

# The value of industrial biotech

*Based in Germany with operations worldwide, Direvo is a biotechnology company with a focus on the biomass conversion industry. The company addresses bottlenecks and weaknesses in current industrial processes with solutions that not only save costs but also relieve the burden of industry on the environment. Dr. Jorg Riesmeier, Direvo CEO, talks about the value of industrial biotech.*

Direvo was originally founded out of the Max Planck Research Institute, in 2000. The company did research in the directed evolution space for both pharmaceutical and industrial applications. Direvo Industrial Biotechnology, as its full name is today, was spun out of former Direvo AG's industrial biotechnology business unit and AC Biotec in 2008. Direvo is funded by the likes of Wölberrn Private Equity Partner, NRW Bank, TVM Capital, Danisco, a private equity firm affiliated with Sparkasse KölnBonn, SandersMorrisHarris Enzymes, Mulligan BioCapital, and several private investors.

Dr. Riesmeier was appointed CEO in 2010. His experience in industrial biotechnology spans both long-range industry investment and product development. He joined Direvo from Life Science Partners' foothold in Boston, where he had been general partner since 2006. His job now, he explains, is to support the development of DIREVO as a product-orientated company. "With a

new and unique focus on industrial applications we've had to restructure the entire organisation as well as our business model. We're still essentially building on our many years of expertise in the directed evolution space, however."

He goes on to explain that Direvo provides customized solutions via the development and optimization of biocatalysts, using its ultra-high-throughput screening platform. The company serves the feed and food industries, and chemical and biorefinery businesses, where its products are developed either independently or in conjunction with partners such as Danisco/Genencor and Nestlé. To BASF, Direvo recently sold a novel feed enzyme which complements the existing range of feed enzymes that BASF currently markets. "There is no comparable enzyme on the market," says Dr. Riesmeier.

In the short term he sees applications primarily in the development of micro-



organisms and enzymes for the ethanol industry, and in the long term for other biomass conversion applications including cellulose conversion plants. "Selling the feed enzyme to BASF means immediate cash for us. In the longer term we aim to commercialise products ourselves. We believe we have a valuable contribution to make in helping industry to save costs in a sustainable manner, without harming the environment." On that note, he comments: "Especially when you look at all the money governments invest in solar and wind energy, it's a shame that the potential of industrial biotech is often overlooked. There are a lot of people out there who want to invest in industrial biotech, but a governmental mandate is missing to secure the CAPEX needed to deploy newly developed technologies like ours in big production plants."



DIREVO Industrial Biotechnology GmbH  
Nattermannallee 1  
D - 50829 Cologne  
Germany  
Website: [www.direvo.com](http://www.direvo.com)