PRESS RELEASE

Greifswald (Germany) & Seraing (Belgium), April 27, 2022 – Enzymicals and Syngulon present an update about their non-exclusive license agreement of May 2020 on the use of Syngulon's antibiotic free technology to produce enzymes. The R&D phase for the first project has ended successfully with several enzymes developed and the large-scale production has started.

Enzymicals AG, a German enterprise focusing on industrial biocatalysis and Syngulon, a Belgian synthetic biology company developing original genetic technologies using bacteriocins, announced in May 2020 a non-exclusive license agreement which provides Enzymicals access to Syngulon's patented selection technology.

Syngulon's technology offers advantages over antibiotic selection for several reasons: it avoids the use of antibiotics in the first place, helping to reduce the spread of antibiotic resistant microbes. The technology also increases product yield; as bacteriocins are generally small peptides, they do not impose a heavy metabolic burden on the producing cell. They can have a wide target specificity, helping to avoid genetic drift. Finally, the system is 100% plasmid-based (e.g. without chromosomal mutations), making it applicable for use in any *E. coli* strain.

Enzymicals offers a broad selection of recombinant enzymes suitable for research, development, production and diagnostics, as well as a tailor-made protein expression and supply service. There is a growing interest for antibiotic-free production of enzymes coming from customers and Syngulon's technology was applied in a first project for the large-scale production of diagnostic enzymes for a world leading diagnostics company that requires antibiotic-free production. Several enzymes have been successfully developed and produced internally at Enzymicals using Syngulon's technology during the R&D and pilot phase that has now ended with the start of the large-scale production in fermenters up to 500L for these enzymes.

Dr. Erik de Vries, CEO of Enzymicals AG, states “Syngulon's new genetic technology is easy to set up and as convenient as conventional antibiotic-based selection techniques. We are happy to have successfully ended the R&D phase with several enzymes and started the large-scale production. We are now looking at other specific developments and broader applicability of Syngulon’s bacteriocin technology for our clients.”

Guy Hélin, CEO of Syngulon, added “This is a very important milestone because the first products with our technology will soon be on the market thanks to Enzymicals and their project for a world leader in diagnostic enzymes.”

About Syngulon

Syngulon is a synthetic biology startup developing original genetic technologies. The team of scientists works in collaboration with different academic partner laboratories including a.o. UCLouvain, ULB, ULiège, UNamur in Belgium, INRAE in France and Imperial College and UCL in UK. R&D programs of Syngulon are supported by the Wallonia Region of Belgium.

Syngulon’s selection technology expands the capacity for selection of microorganisms. Synthetic biology uses the concept of “bioengineering” to improve or modify existing genetic systems to create microbes with desired behaviors, and Syngulon uses this approach to develop its selection technology (with issued patents in EU, USA, India, China and Brazil). It is based on bacteriocins, ribosomally-produced peptides naturally made by most bacteria to kill competitive microbial species. Syngulon owns the largest collection (PARAGEN) of natural and synthetic bacteriocins.

About Enzymicals

Tailor made enzymes, custom chemicals and individual (chemo-)biocatalytic process solutions

Since its founding in 2009, the German enterprise Enzymicals AG has created a customer-oriented industrial platform for process development and piloting of chemo-biocatalytic synthetic routes for high-quality fine chemicals. The company built a bridge between academic research to industrial application and focuses on three business segments: a) Enzymes: production of biocatalysts, b) Chemicals: production of fine and specialty chemicals and c) Solutions: customer-specific solutions to all questions of chemo-biocatalytic synthesis, process development and piloting. This orientation is based on profound expertise in industrial biocatalysis and development of enzymes for organic synthesis. Together with its network partners, the service can be expanded to cGMP production and bulk scale industrial supply.