

## Press release

### DEINOVE AND ARBIOM JOIN FORCES TO DEVELOP A “CARBON-FREE” CHEMICAL INDUSTRY

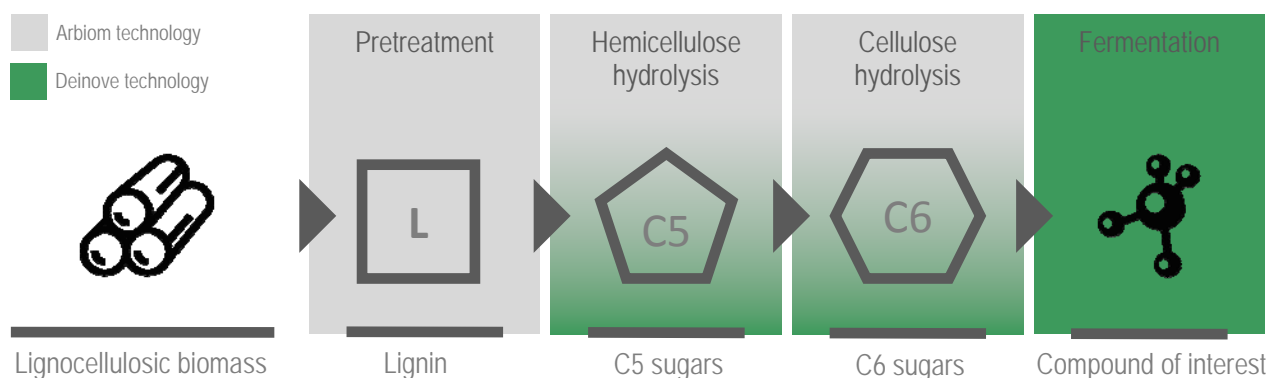
- **The two companies have started a collaboration to demonstrate the synergy of their respective technologies for the valorization of non-food plant biomass.**
- **In an initial phase, DEINOVE tested its technology on wood pretreated with the ARBIOM technology and demonstrated for the first time that its technology is adapted to forest residues.**

**Montpellier, 14 March 2016** – DEINOVE (Alternext Paris: ALDEI), a biotech company developing innovative processes for producing biofuels and bio-based chemicals by using *Deinococcus* bacteria, and ARBIOM, a biotechnology company dedicated to the development of a bio-refinery process from non-food biomass, today announced the start of a collaboration. Both companies decided to combine their respective technologies to provide a complete value proposition integrating different links in the biorefinery<sup>1</sup> value chain.

#### Combining technologies of excellence

By combining their technologies, both emerging from French biotechnology research, the companies aim to develop more efficient integrated industrial processes in terms of performance and production costs.

- ARBIOM develops biorefinery units for the conversion of non-food biomass into fermentable sugars and lignin. The company has developed a patented process for the pretreatment and hydrolysis of plant biomass, with a particular focus on lignin-rich forest residues. It aims to provide ready-made recycling solutions to industries producing plant waste (sawmills, furniture, construction, pulp and paper industries, etc.).
- DEINOVE develops biomass hydrolysis and fermentation methods for the production of compounds of interest used in plastics, food, feed, cosmetics, etc.



<sup>1</sup> Biorefinery is the transformation of biomass into molecules of industrial interest

### Initial evaluation phase

The initial phase of the collaboration involves the characterization of the ARBIOM biomass (forestry residues pre-treated with phosphoric acid and hydrolyzed) and the evaluation of *Deinococcus* potential for assimilating the sugars extracted from this biomass.

Prior to the conclusion of the collaboration agreement with ARBIOM, the DEINOVE teams conducted assimilation tests in the laboratory, which show promising results. On this basis, further tests will be conducted to define the molecules that can be produced by fermentation.

The work could continue in the ARBIOM pilot unit in Norton, Virginia.

*"Our goal is to contribute to the development of a responsible bioeconomy. This collaboration with DEINOVE broadens the range of applications of our bio-refineries and the solutions we offer to industry,"* said Dr. Gilles AMSALLEM, CEO of ARBIOM.

*"This collaboration agreement with ARBIOM constitutes a new market potential for our technology. We are pleased that our technology also works on wood, opening the way to multiple applications for the valorization of wood residues,"* said Emmanuel PETIOT, CEO of DEINOVE.

## 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 almost 50 people in its new offices and laboratories located in Montpellier, France.

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

## About ARBIOM

ARBIOM is a technology company developing solutions to convert non-food biomass into sustainable intermediates suitable for the chemicals and fuels industry. Headquartered in North Carolina, USA, ARBIOM combines the biotechnology expertise, process development capacities and pilot operations of its subsidiaries Biométhodes SA (located in Evry, France) and Optafuel US Inc (located in Norton, Virginia, USA.) After 15 years of developing proprietary enzyme technologies and 7 years scaling up its biomass fractionation process, ARBIOM is now engaged in consolidating the ligno-cellulose to chemicals value chain by integrating upstream with biomass stakeholders and downstream with industrial biotechnology/biobased chemicals companies in order to drive the emergence of the sustainable bioeconomy.

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

### Contacts

#### **DEINOVE**

**Emmanuel Petiot**

CEO

Tel.: +33 (0)4 48 19 01 28

[emmanuel.petiot@deinove.com](mailto:emmanuel.petiot@deinove.com)

**Coralie Martin**

Communication, Marketing and IR Manager

Tel.: +33 (0)4 48 19 01 60

[coralie.martin@deinove.com](mailto:coralie.martin@deinove.com)

#### **ALIZE RP, Press Relations**

**Caroline Carmagnol / Wendy Rigal**

Tel.: +33 (0)1 44 54 36 66

[deinove@alizerp.com](mailto:deinove@alizerp.com)



#### **ARBIOM**

**Romain Fouache**

VP Operations

Tel.: +33 (0)1 60 91 21 21

[info@arbiom.com](mailto:info@arbiom.com)