

zoom #8

BY SKINOBS

édito



The beginning of the year was a period of many events regarding clinical testing. **“Boost Your Test”** at in-cosmetics was a unique opportunity to meet international evaluation managers. We have answered questions about Microbiote, Anti-pollution and Anti-ageing assessments. **ISBS in San Diego** was focus on the latest Skin Bioengineering research. Now it’s time to take stock of the main trends and present you the last innovations of our partners: Cerco, Cosmepar, DermScan, Dermatec, Eotech, Eurofins, Intertek, Phylogene, Orion, JS Hamilton, Connected Physics, Zurko research and Lipotype.

Happy reading!
Anne Charpentier, CEO

What's new ?

Cosmeticians can easily retrieve the classical methods and the latest innovations to substantiate their claims. Thanks to a collaborative work with the stakeholders of the testing sector we present you the latest referencing of biometrological testing solutions:

- ARAM HUVIS, Aramo ASG 200 for hair growth
- C-LAB, Neovoir II for skin visualization
- CONNECT PHYSICS, Dermo for hydration and collagen
- DERMLITE, DermLite DL100 for skin visualization
- BTBP, Clarity System for skin visualisation and analysis
- LABTHINK, Auto for fibre tensile tester and combing
- NEUROTRON, Neurometer® CPT for skin sensitivity
- ORION CONCEPT, Skinflex for skin elasticity
- TEXTECHNO, Fibrotest for hair density

We provide you a robust tool helping cosmeticians to pertinent and innovative **bridge between science and marketing**. Let ask specific requests and give us your feedback at contact@skinobs.com

How does the database accelerate your skin evaluation ?

For effects on skin pigmentation, you find:

+ 40 methods

+ 45 testing labs

+30 countries



Discover
200 tests
60 claims
30 countries

Statistics of Skinobs traffic

+1,800
CONNECTED
COSMETICIANS

+1,000
VISITS PER WEEK
ON THE SKINOBS
NEWSFEED

+16%
NEW USERS*

+7,800
PAGES VIEWED*

*In January 2018

*Since January 2018

CONNECT
WWW.SKINOBS.COM

Sensory by Skinobs



5 METHODS



50 TESTING LAB



30 COUNTRIES

A WORD OF EXPERT



Dr Karl Lintner

What are the true criteria for buying cosmetic products?

Price? Efficacy? Brand name and reputation? Yes, they all play a small role. But the real and mostly unconscious reasons for the choice of a shampoo, an anti-wrinkle cream or a lipstick are the hedonist aspects, the skin feel, the texture, the pleasure derived from the acts of Choosing, Applying, Feeling and Smelling. New and improved, sophisticated test methods are now available, able to analyse and discriminate – quantitatively – new sensorial experiences, and highly innovative emotional and psychological benefits of cosmetic products. Both active ingredients and finished products can benefit from associating physico-biochemical instrumental protocols with proven Quality-of-Life parameters. Measuring increased Well-being and self-esteem becomes the new Anti-age paradigm!

SENSORY ANALYSIS, SCIENCE BEYOND THE PERCEPTIONS

Everyone knows that **organoleptic properties and consumer insights** using direct life experiences are part of the **perception of the efficacy** by the consumers.

The sensory analysis using the human senses are scientific studies **based on experimental design and statistical analysis**. They concern all types of products and are generally conducted following standardised practices and normative process covering the **4 phases of the cosmetics use**: the appearance, the pickup, the application and on final touch.

The sensory analyses use **two types of panels**:

- **The expert ones**: trained assessors who measure the various characteristics of the product or
- **The naïve ones**: subjects who test the products and give their opinion on its characteristics.

How to objectivate the real and perceived efficacy?

Sensory analyses are tailored protocols to be deeply defined with your testing suppliers in function of the targeted countries. It requires specific equipment such as specialised test rooms (Afnor NFV 09105) with individual cabinets including : fizz network, sink, mirror, standardised daylight neon...

The protocols include discriminative tests, descriptive tests for organoleptic properties (appearance, odour, texture) and for perceptions (liking, insights, acceptability, perceived efficacy).

Beyond safety and efficiency characteristics, the sensory analysis is a major criterion of the personal care product objectivation by describing, discriminating and comparing them.

It may be subdivided into three sections:

- **Analytical testing by the expert panel**: evaluation of the objective facts of the products for the discrimination testing and the descriptive profiling: hedonic test, Product characterisation, Sniff tests, Organoleptic properties: appearance, the odour, the texture. The panellists rate the intensity of each descriptor (previously defined) answering a questionnaire.
- **Affective testing**: evaluation of the subjective facts such as preferences.
- **Perception analysis**: evaluation of the biochemical and psychological aspects of the holistic sensation focused on the overall appearance of the product.

