



## New building blocks for medicinal chemistry

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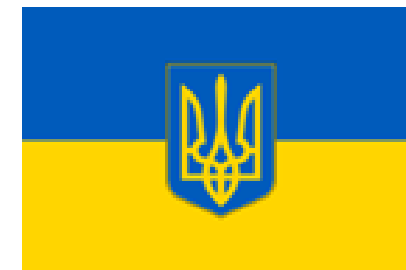
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Successful R & I in Europe: 12th European Networking Event  
Dusseldorf, Germany 2025

## Topics we would like to explore in our future Horizon Europe projects

- ✓ Late-stage functionalization of drugs
- ✓ Photochemical fluorination of organic compounds
- ✓ Photochemical amination of organic compounds
- ✓ Light-mediated synthesis of biologically relevant heterocycles and their postfunctionalization
- ✓ Computer-aided discovery of new multicomponent reactions for drug discovery



We have scientists in our team who are ready to collaborate and who have completed scientific internships at prestigious universities:



# Our experience and what we offer

**Physico-chemical criteria: "rule-of-two" (Ro2)**  
for the building block fragment that is incorporated

MW < 200, logP < 2, HDon ≤ 2, HAcc ≤ 4, RotB ≤ 4

(can be somewhat extended for bi- and trifunctional compounds);

balanced approach to  $F_{sp^3}$  favoring saturated

( $F_{sp^3} = 0.8...1$ ) and mostly heteroaromatic ( $F_{sp^3} = 0.2...0.5$ ) compounds

## Structural criteria

Additional group  
(can be optional)

FG' = NH<sub>2</sub>,  
CO<sub>2</sub>H, NHPG etc.

FG'

Polar group  
e.g. OH

Hydrophilic  
aromatic  
heterocycle

Fluorine-  
containing  
group

Low-MW  
alkyl /  
cycloalkyl

...

act as "single pharmacophores" and/or  
ADMET modulators

Saturated  
carbo-/heterocyclic or  
heteroaromatic core

FG

Functional group amenable  
to commonly used reactions,  
e.g. CO<sub>2</sub>H, NH<sub>2</sub>, CHO,  
SO<sub>2</sub>Cl, B(OH)<sub>2</sub>, ...

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If you have a need for unique compounds for your medicinal chemistry projects, we are pleased to offer:

- Building blocks (amines, acids, amino acids, amino alcohols, bi- and tricyclic cage compounds etc.) that can be utilized in the early stages of drug design
- Design and synthesis of compound libraries valuable for *in silico*, *in vitro* and *in vivo* bioscreening
- Synthesis of drug-like compounds (e.g. cage compounds, N,O,S-heterocycles, etc.)
- Custom organic synthesis up to 100 g scale. Synthesis of novel or known organic compounds for pharmaceutical, agrochemical, and materials industries
- Stable isotope labeling – synthesis of deuterium-, <sup>13</sup>C-, or <sup>15</sup>N-labeled compounds
- Contract Research & Collaboration

## The type and role of partners we are seeking

We seek partners with complementary expertise and resources to collaborate effectively in achieving our mutual goals

### Specifically:

- Provide insights into market demand for specific building blocks and reagents relevant to MedChem projects
- Participate in joint research on innovative synthetic methods (organo- and photoredox catalysis, green chemistry)
- Offer access to advanced analytical equipment and facilities (NMR, LCMS, HRMS, X-ray, etc.)
- Co-author publications to disseminate results in the scientific community
- Support commercialization efforts and assist in scaling up production
- Provide raw materials and logistical support for large-scale synthesis

This partnership will ensure mutual benefits through shared expertise, risk reduction, and faster progress toward innovation and commercialization.

### Open Calls:



# We are proud to publish our results in prestigious journals and we are open to new collaborations!

