

**Press Release** 

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Four European Biotech SMEs form the Enzyme Technology Alliance to offer protein and enzymatic process R&D from early discovery to chemical manufacturing across the entire value chain

The demand for sustainable yet scalable protein solutions is rising in the Pharmaceutical and Industrial Biotechnology sectors worldwide. The journey from a DNA or protein sequence to a valuable chemoenzymatic process to deploy at scale requires broad expertise in R&D and manufacturing to bring such projects to success.

The newly formed Enzyme Technology Alliance allows start-ups and corporations globally to access the full scope of protein development to marketable products. Founders and members of the Enzyme Technology Alliance are the technologically complementary biotech-SMEs Candidum GmbH, Aminoverse B.V., ChiralVision B.V., and Enzymicals AG comprising 45 scientific experts and more than 150 years of combined experience ranging from enzyme discovery to facilitating cGMP enzymatic production of APIs.

Under the framework of the Enzyme Technology Alliance, the independent partners jointly tackle complex development projects spanning from in-silico catalyst discovery over Al-supported enzyme engineering to catalyst immobilization, DOE-based process intensification and scale-up. Like interlocking pieces of a puzzle, the strengths of each member are combined not only to create a new point of contact for the biotech industry but offer competitive solutions for both superior proteins and chemical entities.



Dr Sven Benson, Dr Rob Schoevaart, Dr Erik de Vries, and David Schönauer in front of a lab at Aminoverse, The Netherlands.

Dr. Sven Benson, CEO of Candidum, "Due to enormous technological advances in simulation technology, protein structure prediction and availability of data, computational enzyme design has become an integral part of our industry to drive innovation forward. Our contribution to efficiently navigate nature's complexity, optimize variants by using state of the art *in silico* approaches and identify efficient enzymes to meet process requirements, adds value to the Enzyme Technology Alliance that can bring enzyme-based products to the market."

"Protein engineering has become an established technology that is routinely used in today's developments but is just half of the story", states David Schönauer, CEO of Aminoverse. "By joining forces with complementary specialists, we can extend our enzyme discovery and Al-powered enzyme evolution offerings to pilot scale process development and manufacturing."

Dr. Rob Schoevaart, Managing Director of ChiralVision, "We have been successful in the market for more than 16 years with our expertise in enzymatic process development using tailored immobilized biocatalysts. Enzyme immobilization is the key to economical and sustainable production. Through this collaboration we can now support much larger and more complex development projects and let our commercial scale production of immobilized enzymes and chiral compounds grow further. We are ready to take this step and consolidate current partnerships."

Dr. Erik de Vries, CEO of Enzymicals AG, states "Our company focuses on the development and scaleup of chemo-enzymatic processes. This cluster is a good opportunity to go to market together with a consolidated offering for high level enzyme technology projects. Each partner has certain key competencies and can continue to focus on these. I am convinced that the "one-stop-shop" Enzyme Technology Alliance offers a unique added value to the market".

In order to ensure the flexibility and independence of all partners, the agreement reached between the companies is not exclusive and thus offers room for deviating requirements or individual preferences of the clients. A lead partner is available as main contact to the client and the other partners will be regarded as a subcontractor in collaborative projects. This approach has already been proven between the SMEs and offers its customers clear competitive advantages while keeping administrative burden at a minimum, providing full control over the flow of confidential information and facilitating transparent IP transfer.

### About

## Candidum GmbH (contact@candidum.bio)

Candidum generates custom enzyme solutions with an emphasis on reducing complexity and improving predictability by integrating computational design into the enzyme development process. We identify the most promising enzymes that natural evolution has to offer and engineer the synthetic potential of selected enzyme templates by means of focused libraries that are customizable towards multiple design targets in parallel. Our holistic approach enables us to quickly adapt to changes in project, process or IP requirements to de-risk R&D projects.

# Aminoverse B.V. (info@aminoverse.com)

Aminoverse enables clients to accelerate and de-risk enzyme innovation in the early value chain from target reaction to tailored enzyme. Founded in 2020, Aminoverse's CRO services combine enzyme wet lab expertise with in silico design boosted by its recently launched proprietary AI technologies "EnzyMAP" and "EnzyREC". For biocatalysis, Aminoverse offers the world's largest collections of unspecific peroxygenases and ketoglutarate-dependent oxygenases for rapid hit screening – free or 3rd party IP and scalable. Aminoverse is the go-to enzyme R&D partner for successful enzyme discovery and next generation enzyme engineering with attractive IP regulations.

### Chiralvision B.V. (info@chiralvision.com)

For over 16 years ChiralVision has designed, developed and scaled-up hundreds of immobilized enzyme processes for all thinkable markets. Chemistry is reinvented by applying biocatalysis and enzyme immobilization to your process. Finding the right enzyme takes you only half way. Designing the production process around it and applying immobilization to allow for more extreme conditions, recycling, continuous processing and full enzyme removal takes you all the way.

### Enzymicals AG (info@enzymicals.com)

Enzymicals stands for tailor-made enzymes, customized chemicals and individual process solutions. The German enterprise has created a customer-oriented industrial platform for process development and piloting of chemo-biocatalytic synthetic routes for high-quality fine chemicals. Enzymicals is your experienced partner for industrial biocatalysis from gram to ton-scale with more than a decade of experience. Together with our network partners, our services can be expanded to cGMP production and bulk scale supply.