Dear fellow shareholders,

I am pleased to write you at the end of 2015 for an update on the progress of our projects.

Since last year, you will see that we have diversified our areas of development and partnerships.

- In biofuels, we have focused our efforts on the diversification of biomass sources with the goal of expanding the market for our DEINOL process. We are now able to produce biofuels from different agricultural and forestry residues, and urban and municipal waste. We have also taken a very important step recently in the production of ethanol in a 300-L fermenter. In our sectors, the transition from laboratory performance to industrial performance is a real challenge that we have been able to meet.

- In green chemistry, we have made progress in our isoprenoid program supported by ADEME and the Investments for the Future program. We have also intensified and broadened our projects in animal nutrition and carotenoids. Finally, we have begun a new research program on mucopolysaccharides.

At a time when the COP 21 opens in Paris, where world leaders are seeking an agreement to control the effects of global warming, we are ever more convinced that our approach, which aims to replace fossil resources by renewable raw materials, is an asset for the future, for France, and for the planet.

We are continuing our efforts in this direction. Beyond the research work on which our teams are fully mobilized, we are continuing our actions to convince the relevance of our approach and the economic viability of our solutions. Recently signed partnerships testify to that effort.

We thank you for your support and assure you that we strive to ensure that our R&D projects of today are fast becoming an industrial reality.

Emmanuel Petiot
CEO

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**LETTER TO SHAREHOLDERS**

**NOVEMBER 2015**

**OUR APPROACH THAT AIMS TO REPLACE FOSSIL RESOURCES BY RENEWABLE RAW MATERIALS IS AN ASSET FOR FRANCE AND FOR THE PLANET**

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**DEINOVE STRENGTHENS ITS MANAGEMENT TEAM**

Dennis MC GREW joined the management team as Chief Business Officer. Former CEO of NatureWorks and VP Business Development of Genomatica, two American companies specializing in plant chemistry, Dennis holds a degree in chemical engineering from Washington University, St. Louis. Dennis supports the development of research, industrial and commercial partnerships, with a particular focus on the North American market.

Marie BÉZENGER also joined the Executive Committee as Director of Operations with the mission to support the scale-up, industrialization, and commercialization of the DEINOVE technology. Previously Director of Operations at Fermentalg, she spent most of her career at Chr. Hansen, one of the world’s leading producers of natural ingredients for food and health (dyes, enzymes, probiotics, etc.). Marie is an engineer (Polytech Montpellier) and a Doctor in Biochemistry, Cell Biology, and Molecular Biology (University of Montpellier).

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**CONTACTS**

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For more information, please visit www.deinove.com

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**SHAREHOLDERS’ INFORMATION**

**MARKET DATA**

<table>
<thead>
<tr>
<th>Price on 30.10.15</th>
<th>€5.52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Cap.</td>
<td>€40 million</td>
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<td>52-weeks Hi-Low</td>
<td>€5.90 - €10.23</td>
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**EVOLUTION OF THE MARKET CAPITALIZATION SINCE THE IPO**

<table>
<thead>
<tr>
<th>April 2010 - Euro Millions</th>
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<tr>
<td>51.4%</td>
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<tr>
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<tr>
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<tr>
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<td>15.5%</td>
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**ANALYSTS CONSSENSUS**

DEINOVE is covered by 3 analyst offices, 2 of which are making investment recommendations. The publications can be reviewed at www.deinove.com.

<table>
<thead>
<tr>
<th>Broker</th>
<th>Price target</th>
<th>Position</th>
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<tbody>
<tr>
<td>Edison</td>
<td>€6.7 to €9.1</td>
<td>Buy</td>
<td>25 sept. 2015</td>
</tr>
<tr>
<td>Invest Securities</td>
<td>€9.1</td>
<td>Buy</td>
<td>25 sept. 2015</td>
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<tr>
<td>Portzamparc</td>
<td>€18.3</td>
<td>Buy</td>
<td>9 oct. 2015</td>
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</tbody>
</table>

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**BREAKDOWN OF CAPITAL AT 30.06.15 (FULLY DILUTED)**

- 51.4%
- 38.1%
- 4.2%
- 1.6%
- 4.7%

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DEINOL: THE CHALLENGE OF LIGNOCELLULOSIC BIOMASS

PROGRESS TOWARD 2G

Compared with initial targets set in 2010, the DEINOL program has largely refocused on 2G substrates - an essential branch of the biocatalytic development in the long term. The research teams worked all year in this direction and achieved significant results in several areas.

- Lignocellulosic biomass hydrolysis and enzyme savings
  DEINOVE has improved the cellulosytic and hemi-cellulosytic activities of Deinococcus by genetic engineering. The strains developed are capable of hydrolyzing plant cellulose as quickly as Trichoderma reesei. The filamentous fungus, used to produce many commercial cellulases is widely used by the industry. The natural cellulolytic and xylanolytic properties of Deinococcus optimize the use of convertible sugars extracted from plant biomass and reduce the use of costly commercial enzymes (up to 30% of the total cost of production).

- Resistance against inhibitors
  By directed evolution, the DEINOVE teams gradually doubled the strain tolerance to inhibitors common to 2G substrates. These molecules (e.g. furfuraldehyde, acetic acid) are produced during bioproduction and slow down the process, which is a well known limitation of biological processes.

