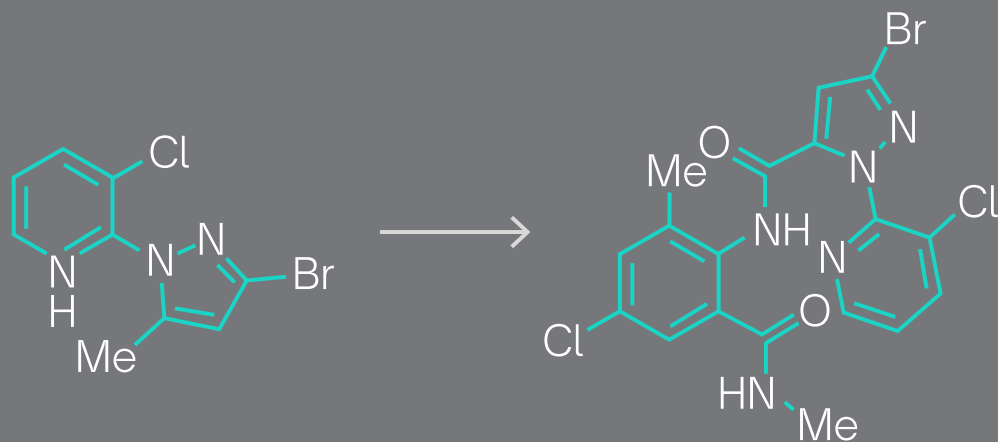
FUNCTIONALIZATIONS OF 9H-CARBAZOLES



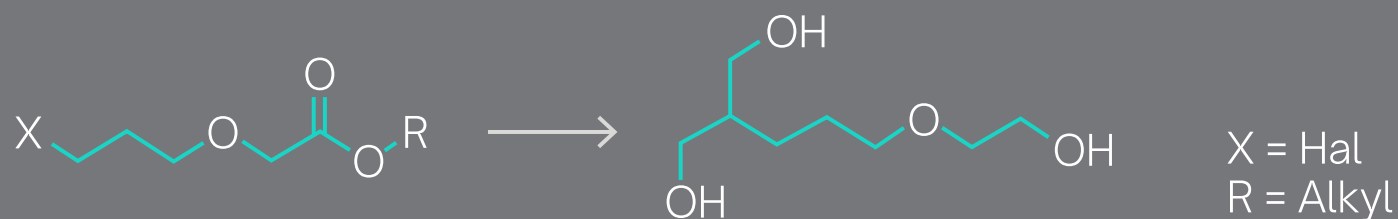
INDOLES CHEMISTRY



CARBOXYLIC ACIDS DERIVATIVES

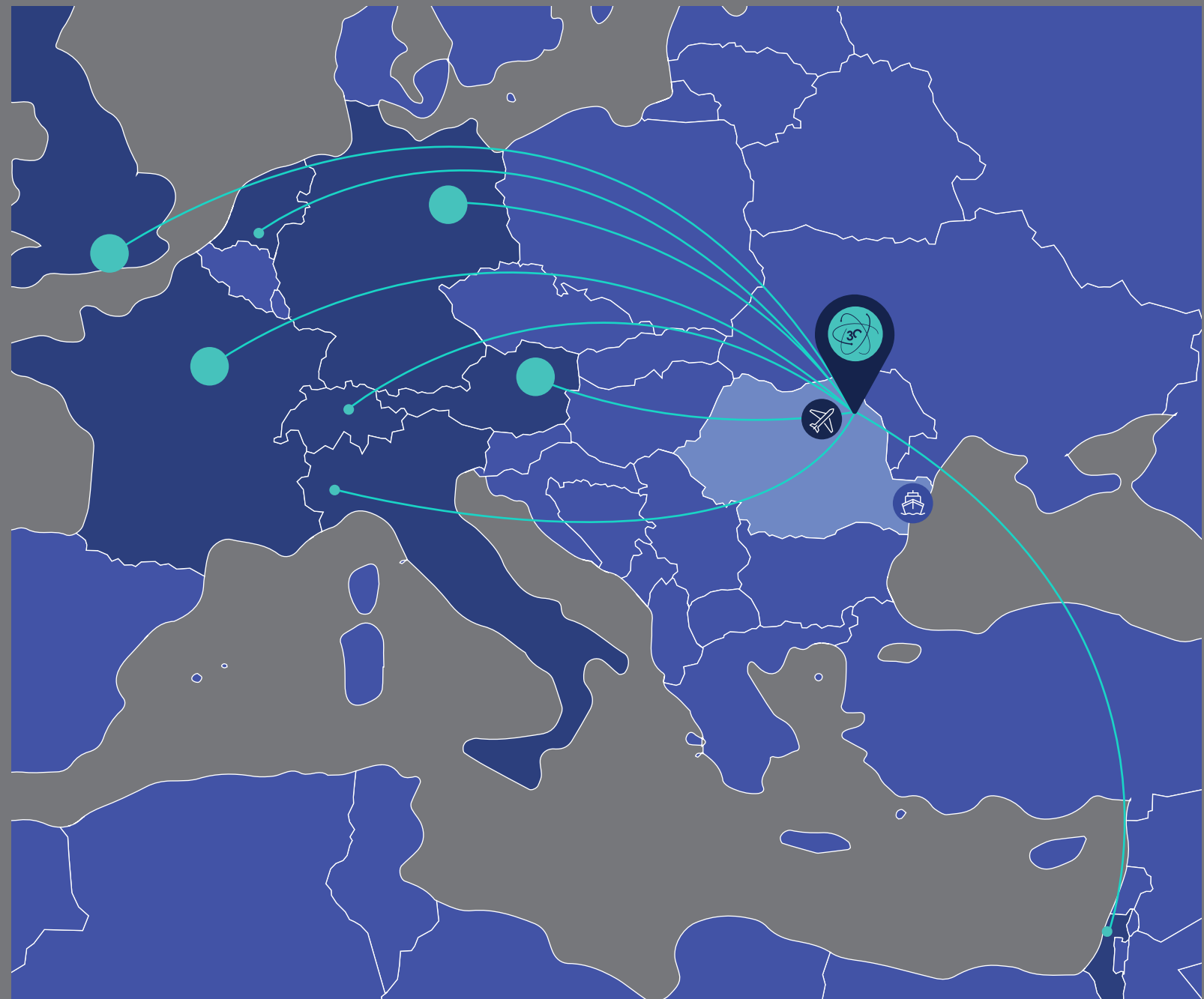


POLYHYDROXYLIC COMPOUNDS





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Upscaling production

From laboratory through pilot scale up to production line.

-  Air Cargo transport (Iași International Airport)
-  400 km to the nearest port (Constanța)

In the context of recent global events, a new paradigm has challenged the world: reshoring. Ch-C supports this movement in order to diversify the production and supply chains and to promote sustainable investments within the European Union, regarding the chemical industry.

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