

PRESS RELEASE

BRAIN and WeissBioTech announce joint research collaboration

The partners complete the value chain to the market and jointly develop unique enzymes for applications in the dairy industry

Zwingenberg and Ascheberg, Germany, August 12, 2015 – Bio-technology company BRAIN AG and enzyme specialist WeissBioTech GmbH initiated a joint research and development collaboration for the bio-production of technical enzymes for the dairy industry. Within the collaboration the application know-how in the growing field of enzymatic production processes in the dairy industry of WeissBioTech together with its marketing and sales intelligence will be combined with BRAIN's expertise in enzyme discovery, its expression technologies and enzyme development know-how.

In November 2014 the two companies announced a strategic investment of BRAIN in WeissBioTech. During the current collaboration new enzymes for the production of dairy products will be developed based on BRAIN's extensive range of novel enzymes and metagenome libraries, summarized in the BRAIN BioArchive®, and the associated technologies required for identification, development and production of enzyme products. WeissBioTech's application know-how and market knowledge will be the essential guide for enzyme

Contact:

B•R•A•I•N
Biotechnology Research
And Information Network AG

Dr. Martin Langer
Executive Vice President
Corporate Development
Darmstädter Str. 34-36
64673 Zwingenberg, Germany

Tel.: +49-(0)-6251-9331-16
Fax.: +49-(0)-6251-9331-11
E-Mail: ml@brain-biotech.de
www.brain-biotech.de

WeissBioTech GmbH

Johannes de Bie
Chief Executive Officer
An der Hansalinie 48-50
D-59387 Ascheberg, Germany

Tel.: +49 (0) 2593 919 386
Fax: +49 (0) 2593 919 393
E-mail: info@weissbiotech.com
www.weissbiotech.com

discovery, development and sales of the new products from this collaboration.

The dairy industry is in a growth phase worldwide since the Asian customers have discovered milk and dairy products as a valuable new part of their daily diet. Traditionally, enzymatic milk processing is already widely used in the Western World, especially in cheese production. In recent years the demand for enzymatically produced lactose free milk products is increasing worldwide, with an emphasis on the South American and Asian markets due to the inherited lactose intolerance in these populations.

"WeissBioTech has already an interesting portfolio of 50 diversified enzyme products for a variety of industry segments e.g. for fruit juice production, the starch processing industry and the production of fuel and potable alcohol. This portfolio serves as good basis for introducing new or improved products for our customers in the dairy industry. The collaboration with the leading biotech company BRAIN gives us the opportunity to expand our product portfolio by exploiting the Bio-Archive® of BRAIN" explains Johannes de Bie, CEO of WeissBioTech. "Furthermore, we expect that we will improve our production capabilities by applying BRAIN's strain improvement, fermentation expertise and research infrastructure during the development phase."

"This collaboration between WeissBioTech and BRAIN creates the unique opportunity for the two companies to generate and exploit synergies in the White Biotechnology and BioEconomy fields and underlines the value of the strategic investment of BRAIN in WeissBioTech in November 2014. As expected, this turned out to be perfect example of a win-win situation in industry," says Dr. Jürgen Eck, CEO of BRAIN AG, about the collaboration. "BRAIN gains the opportunity to channel its expertise in enzyme development and production into the interesting market for enzymes for production of dairy products via WeissBioTech. The first promising novel enzymes were

identified ahead of schedule. Currently the candidates are in the scale-up and development phase."

The total market of enzymes for the dairy industry is estimated to be at € 225 million in 2014 and showed a CAGR of 8% between 2012 and 2014. Enzyme products for the dairy industry thus address an interesting segment of the whole industrial enzyme market, which had a global volume of approximately €3 billion in 2014. Between 2006 (market volume €1.6 billion) and 2012 the enzyme market showed an annual growth rate of 8 percent.

About BRAIN:

BRAIN AG is an industrial "white" biotech company which discovers and develops novel bioactive natural compounds and proprietary enzymes for its partners and customers in the chemical and pharmaceutical industries, as well as the food and cosmetics industries. With its unique approach to the discovery and production of new biological compounds and biocatalysts, the company achieves creative solutions by harnessing nature's untapped biodiversity. Its success is built on its proprietary BioArchive comprising millions of genes, proteins and metabolic pathways from microbial isolates and metagenome libraries. Since its foundation in 1993, BRAIN has entered into over 100 strategic collaborations with nearly all the relevant companies within the chemical industry as e.g. BASF, Ciba, Clariant, Evonik, DSM, Genencor, Henkel, Nutrinova, RWE, Sandoz, Schering, Südzucker and Symrise, to name but a few. Currently, BRAIN employs 120 highly skilled personnel.

The industrialization strategy, which was successfully launched in 2010 as the company's second pillar of operation next to the co-operation business, has been expanded successfully. It permits BRAIN AG to access the BRAIN Group's entire value chain of different lucrative markets, from the identification of biological solutions and their development to their implementation in the target industries. Currently, the BRAIN Group consists of six companies, all of which operate successfully in the market.

www.brain-biotech.de

About WeissBioTech

In 2002 the company WeissBioTech GmbH was established and focused on addressing the market needs for a specialty enzyme supplier in the developing market of first generation Bio-Fuels, the fuel ethanol business. Their high-end technical service, keen understanding of enzymes technology (including enzyme side activities and its value in the respective applications as well as the value of certain enzyme blends), deep application knowhow, large network into the food and starch processing industry and into the world of enzyme developers, producers and suppliers worldwide helped to build a profitable enzyme business. Their unique proprietary know-how and network position in the specialty enzyme business allows WeissBioTech to carve out their niche position and demand higher margins than that of a mere distributor.

In 2011 WeissBioTech GmbH further pursued the expansion of their value added position by the establishment of a blending, mixing and packaging facility in France at their newly founded subsidiary WeissBioTech France SARL. Combined with the establishment of their strong QA/QC function this enabled WeissBioTech to further add value through the purchase of specific enzyme concentrates they could subsequently mix and blend down to the desired customer product specs and sell under WeissBioTech GmbH trade mark. WeissBioTech currently has more than 100 hundred enzyme products in its range and sold several thousand tons of enzyme products during 2013 in more than 50 countries on all continents.

In November 2014 BRAIN strategically invested in WeissBioTech and took over the majority stake of shares. The proceeds since then are used to expand enzyme production, distribution and marketing.

www.weissbiotech.com

Pictures

Microbial production of dairy enzymes from technical scale to high volume bioprocesses.

© Luise Böttcher, Archive BRAIN AG, Reprint permitted with byline.

The text from this press release can be downloaded from www.brain-biotech.de under "News "