



Denis Chéreau
CEO



Can you enter into details of Improve history and purpose?

IMPROVE based on a public-private partnership bringing together academic structures, financial and industrial partners. The IMPROVE SAS has been created in July 2013, it is located in Dury 1h north of Paris (France). IMPROVE is a research and development company dedicated to the promotion of protein for the future. It aims to help the development of the proteins sector, starting from the plants, microorganisms or alternative animal sources throughout extraction and fractionation ending in the placing on the market of new products in the areas of human food, animal feed, cosmetics and bio materials.

Business model

The IMPROVE activity, based on contract research services, is conducted in total confidentiality on behalf of French and foreign clients. The intellectual property of results is wholly owned by the structure which funded the work. Furthermore, IMPROVE spends between 10 and 15% of its resources to participation in collaborative research programs to develop its own intellectual property and promote its expertise throughout Europe and America.

What are the main services you offer?

We offer services in our pilot hall on dry and wet processing of various raw material like seeds, algae, roots leaves, microorganism or insects. We can also do analytical characterisation of proteins in terms of composition, functional properties, digestibility and anti-nutritional factors.

Why proteins and why plant based proteins?

Protein is the most important macro nutriment (compared with carbohydrates and fats). The demography evolution

is putting a huge pressure on protein demand. This is why the occidental nutritional balance between plant and animal protein is not sustainable. IMPROVE intent to develop new ingredients in order to diversify the protein offer.

What are the main sources of high vegetal proteins ingredients?

Today the vegetal protein ingredient market is dominated by soy and wheat. We see more and more of new comers like pea, rice of faba bean.


What are the technological tools you use to build your IP portfolio?

Our main tools are either in the dry processing (different type of mills, sieves air classifiers, electroseparator..) or in the wet processing (extraction units, decantor, clarifiers, tangential filtration, evaporation, heat treatment, spray driers...)

Have you identified markets to develop and/or new market opportunities?

Market is demanding ingredients having high proteins contents (>85% on DS), with a neutral taste and color, good functional properties (foaming, emulsifying, gelling, binding) and good digestibility (PDCAAS).

What is your business model?

We are doing contractual R&D for customer. We don't take any IP. We are developping different process and doing protein characterization. 

Denis Chéreau holds a Ph.D. in microbiology on the production of single-cell protein by solid state fermentation. He participated to Lyven SAS start up, company specialized in enzymes production for food and feed applications. He then worked in the starch industry as technical and plant manager in France and the USA in wheat and corn plants. He is currently general manager of IMPROVE R&D center dedicated to protein valorization.

