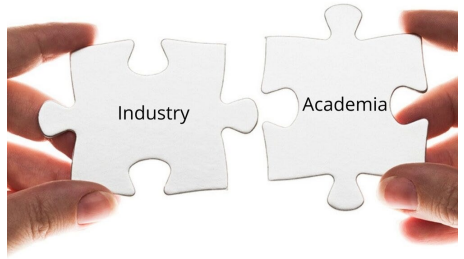
Vereinigung für
Allgemeine und
Angewandte
Mikrobiologie



11. VAAM Industry-Academia Panel

18.01.2024, 4 pm, online via Zoom

How different approaches in academia and industry lead to the next generation of enzymes for sustainable applications

Dr. Alexander Pelzer, Head of R&D, BRAIN Biotech AG, Zwingenberg

What is required to provide specialty enzymes? Spoiler alert: excellence in various technological fields

* Tailored project solutions: Enzyme discovery & engineering can be used individually, simultaneously, or consecutively to exploit the full potential of enzyme development.
* The best enzyme is worthless if we cannot produce it. The economically viable production of enzymes is a key factor to bring them to market.

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Prof. Dr. Aurelio Hidalgo, Center for Molecular Biology *Severo Ochoa*, University of Madrid

To boldly go: new frontiers in the discovery of greener bioctalysts for consumer products

The application of enzymes in chemical industrial processes is increasingly important to achieve the EU's sustainability goals and strengthen the bioeconomy, representing a greener alternative to oil-based chemistry. While enzymes have the potential to meet these demands, they still find several hurdles for their industrial application: low success rates of discovery and engineering; tedious and expensive methods to explore diversity and limited activity/stability in the final application. Microorganisms represent an unfathomable source of enzymes for the bioeconomy but only a small fraction of them can be cultivated in the laboratory. Throughout the course of EU-funded proyects CarbaZymes, MetaFluidics, RadicalZ and BlueTools, we have been developing (and will develop) technology to overcome the limitations both for the study of microbial communities and their "econological use" and to tailor the discovered enzymes towards industrial applications.