

Why and how are NEW ACTIVE INGREDIENTS manufactured?

Interview by Laure JEANDEMANGE

It's impossible to imagine a brand that does not market new products with ingredients loaded with promises. And knowing that it takes years of testing before an ingredient is included in a product, how do you anticipate desires and needs? To answer all our questions about ingredients, we interviewed Romuald Vallée, Scientific Director of the Phytomer Group.

Why is it important to discover new ingredients?

While we have Phytomer's emblematic products, we are constantly seeking to innovate. Indeed, if a brand does not market new products, and hence new ingredients, it will appear aging. In addition, no one has yet found the miracle cream that will completely erase all wrinkles in less than a month and make women look 10 years younger! I believe in a good combination of several ingredients that would enable improving a lot of things.

How do you suspect that an ingredient would be beneficial for the skin?

A researcher or team of researchers does not wake up every morning with an extraordinary idea. Above all it's observation. We constantly cultivate human skin cells and those of seashore plants, algae and microalgae; we observe them live and we study them by changing their living conditions, their food and stress factors. Then we take things further and observe all these plants or microorganisms in their "real life" on the seashore, in the oceans, and watch what happens. Research starts primarily by observation while adapting to current needs.

What are the major discoveries of active ingredients?

Retinol, alpha hydroxy acids, peptides and all the natural molecules that plants or microalgae have been able to provide, especially exopolysaccharides.

How much time does it take between when you start looking at an ingredient and the finished product?

A minimum of 5 years. Right now, we are working on ingredients that will be around in 5 or 10 years.

How do you anticipate cosmetic needs in 5 or 10 years time?

It's impossible to know in advance, there is a visionary risk. Current needs are not the same as 10 or 20 years ago, it's not the same stress or the same pollution, blue light has appeared... Today, despite cosmetics, we age more than 10 years ago. The face is marked earlier and faster with more inflammation and redness. Fifteen years ago, there was not as much adult acne and it has nothing to do with hormonal imbalances. Research has to constantly adapt to the changing world. Today we are cultivating algae, plants and cells, we observe them, we are producing things without knowing what purpose they will serve. But everything is preserved, tested on models of reconstructed skin where we observe how up to 20,000 genes react. Later, depending on changing needs and technologies, we will draw on our previous studies to find new applications for them. For example, today, and for the past 2 or 3 years, anti-pollution cosmetics have become essential. This data was generated by our laboratory almost 10 years ago, but we have only been able to translate these biological effects very recently to meet the needs of today's cosmetics.

How is it that emblematic creams with old recipes still attract consumers in spite of a multitude of innovations?

In the same way that you remain faithful to a loved one, our customers have an affective relationship with our emblematic



products which explains this loyalty to them. This does not exclude testing other products without abandoning the one they know perfectly. They know that the latter will always be good for them, always be a pleasure to use. Cosmetics products are primarily about pleasure, touch and sensuality.

Is pleasure just as important in a cosmetic product?

When performing clinical tests, for the same active ingredients that are tested in an extremely sensory cosmetic base and in a less sensory cosmetic base, the clinical results, measurements and impressions will not be the same. I am not talking about the customer's feelings but about the measurements of wrinkles for example. This is possible thanks to the effects of pleasure. The consumer applies her product more conscientiously, more leisurely and her pleasure induces the production of certain molecules through the skin that are restorative. Science is as much in the formulation as in the ingredient, so a great brand has to have great ingredients and great cosmetic formulations: it is alchemy that makes our profession so wonderful.

THE PHYTOMER SPECIFICITY

Our trademark is undeniably marine biotechnology, marine microorganisms that naturally produce molecules. We use marine cells like small factories. We have studied how they react, protect themselves and communicate, which could be similar to the functioning of human skin, and make them naturally excrete active molecules. It is neither synthesis nor extraction and nature remains intact: we no longer speak of exploitation of natural resources but of collaboration. It's a real little factory. Our philosophy, through observing the marine world, is to produce molecules from marine plants, that can come and re-balance skin disorders. Phytomer research laboratory brings together 20 people, 6 of whom work full-time on cell culture. Phytomer is one of the only brands to develop its ingredients on its own, carry out its own efficacy tests and have its own skin technology laboratory. The brand controls everything from A to Z.
