

Anti-pollution efficacy proven

Lipotec's research on anti-ageing has recently put the focus on the anti-pollution properties of the well-known antioxidant ingredient Lipochroman synthetic molecule.

The recent *in vitro* results have showed a reduction by 99.3% of DNA damage induced by pyrene, one of the most abundant and harmful air pollutants. Upon photoactivation by UVA and/or visible light, pyrene potentiates reactive oxygen species that induce single strand DNA breaks.

The research of Lipotec in skin prevention has led to numerous patented peptides and synthetic molecules addressed at modulating proteotoxic stress and preventing cellular damage due to free radicals generated by

intrinsic and extrinsic stimuli. Among them, Lipochroman synthetic molecule has dual scavenging properties (ROS and RNS) and helps to protect cells from irreversible damage while preserving cellular viability against oxidative stress.

With proven excellent long term stability when compared to other well-known antioxidants, Lipochroman synthetic molecule has shown *in vitro* an antioxidative effect greater than resveratrol, vitamin E and ferulic acid, and a photoprotective profile. In today's environment, protection against the impact of pollution, stress and UV is a continued area of focus in skin care products the new anti-pollutants study completes its shielding profile to meet increasing consumer awareness on age-prevention.



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Manufacturing agreement

P2 Science and Bedoukian Research have entered into an agreement for the development, manufacturing and marketing of flavour and fragrance (F&F) ingredients.

Launching into a demanding market, the companies are hoping to create innovative new molecules for the F&F industry. Bedoukian's background as a F&F ingredient company, combined with P2 Science's experience in the renewable chemical sector, will allow them to alleviate regulatory pressures and consumer demands for greater product sustainability while

also increasing the cost effectiveness of the molecules.

P2 Science use patent-pending 'ozonolysis' technology to convert biomass into specialty chemicals. This technology will be used to produce renewable versions of existing F&F ingredients as well as brand new molecules that are inaccessible using current chemical methods

The companies are hoping to be able to produce the new molecules for commercial supply within a 12-month time frame.

COMMENT

The power of claims

One of the most valuable ways for personal care companies to rise above the competition is to make more impressive claims within their advertising and on their packaging. Doing this correctly requires a great deal of teamwork between the R&D and marketing departments, however, unfortunately some companies have occasionally overstepped the mark.

On page 14 of this issue of *Personal Care*, a new product launch from the US managed to make headlines across Europe based on its incredible claim to offer UV protection in a drinkable delivery system. This claim was immediately pounced on by newspaper editors who rightly supposed their readers would like to hear about a new way of protecting their skin, but did not look too deeply for evidence to back up the claim.

It is clear how potentially dangerous

it could be to market ineffective sun protection to consumers but this is perhaps a strong, if negative, example of how powerful claims can be. In the meantime, we watch the further development of properly-researched oral sunscreens with interest.

The article from MMR on page 17 offers an excellent insight into how various components of a campaign can be tested and the piece illustrates the power of efficacy claims to consumers, often proving to be more influential than images of celebrity endorsers. This is a real indication of the constant need for technological innovation within the personal care industry, but innovation that is backed up with credible science and rigorous testing rather than marketing claims alone.

Richard Scott
Editor

Natural ester portfolio acquired

The HallStar Company has announced a strategic expansion of its natural functional ingredients portfolio with the recent acquisition of the Florasolvs natural esters product line of specialty ingredients from FloraTech.

"Today's savvy consumers demand the best of both worlds—an assurance of trusted, natural ingredients with functional properties for personal care products," stated John Paro, president and CEO, The HallStar Company. "Investing in ingredients such as Florasolvs

natural esters is a win-win for our valued customers, who want to develop only the most unique products to distinguish their hair and skin care formulations from others in competitive consumer markets."

Florasolvs esters join a growing portfolio of The HallStar Company's organically derived products that deliver functional benefits. The Florasolvs series brand bolsters the company's growing line of products for the naturals segment in the personal care ingredient industry – and

strengthens their position to serve the burgeoning market for personal care products featuring renewable natural ingredients. This recent acquisition is one in a series The HallStar Company has completed toward expanding its natural functional ingredients portfolio. In 2011, the company acquired Italy-based B&T Company, a worldwide leader in olive-based performance ingredients for use in personal care products, and BioChemica International, a leading developer of exotic butters and oils.