Other **analyses also enable the sensory evaluation** by naïve panels:

- **Consumer testing** including large (50 or more) panels. It obtains subjective data, or how well products are likely to be accepted. It is simple comparative or more complex questioning.
- **Focus group testing** with small subject number obtain qualitative and deep insight mapping.

The sensory profile with expert panel is useful for all phases of the products development and represents a **sensitive tool** which can be compared with instrumental measurement. It is very helpful to optimise links between formulation and worldwide product perception.

Find tomorrow new textures thanks to sensory analysis by Eurofins!



Research for new sensorialities, exploration of innovating product experiences are today the key issues of innovation in cosmetics.

Sensory analysis then appears as a **major decision-making tool** to identify and select new powerful formulas. Thanks to a panel of experts trained on the texture of emulsions, Eurofins Marketing Research offers to draw up the dynamic sensory profile of your products on all the texture temporal dimensions (at pick-up, during application, on final touch). Add **sensory dynamic studies** to your innovation process and surprise your consumer with new sensorial effects!

www.product-testing.eurofins.com

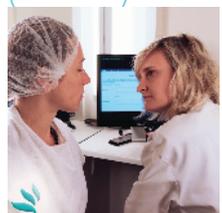
The different methodologies of sensory analysis by the Cerco



It can take different forms: from the standardised technique with a panel trained to the consumer evaluation on a more naïve population. According to the need, the normative methodology can be replaced by the organisation of **comparative consumer tests** allowing to combine the consumer preference with the perception that they have of the appearance, the odour, the texture of the products tested. It is then possible through the same study to connect **statistically sensory performance, perception of efficiency and consumer preference**.

www.cercotests.com

Sensorial analysis: a major asset of the Dermscan Group



Dermscan guides you to evaluate the **perceived quality** of your products, both in terms of their efficacy and their appreciation by your future consumers. Tailored protocols are carried out by our **panel of experts**, with a know-how of more than 25 years! Dermscan realizes:

- discriminative tests, detecting the presence or absence of sensory difference between several products
- descriptive tests, such as profiles giving the organoleptic characteristics of each product - which makes it possible to compare them
- classification tests, by an expert panel
- hedonic tests, by a naïve panel

www.dermscan.com

3D MODELLING, ALGORITHMS AND IMAGING

Key notes of the International Society for Biophysics and Imaging of the skin, (ISBS) congress - May 2018 - San Diego USA

This international biennial congress is a formidable window of the **skin objectivation science**. It reflects the state of the art in the **latest innovative devices and methods** to objectivate the efficiency of personal care products.

The various lectures demonstrate the importance of the imaging of the skin from the **centimetre to the nano scale**. Measuring the several elements and structure of the skin: water, lipids, dermal-epidermal junction, extracellular-matrix, fibers...

Globally, it seems that the ultimate Graal is **the visual and quantitative evaluation** coupled with **data treatment algorithms**. **3D modelling** of the skin structure from the surface until the deep dermis **remains a "must have"**. The various new techniques mentioned constitute a long list:

- the microscopy: multiphoton, reflectance confocal,
- the spectroscopy: FTIR, confocal raman micro, infrared spatially resolved (Connected Physics)
- the tomography: Optical Coherence, Gabor-domain optical coherence,
- Miscellaneous: Lightcam (Newtone), skin reflectance (Canfield), EvaSKIN (Eotech), model of elastic wave propagation (Ecole Centrale),

Here are some of the topics which have been scanned:

- The **overcoming the barrier** and delivery into the skin using polar pathway (C1)
- The **neonatal skin** with the multiple physical and biological functions of the Vernix caseosa (C4). The significant improvement of tribo-acoustic parameter on dry skin roughness treatment in a pediatric population (C6)
- **Barrier Function and Hydration**: reconstructed image of the SC using confocal microscopy and algorithms (C8). Molecular descriptors of skin barrier function by the confocal Raman microspectroscopy (C9)
- **Stratum Corneum Hydration**: the maturity of the cornified envelope using stripped stratum Corneum (C10). The Capacitance imaging technology (Cyberderm) evaluating the skin surface microtopography and moisture (C11). Interestingly, higher compacity of lipids, higher total water content and lower unbound water content are observed for elderly (C12). Dynamics of the moisture with Deuterium measurement (C13).
- **Skin Imaging in honour of Pr. Nick Kollias**: Validation of a statistical modelling of facial skin Radiance (C15). Measuring skin mechanical properties with the 3D digital image correlation (C17). A new algorithm developed in parallel use of the multiphoton microscopy that characterizes the orientation and density of dermal fibres (C19).