- Diversification of substrates
  DEINOVE has undertaken to diversify potentially useful biomass sources in order to address one of the major issues of 2G biocconversion: the variety of raw material sources. The bacterium has been tested on several substrates: corn and sugar cane bagasse residues, urban waste, and AFEX® pre-treated corn stover.

This progress has allowed in July 2015 validation of the third and penultimate milestone in the DEINOL - ISI program, which has resulted in the production of 1.2m from Bpifrance.

SCALE-UP: 300 L ACHIEVED!

To achieve industrial production, we must gradually move from fermenters of a few hundred milliliters to tanks of a few hundred m³. The first steps were performed in DEINOVE laboratories whose capacity is currently limited to 20 L. The next step, undertaken with the VTT, was scaling the production to 300 L, which has just been reached.

The starting material used is a mixture of glucose (a six-carbon atom sugar, Gl) and xylose (X), the main components of the non-food biomass. Bacterial fermentation of the raw material by the DEINOL method allowed the production of 7.3% v/v ethanol, in line with the levels obtained in the laboratory and is compatible with industry standards.

This is a big step toward the industrialization of the DEINOL process and a result that also confirms the industrial potential of the DEINOVE platform. From these results, DEINOVE will work with its partners on a demonstrator and industrial pilots. The objective is to achieve an industrial solution by 2018.

WASTE, FUEL OF THE FUTURE

As we need to reduce our oil consumption, especially for transport, using waste as a raw material has many advantages.

- Waste is produced in large quantities on a regular basis and is a real problem for the communities that are in charge of its elimination. Therefore, in developed countries industrial chain collection and treatment is a very well organized.
- After sorting and recycling easily recyclable parts (glass, plastics, metals...), the residual fraction (waste and soiled food packaging) is most often burned for lack of better valuation.
- Carbon-rich, this residual fraction can be converted into different types of energy, such as methane (gas recovery from the fermentation).

Since 2014, DEINOVE has been working with SUEZ to develop a new process for transforming this residual organic waste into ethanol. The ultimate goal is to merge with the existing collection and recycling processes by installing ethanol production facilities in reprocessing plants. The collaborative program signed with SUEZ aims, finally, to evaluate the technical and economic feasibility of this project.

DEINOCHEM: PLANT CHEMISTRY

PROGRAMS AND PARTNERSHIPS

Isoprenoids / ADEME program:
milestone 1 validated (January)

DEINOVE validates the EC1 of the isoprenoid program funded by ADEME from 2013. The modified strains construction rate has multiplied by 10 in less than a year and the DEINOVE teams have made progress in identifying limiting enzymes. The Company received €1m.

Animal feed, an expanding topic

COLOR2B / AVRIL program: milestone 1 validated (May)

In less than a year, DEINOVE managed to select 20 bacterial strains producing compounds of interest for animal feed, consistent with desired properties sought by AVRIL, which engages the second phase of the COLOR2B project to characterize and test these compounds to assess their commercial potential.

DEINOVE starts a 17-month R&D program with Flint Hills Resources, a subsidiary of KOCH INDUSTRIES - one of the largest private companies in the world - and a leading refining, petrochemical, and biofuels company in the United States. The program aims to produce additives for animal feed by Deinococcus bacteria from raw material provided by FHR, which also provides funding.

July 2015: launch of the muconic acid program

DEINOVE engages in the production of biomass muconic acid, an intermediate chemical for many applications including plastics, textile fibers, and food that represent billions of dollars.

New US partner

After an initial proof of concept obtained in July from a synthetic substrate, DEINOVE confirmed in September the production of muconic acid from cellulose (2G).

DEVELOPMENT IN CAROTENOIDS

Naturally present in many living beings and widely used in the industry for their coloring, antioxidant, and photoprotective properties, carotenoids in 2019 will represent a global market of $1.8 billion.

The applications for these molecules continue to diversify in feed and food as in cosmetics and health. Much of the production comes from chemical synthesis and is derived from oil, however the segment of molecules extracted from plants has grown the fastest, driven by consumer demand.

Current production techniques use extraction from tomatoes (lycopene) or paprika (capsanthin) and biomunufacturing from algae (astaxanthin) or microorganisms (beta-carotene). The supply of bio-based solutions remains limited by high production costs. DEINOVE aims to meet this challenge by providing a more economical biological solution to meet the high demand.

Deinococcus bacteria naturally produce carotenoids, specifically Deinoxanthine, untapped to date. DEINOVE has also modified the Deinococcus strains to produce two other carotenoids in the laboratory, molecules already widely used as pigments, cosmetic ingredients, or dietary supplements. These molecules, called platforms, may themselves be converted into other carotenoids with high-added value.

The next steps in this program include a series of functional tests to demonstrate the commercial value of the carotenoids produced by DEINOVE and their approval by regulatory agencies.

Considering the low-volume nature of carotenoid production, DEINOVE has decided to rely on producing partners, such as POS Bio-Sciences, to develop and market an exclusive range of carotenoids ready for use within two to three years.

DEINOVE teams have made progress in identifying compounds with the greatest potential.