Sustainability concept launched

Clariant has recently launched its EcoTain concept for the personal care sector. The increasing emphasis placed by consumers on health and wellness at both a personal and environmental level is reflected in the growing demand for sustainable personal care products that use natural ingredients.

The EcoTain concept is an integral aspect of Clariant's Secret Code of Beauty, introduced at in-cosmetics in 2013, with its five complementary codes: sensorial solutions, sustainability, consumer and trend insights, innovation power and market expertise.

Sustainability is the cornerstone of the EcoTain label, which provides a means of measuring and understanding the ecological, economic and social impact of Clariant's products over the entire value chain. The EcoTain four-step concept was developed to protect human, environmental and ecological health without



compromising on the performance or efficiency of Clariant's products.

EcoTain promises "sustainable excellence at every step" and more than 25 cosmetic

ingredients in six categories – emollients, emulsifiers, mild surfactants, pearlers, actives, preservatives & boosters – have already been awarded the label.

Various criteria of sustainability distinguish these products. These include the use of natural or nature-identical resources, provision of sustainable alternatives to undesirable substances, suitability for skin-friendly formulations, and handling and processing benefits, among others.

By selecting EcoTain-approved products, Clariant customers in the personal care segment are able to meet consumer demand for more natural, environmentally compatible products at the same time as contributing to their company's long-term business success and fulfilling corporate sustainability targets. EcoTain products are highly efficient and perform to the same high standard as traditional products – often higher.

Colour protection preserves volume

Dow Corning has introduced an innovative silicone microemulsion that helps bring hair repair and colour protection benefits to shampoos without sacrificing hair volume.

The new product reflects the growing demand from consumers for products that can help address one of their biggest hair care issues – how to repair damaged hair. Shampoo manufacturers are launching lightweight, volumising shampoos that cater to consumer desires for youthful, fuller hair. However, only a fraction of these products claim to repair damaged hair.

"In the past, shampoo formulators often felt that they had to compromise hair volume to achieve the benefits of repair and protection," said Feifei Lin, Americas marketing

manager for Dow Corning's hair care market. "We designed the new Dow Corning CE-1874 Microemulsion so that they no longer have to compromise. Now they can create shampoos that deliver more of the benefits consumers want."

Dow Corning CE-1874 Microemulsion is a clear, water-dispersible microemulsion of silicone polyether that delivers feather-light smoothness. It can be used in standard, sulphate-free and clear shampoos to help increase the fullness of thin, tired-looking hair; to repair dull, dry hair; and to protect and maintain the colour of colour-treated hair. Suitable for use on many hair types, the product also has the ability to enhance hair shine and improve ease of combing.

Call for papers

The Scientific Committee of the IFSCC Conference 2015 in Zurich, Switzerland, has invited submissions of abstracts for oral presentations and/or a poster presentations at the conference.

The important deadlines for the process are as follows:

- **31 October 2014**
Abstract submission deadline
- **31 January 2015**
Notification of abstract selection results (by e-mail)
- **31 March 2015**
Deadline to send the full papers (accepted abstracts)
- **21-23 September**
2015 Conference

Abstracts must be submitted in English with a maximum of 500 words. Tables and graphs cannot be included in the abstract. The abstract should describe an original scientific work and must not have been previously submitted to any other conference.

Superfood inspiration

Croda has unveiled its latest products derived from superfoods; Hydroastivum P for powerful moisturisation and anti-irritancy properties for the hair and skin; and Crodasone P for protection against cuticle cracking caused by heat and styling damage.

Obtain hydration harmony with Hydrosativum P, a highly moisture retentive biopolymer that exhibits powerful moisturisation properties in hair and skin care formulations. Hydrosativum P immerses the skin with moisture to improve firmness and elasticity which promotes younger looking skin. As well as moisturisation benefits Hydrosativum P has additional anti-irritancy properties ideal for skin and scalp care. Hydrosativum P is naturally substantive to a variety of hair types from different ethnicities binding to moisture and hydrating hair at a wide range of humidities,

increasing hair plasticity to help prevent breakage.

