



Star Colibri

B.R.I Platform

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# Mutualised Innovation Platform B.R.I

## BIOREFINERY RESEARCH AND INNOVATION



### Teaching & academic research



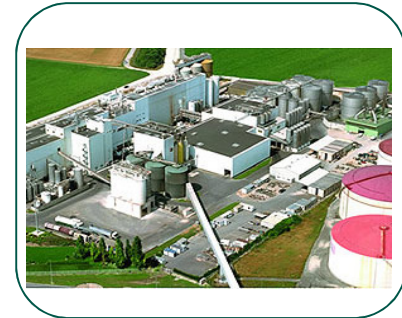
### Applied research



### Technopole



### Lobbying



### Foundation :

Cristal Union, Cristanol,  
Champagne Céréales,  
Siclaé, Chamtor, ARD



With the financial support from :



# Contracting possibilities



- Various contracting possibilities do exist :
- **Specific research** program involving Phd directly with academic research centers, through private or public / private financing.
- **Applicative research** program from laboratory scale up to pilot plant and / or industrial demonstration plant : directly with ARD through codevelopment agreement or subcontracting.
- **Hiring offices**, laboratories on site directly with Chamber of Commerce and Industry of Reims and Epernay.

# ARD – Project coordinator

## Our shareholders



### Facts & Figures :

Created in 1989, 100 employees  
Budget : 11M€

### Target :

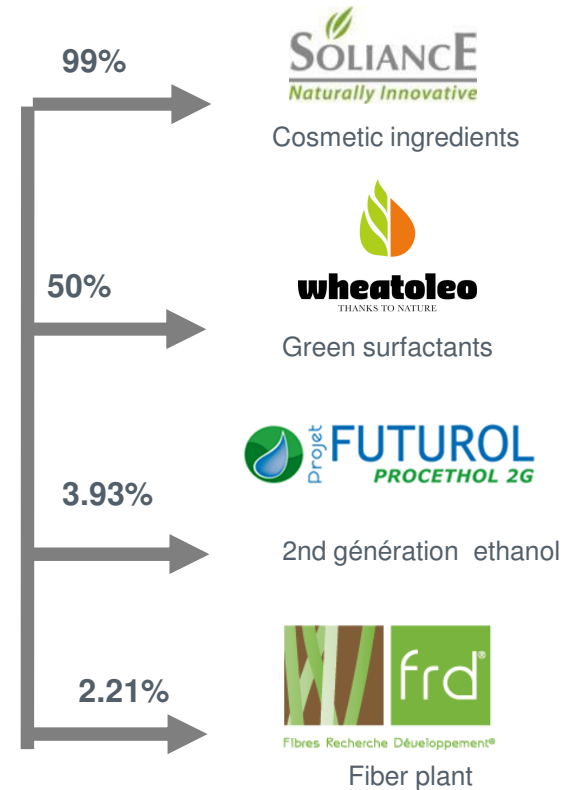
To develop innovative processes to produce chemicals derived from biomass within the concept of biorefinery

### Expertise in :

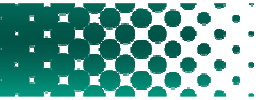
Biomass Fractionation  
Industriel biotechnology  
Bio-based chemistry  
Scale up from lab up to the demonstration scale, a **2000 tons capacity plant**



## Our main developments



# B.R.I is integrated into an existing biorefinery



**Chamtor**  
Wheat processing

**BioD mo**  
Industrial demonstration plant

**Cristal Union**  
Sugar beet refinery



Credit photo : Procethol 2G

**PROCETHOL 2G**  
Project FUTUROL  
2<sup>nd</sup> generation ethanol

**ARD**  
Mutualised research center  
**SOLIANCE**  
Active green ingredients for cosmetics

**Cristanol**  
1st generation ethanol production



# Conclusion



## Example of ongoing contracts :

### ■ SYNTHONS :

Research program involving academic research center, ARD, Arkema, L'Oréal, Rhodia, Biomodeling System :

Technical feasibility to **produce some chemical Intermediate out of biomass** by white biotech.

Project sponsored by French Ministry of Industry.

### ■ FUTUROL :

Research program involving academic research (INRA, IFP), applicative research (ARD, LESAFFRE), industries (TOTAL, SICLAE, TEREOS, ONF) and financing institution (NAPLES investissement, CREDIT AGRICOLE, UNIGRAINS) for the **development of a new process to produce Cellulosic ethanol.**

Project sponsored by OSEO ISI.

### ■ BIOAMBER :

Scaling up of **succinic acid process** on the industrial demonstration plant BioDémon.

### ■ AMYRIS :

Development of **squalane for cosmetic market** at the pilot scale.

■ **Other molecules** produced by biotechnology or chemistry for starts up or industrials.

**Thank you for your attention**

**[www.a-r-d.fr](http://www.a-r-d.fr)**



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