



Synple Chem and Enamine Partner to Accelerate Chemical Space Exploration Using Predictive Automated Synthesis

The highly standardized automated synthesis platform delivers a new 1 billion compound chemical space after being charged with 300 thousand stock building blocks

Kemptthal, Switzerland and Kyiv, Ukraine, April 29, 2024: Synple Chem, an innovative developer of integrated automated chemical synthesis solutions, announced today a strategic partnership with Enamine, a world-renowned supplier of building blocks. The partners agreed to jointly develop a new chemical space by fueling the world's largest collection of building blocks provided by Enamine to Synple Chem's reaction outcome prediction tools. Researchers will be able to download the resulting compound library and search it using their workflows. Selected compounds will be synthesized by Synple Chem's automated synthesis platform.

A large collection of diverse building blocks and thoroughly standardized and predictable chemical reactions are two elements that have proved critical in the success of Enamine's virtual space of REAL Compounds. Synple Chem has developed an automated rapid multi-step synthesis platform, "Synple". It conveniently uses a set of different cartridges to conduct a number of simple reactions and workups in a consecutive way with high yields. The companies agreed on a prompt supply of Enamine building blocks from its local stores in Europe and the USA in a specific format that is fully compatible with the automated platform and ensures the immediate start of the synthesis.

The partners extend into new regions of highly tractable chemical space, containing around one billion compounds that can be rapidly and cost-effectively explored. This rich chemical diversity complements the existing Enamine REAL Space and offers researchers significant new opportunities for discovery and innovation. The virtual space is freely available for virtual screening and library members can be ordered on demand from Enamine or Synple Chem with short lead times enabled through automated synthesis.

"Synple Chem has leveraged highly standardized reaction outcome data to develop predictive models for Synple-compatible reactions," says Benedikt Wanner, PhD, CEO at Synple Chem. He continues: "This enables the enumeration of new chemical space that is truly tractable and rapidly accessible using an automated approach. Collaborating with Enamine, recognized for its prompt delivery of building blocks, provides the opportunity to fully accelerate hit discovery."

Vladimir Ivanov, PhD, Executive Vice President at Enamine, commented: “Enamine is committed to continuous innovation and acceleration of the global drug discovery process. We are pleased to announce our partnership with Synple Chem, reinforcing our commitment to this mission. We are also happy to provide related follow-up products and services, including analog-by-catalog from our REAL space and the MADE collection of building blocks.

About Enamine:

Enamine is a scientifically driven integrated discovery Contract Research Organization with unique partnering opportunities in exploring new chemical space. The company combines access to the in-house produced screening compounds (4.2M in stock) and building blocks (300K in stock) with a comprehensive platform of integrated discovery services to advance and accelerate the efforts in Drug Discovery.

About Enamine REAL Space:

Enamine REAL Space contains over 39 billion make-on-demand molecules that can be synthesized at Enamine extremely fast (3-4 weeks), with high feasibility (over 80%), and inexpensive. The REAL compounds are created by parallel chemistry through the compilation of 137,000 building blocks via 167 different synthesis protocols, underlying Enamine’s approach to design make-on-demand compounds to maximize synthesis success rate.

For more information on Enamine, please visit the website: <https://enamine.net>

About Synple Chem:

Synple was founded in 2016, as a spin-off from ETH in Zürich, with the aim of providing easy to use, safe, efficiency-enhancing organic synthesis solutions that help accelerate discovery research. Since then, the company has developed a unique type of automated synthesis platform which was recently empowered by predictive AI tools.

For more information on Synple Chem, please visit the website <https://synplechem.com>

Access to Synple Enamine Space:

<https://drive.google.com/drive/folders/1EJ14VquSeGQjs78-L3w80Z1905QlfbM?usp=sharing>