Defend cuticles from heat and styling damage with Crodasone P, an advanced copolymer that offers proven protection against cuticle cracking caused by common hair styling practices such as blow-drying, combing and styling. Due to its complex polymeric structure, Crodasone P cross-links on drying to form a conditioning and protective network that offers functional benefits to all types of hair care products. Studies have shown that Crodasone P can reduce thermal cracking by 49% in an aqueous spritz and 38% in a conditioner system. Crodasone P is ideally suited to leave-on styling products or conditioners claiming heat defence but is also proven to be effective in rinse-off applications such as shampoos, conditioners and hair treatments to defend the cuticles from damage caused during styling.



New member for ethical union

The personal care business unit of Naturex, manufacturer of natural ingredients to the cosmetic industry, has become the newest member of the Union for Ethical BioTrade.

Naturex sources raw materials from all over the world and develops innovative ingredients that combine performance with sustainable practices. Becoming a UEBT member is part of Naturex's sustainability programme launched in September 2013. In continuation with the company's dedication to sustainable principles and practices, this programme drives improvements in ethical and responsible business practices across the entire value chain.

As part of UEBT membership, Naturex will continue to implement Ethical BioTrade requirements in the supplier management system of its fast-growing personal care business unit. Relying on 8 purchasing offices located near strategic sourcing areas, Naturex will also further develop its partnership with its suppliers to promote good practices throughout its supply chains, giving initial priority to the most extensive cosmetic ingredient supply chains. Moreover, Naturex's agronomic department provides technical assistance and promotes, encourages and monitors the implementation of responsible practices by actors involved in the agricultural production chain.

Naturex's Personal Care Business Unit will report annually on the progress made regarding its UEBT membership requirements. Independent auditors will audit Naturex triannually to confirm adherence with UEBT standards.

Texture and smoothness of stressed skin improved

Symrise launches SymVital AR, which is a 100% pure and natural ginger root extract. SymVital AR is proven to significantly improve the skin texture and smoothness of stressed skin, smoothing wrinkles and enhancing complexion regularity in three weeks. It also helps to reduce signs of sun damage in less than two weeks.

SymVital AR is a 100% natural ingredient from ginger root. The spice has a long history of use for food and pharmaceutical application. Symrise uses an eco-friendly process to extract the main components of ginger with soothing and antioxidant activity. Thanks to a multistep separation process, the final extract is enriched with the two main compounds responsible for

the benefits in skin care application.

The versatile skin beautifier SymVital AR is suitable for all complexions and ages. It protects and improves skin smoothness, complexion regularity and homogeneity of the challenged and stressed skin. Antioxidant and soothing activities provide skin protecting and caring properties. SymVital AR is proven to significantly smooth wrinkles and even the skin tone in 21 days and also help to reduce signs of sun damages in less than 2 weeks.

After 56 days of using a cream with 0.2% SymVital AR twice daily, the product significantly decreased the appearance of UV spots compared to a placebo product.

Self-emulsifying waxes

At the SEPAWA Congress in Germany, KahlWax will be presenting the company's self-emulsifying waxes which open up great new options for the cosmetics industry.

The advantage of self-emulsifying waxes lies in the combination of a wax blend with a PEG-free emulsifier, meaning they can be simply added to the water phase and heated to approximately 80°C for gentle melting.

The KahlWax portfolio includes two self-emulsifying waxes. Firstly, Kahlwax 5109 is based on sunflower and carnauba wax. Sunflower wax is a pale yellow wax with a transparent melt. It has a melting point of 78°C, yields a balanced hardness and has an excellent oil-binding capacity. Carnauba wax is a very hard wax which

forms a glossy surface. It also has an excellent oil-binding capacity and it improves the thermal stability of sticks thanks to its high melting point (82-86°C). KahlWax 5109 with its PEG-free emulsifier boosts the sensory properties of formulations and stabilises oil/water emulsions.

Kahlwax 5115 combines the benefits of rice bran wax and myrica wax and is specifically optimised for use in oil/water emulsions. Myrica wax is a fruit peel wax from Latin America.

It has a low melting point (40-50°C) combined with exceptional hardness. Rice bran wax is a hull wax produced as a by-product during the preparation of rice bran oil. It has a high melting point (78-82°C) and due its crystallinity forms soft, matt oleogels.