Whether for ageing, radiance, biomechanical properties or moisturizing, the several techniques look for **higher resolution, larger measurement area, non-invasive, no-contact and direct methods**. The **algorithms and the statistics** are the principal future contribution of the success of these new technologies.

The combinations of classical biometric measurements with more high-tech devices and specific biomarkers can provide a **better understanding of the organization of the skin structure and its functions**. It increases the accuracy of the measurement and gives new perspective in the claim substantiation of cosmetics and its application on the ethnical diversity.

An innovative device to objectivate skin ageing by Varenne Technologies

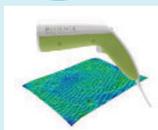


Collagen is a key parameter for skin aging characterisation but there is no hand-held and cost-effective scientific device on the market to assess it

accurately. Based on **infrared diffuse reflectance spectroscopy**, a new cosmetic probe, Dermo of Varenne Technologies, is able to measure both **collagen and deep moisture in the dermis**, at a probe depth between 250µm and 400µm. Connected, fast and easy-to-use, Dermo has proven its efficiency to keep track of skincare products effects in research centers and assist beauty counsellors in points of sale.

www.connectedphysics.com

Intertek acquires a new device: the C-Cube



Intertek has acquired a new Dermatoscope included a color video camera: the C-Cube (Pixience) which offers many possibilities in terms of

illustrations and images analysis. It combines indeed in a single device the ability to **evaluate 2D** (color, surface, pigmentation, erythema, ITA) and **3D criteria** (roughness, depth, symmetry and distribution of texture on the skin). An innovative solution allowing pretty visuals at the level of the skin and the scalp and at a lower cost considering acquisitions are simple and quick to achieve!

www.intertek-france.com/etudes-cliniques

Lipid analysis for skin penetration properties of saturated phospholipids by Lipotype

Lipoid offers a wide variety of phospholipids for use in the production of pharmaceutical formulations, cosmetic and dietetic products. Lipoid



conducted this study to investigate skin penetration properties of dermal formulations based on hydrogenated phospholipids. The results of the **quantitative analysis with Lipotype Shotgun Lipidomics** confirm the properties of hydrogenated Phospholipids to penetrate and accumulate in upper epidermal layers. Who is Lipotype? Lipotype delivers comprehensive, absolutely quantitative **lipid analysis services**. The wide range of applications for the cosmetics and dermatology industry include claim support, drug development and validation, and personalized cosmetics.

www.lipotype.com

Partners key figures

2

distinct scorings for long-lasting effect and quality of makeup holding by DermScan

6

Lab centers in Eastern Europe for JS Hamilton Poland

30%

off on EvaSKIN/VisioTOP system by Eotech

32

devices for biometry studies at the Cerco

37

methods listed in the Skinobs platform by Intertek

60

countries of the Eurofins presence

509

quantified unives lipids

1 340

Confocal microscopy images implemented by DERMATEC since January 2018

2 200

analysis implemented by Cosmepar in 2016

Agenda

18-21
SEPT.

30th IFSCC Congress
München

25
SEPT.

LyonBiopôle/CED
Veillessement cutané
Lyon

News

Read the latest news on cosmetics testing. Subscribe to the online Newsletter :

www.skinobs.com/news

Dermatec celebrated the inauguration of its new lab centre



The DERMATEC laboratory celebrated in June its **official inauguration** of its new centre near Lyon. All its partners, academic researchers, doctors, experts in clinical testing, employees of the town hall of Tassin-la-demi-lune, have responded to this special evening. After speeches full of kindness and humour of **Pr Jean-François Nicolas**, (President of LyREC, Dermatologist, Allergologist, Researcher at INSERM), the General Director, Mrs Lavoix and the President, **Mr David Bottiglioli**, the Mayor of Tassin-la-demi-lune, Mr Pascal Charmot, also spoke and stressed his pride in seeing dynamic and innovative companies settle in his city. The evening then continued in a festive and magic atmosphere.

www.dermatec-lyon.com

Antiperspirants and deodorants evaluation by Hamilton J.S Poland



Antiperspirants are used to reduce regular perspiration. The most important aspect for a consumer is the **duration of efficacy**. To present reliable results, it is necessary to perform efficacy testing in the axilla of human volunteers after **24 hours or 48 hours**. To test the sweat-reducing efficacy of antiperspirants, J.S. Hamilton Poland follows the FDA guideline. One of the inclusion criteria for volunteers is a **wash-out period of 17 days**. Moreover, the volunteer should produce >150mg of sweat during the initial sweating phase. After application of tested product, sweat is collected thanks to cotton pads again after specific amount of time and specific conditions. The deodorants masque the odor and their efficacy is evaluated using **sniff tests**.

