

## Press release

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### DEINOVE REACHES THE THIRD MILESTONE OF THE DEINOL PROGRAM AND RECEIVES € 1.2 M FROM BPIFRANCE

- **DEINOVE has reached the third and penultimate milestone of its DEINOL project.**
- **This milestone validates the work of DEINOVE's proprietary platform, now applied to numerous second-generation raw materials.**
- **DEINOVE will receive funding worth € 1.2 m from Bpifrance in the coming days.**

**Montpellier, 8 July 2015** – DEINOVE (Alternext Paris: ALDEI), a biotech company developing innovative processes for the production of biofuels and bio-based chemicals using *Deinococcus* bacteria as host strains, announces that it has reached the third and penultimate milestone of its DEINOL project supported by Bpifrance. Achievement of this milestone triggers funding, adding up to € 1.2 m, from Bpifrance, in the form of an innovation grant.

The DEINOL program, initiated in 2010, aims to develop and market a consolidated, second-generation (2G) bioethanol production process using true non-food biomass (agricultural residues, organic waste, etc.) as raw material and to promote the exceptional properties of *Deinococcus* bacteria that DEINOVE is the only company worldwide to commercially exploit.

Reaching this third milestone validates the progress made in recent years, mainly:

- Improved ethanol production performance: DEINOVE's tools and unique genetic engineering and fermentation skills have resulted in ethanol production of 9% from glucose.
- Improved hemicellulolytic and cellulolytic activities of the strain, an intrinsic *Deinococcus* capacity that allows significant reduction in the cost of the hydrolysis step prior to fermentation.
- The use of a variety of carbon sources, including very efficient co-assimilation of sugars (C5 and C6) from 2G biomass - wheat straw, corn stover, urban waste - resulting in better bioethanol production performance from these various industrial substrates. Several conclusive and repeated tests were conducted on this basis in 20-litre fermenters.
- Improved tolerance of the strain to inhibitors common to 2G substrates.
- Progressive scale-up from 250 ml to laboratory-scale pilot.
- Validation of a strain preservation and stability method, which can be a decisive industrial advantage for manufacturing starters.

These advances have also materialised in a strong intellectual property: DEINOVE currently has a diverse portfolio of 18 patent families consisting of more than 180 patent applications internationally, particularly in Europe, the USA and China.

*"Validation of this third milestone of the DEINOL programme by Bpifrance rewards the considerable progress we have made. We continue to ramp-up the program to the industrial pilot phase. Compared to the initial program, we have also greatly expanded our possibilities in terms of relevant substrates and therefore market potential",* explains Emmanuel Petiot, CEO of DEINOVE.

*"DEINOVE has focused on bringing - through a disruptive innovation - a novel bacterial genus within the set of existing industrial microorganisms, in order to provide more efficient alternatives. Tremendous progress has been made since 2010 and it demonstrates the relevance of the integration of the company's three main strengths: biodiversity, proprietary metabolic engineering platform, and real-time evaluation of the resulting strains",* adds Gérard Goma, Emeritus professor at INSA Toulouse and expert in bioprocesses.

DEINOL is supported by the French Strategic Industrial Innovation program (*Innovation Stratégique Industrielle; ISI*), which foresees an overall funding for DEINOVE up to € 6.3 m. The Company has already received € 4.1 m in the preceding phases. Reaching this new milestone will trigger a payment worth € 1.2 m by Bpifrance in the coming days.

## About DEINOVE

DEINOVE (Alternext Paris: ALDEI) is ushering in a new era of green chemistry by designing and developing new standards of production based on bacteria of untapped potential: the Deinococci. Taking advantage of the bacteria's unique genetic properties and unusual robustness, DEINOVE optimizes natural fermentation and metabolic capabilities of these bacterial "micro-factories" to produce high value-added products from non-food biomass. The Company's primary markets are 2nd-generation biofuels (DEINOL) and bio-based chemicals (DEINOCHEM). On these markets, the Company offers its technology to industrial partners globally.

Listed on NYSE Alternext since April 2010, DEINOVE was founded by Dr. Philippe Pouletty, General Partner of TRUFFLE CAPITAL, and Pr. Miroslav Radman, of the Faculty of Medicine of Paris Descartes University. The company employs over 40 people in its new offices and laboratories located in Montpellier, France.

*More information at [www.deinove.com](http://www.deinove.com)*

## About BPIFRANCE

Bpifrance is a subsidiary of Caisse des Dépôts and the French government, and the trusted partner of entrepreneurs. The French public investment bank finances businesses from the seed phase to stock exchange listing, through loans, guarantees and equity. Bpifrance accompanies firms developing export activities and provides support services for their innovation and acquisition projects, in partnership with Business France and Coface.

Bpifrance offers businesses a financing continuum, present in every key phase of business development and an offer adapted to the specific regional context.

With a network of 42 regional offices (90% of decisions are made at the regional level), Bpifrance serves entrepreneurs to boost economic competitiveness. Bpifrance acts in support of public policy established by the State and the Regions to meet three goals:

- accompany businesses in their growth;
- prepare tomorrow's competitive landscape;
- develop an ecosystem that favours entrepreneurship.

Bpifrance acts as a powerful partner to businesses, one that is on hand and able to respond efficiently to all of their financing, innovation and investment needs.

*More information at [www.bpifrance.fr](http://www.bpifrance.fr) and [investissementsdavenir.bpifrance.fr](http://investissementsdavenir.bpifrance.fr)*

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