www.hamilton.com.pl

SkinFlex™ – OrionTechnoLab, France



This new system developed in collaboration with Sederma company, allows without any contact, a **measurement of mechanical properties** of the skin and subcutaneous tissues. Based on an air flow system to perform the strength and a fast camera (300 fps), the dynamic deformation of the skin and its relaxation can be measured with a close relationship to the **clinical evaluation of the slackening**. This device, handle free and used both on the face and body, gives a quantitative information about the Tension, Firmness, Tonicity of the skin and the speed of its relaxation about which we know that it's very correlated to the skin ageing.

www.orion-concept.com

Zurko Research evaluates deodorants and antiperspirants efficacy



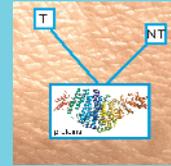
In summer, with heat and sweat we need to resort to deodorant and antiperspirant products. Antiperspirants reduce the production of sweat, while deodorants only neutralize bad odors. These products, like all types of cosmetics, must have passed satisfactorily efficacy and safety tests.

To check the effectiveness of an antiperspirant, Gravimetric Technique Tests are used, which measure the reduction of sweating. For deodorants, Sniff Tests assess the effect of the product against bad odor.

Though, there are other enemies to face, as white spots on dark cloths, or unappealing yellow spots on white outfits. In both cases colorimetric techniques and photographs are used to evaluate products' effectiveness.

www.zurkoresearch.com

An innovative predictive tool for substantiation, LC-MS/MS proteomics and Coravalid™, by Phylogene



This publication shows how our « **free of hypothesis** » approach can describe all the effects which are induced by an ingredient on an ex vivo classic model. It

gives for the ingredient a more extensive understanding of the mechanisms of action and some specific insights, which were also predictive as confirmed at the clinical level, and which allowed supporting a complete and original claiming.

This method shows huge advantages :

- It is **based on proteins** which are in charge of the structure and the metabolic functions in the cells,
- It is **untargeted**, which allows to have at the same time a complete view on positive and possible toxic effects.

www.phylogene.com

EOTECH celebrates its 25 anniversary with the Evaskin



The EvaSKIN system, is a turnkey solution to evaluate the **skin topography**. It uses a 3D digital technology based on a patented Active Stereometry. It is a compact instrument which objectivates wrinkles and folds (crow's feet, nasolabial ...), eyebags volume, Lips wrinkles and volume and skin color texture studies. On this special occasion, Eotech offers a special promotion: **30% off on the EvaSkin/VisioTop System**. This offer is limited on 10 systems and specific configuration package. First order, first served.

www.eotech.fr

Cosmepar the complementary expertise of microbiology, tolerance and efficacy evaluations



Cosmepar group combines the **technical skills of 3 laboratories** dedicated to evaluating cosmetics products. It

proposes the integration of the entire evaluation phases from the microbiology tests, the toxicology aspects, the tolerance evaluation on volunteers to the efficacy objectivation using high-tech methods. Their goal is to guide their customers throughout the **whole marketing process** for standardised studies answering norms and personalised protocols. The clinical studies are conducted on volunteers, examined personally by the doctors or under dermatological, ophthalmological supervision: patch test, Open tests Final clinical safety test, photosensitising potential test, iterative tolerance studies, use tests.

www.cosmepar.fr

Skinobs map: a worldwide view of your testing partners



They have placed their trust in us

Basf – Bayer – Berkem – Botanicchem – Capsum – Chemunion – Clariant – CLR – Codif – Cosmo – ingredients – Covestro – DSM – Expanscience Exsymol – Gattefosse – Givaudan – ID bio – IFF – Impag – Lipoid – Lipotec – Lucas Meyer – Merck – Mibelle – Naturex – Nikko Chemicals – Nikkol Ocealys Provital Rahn – Robertet – Rossow – Sanofi – Seppic – Silab – Sollicebiotech – Thor – Unipex – Weckerle Aesop – Ales – Alpol – Amore Pacific – Aseptia – Avon – Biersdorf – Bioderma Boots – Chanel – Clarins – Coty – Esthederm – Eugene Perma Expanscience Galderma – Hermes Parfums – Hormeta – Ingrid Millet – Johnson & Johnson – KDC – Kiko – Laboratoires de Biarritz – Laboratoires Léa Le Petit Olivier Léa Nature – L'Occitane – L'Oréal – LVMH – Make Up For Ever – Maqpro – Marionnaud – Mavala – McPherson's – MNK Multaler – Natura Nuxe-Oriflame Philips – Pierre Fabre – Procter & Gamble – Rivadis – Sanofi – Shiseido – Sisley – SVR – Thalgo – Yves Rocher – Yves Saint Laurent

Contact

contact@skinobs.com

www.skinobs.com

Technolac • 17 rue lac Saint André
73 370 Le Bourget-du-lac FRANCE