Active repairs and moisturises skin

Optimising lipid organisation, reinforcing epidermal cohesion and activating keratinocyte differentiation are the three biological mechanisms involved in skin hydration homeostasis.

Silab has developed Cohesium, a repairing and moisturising active ingredient, rich in purified ophiopogon tuber fructosans.

Cohesium normalises the barrier function. An original study shows that Cohesium stimulates the natural synthesis of lipids and optimises their organisation. For the first time,

the molecular signature for very dry skin was established and compared with that of normal skin, proving the benefits of Cohesium on epidermal lipid organisation. In addition, it has a positive action on the formation of tight junctions and keratinocyte differentiation.

Cohesium contributes to skin hydration by increasing the levels of NMFs (Natural



Moisturising Factors), true biological humectants for the *stratum corneum*. Therefore, Cohesium maintains an effective epidermal barrier and ensures tailored skin hydration.

Cohesium improves comfort and protection and is recommended in any moisturising and restructuring care for all skin types.

Milan exhibition to return

The Making Cosmetics exhibition will return to the Centro Congressi Milanofiori in Milan on 24-25 November. The show has been fine-tuned after feedback on the highly successful exhibition last year to provide the attendees with the most useful and up-to-date information in an environment conducive to networking.

Once again, Making Cosmetics will integrate with SICC's Formulating Cosmetics to collaboratively produce the first Italian event dedicated to cosmetic formulators. This combination also creates a unique opportunity to provide "up-to-the-minute information from across the innovation chain, right up to University level research".

The conference will include updates on regulatory fulfilments and the economical forecasts in the field, followed by a series of speeches focusing on marketing and business tools (with a focus on the opportunities of the web), product development, packaging and much more.

This year the show will focus on topical issues surrounding the sustainability of products, and moving towards the concepts of Expo 2015.

Ester has spreadability

Lonza has recently launched a new Lonzest DC Emollient Ester that offers excellent spreadability on the skin and skin conditioning properties that will benefit personal care formulators.

Representing the latest multi-functional ingredient from Lonza, Lonzest DC (dicaprylyl carbonate) is a light ester emollient that conditions skin with superior solubility of UV sun filters. It has excellent pigment-wetting properties and is a silicone-free alternative. The product helps give a light, dry, powdery feel to the skin so that the skin does not feel oily or greasy despite the application of a sunscreen or face lotion. Lonzest DC can be used in sunscreens, colour cosmetics, daily facial

lotions, overnight serums and non-greasy aesthetic formulations.

"Lonzest DC emollient ester is a broadly functional ingredient in formulation. One of the major benefits is its ability to provide pigment wetting for colour cosmetics," said Lisa Bouldin, head of Lonza Personal Care. "Study results also confirmed it is capable of helping to solubilise many different organic UV filters, as well as to improve the dispersion of inorganic UV filters."

Lonza has incorporated the Lonzest DC technology into two available formulations for cosmetic and personal care formulators: HydraTherapy Sleep Time Mask and Polyaldo Base Formulations.

Management changes

Werner Breuers, board member of Lanxess AG and, up to now, responsible for the segments Performance Polymers and Advanced Intermediates, will leave the company at his own request after his contract ends on 31 May 2015, in order to pursue new challenges. Mr Breuers will leave the board of management with immediate effect. He will, however, remain in an advisory role to Lanxess for a transitional period.

"We thank Mr. Breuers for his work and wish him all the best for his future," said Rolf Stomberg, chairman of the supervisory board.

The Supervisory Board has with immediate effect handed over the responsibility for the segments Performance Polymers and Advanced Intermediates to Matthias Zachert, chairman of the board of management of Lanxess AG, on a temporary basis.

Anti-blemish and hydrating effects

Naolys, the French company specialised in plant cell culture presents active plant cells with mattifying and hydrating activities from Chinese peony (*Paeonia lactiflora*).

As a multifunctional active ingredient, Pure Light Chinese Peony limits shine, reduces inflammation and increases hydration. *In vitro* tests show an inhibition of the 5 alpha-reductase by 16%, a decrease of IL-6 by 19% and an inhibition of the release of substance P by 20%. A clinical study shows a mattifying

effect translated by a decrease of the shine until 6 hours after a single application, a decrease of the sebum rate by 18% after 56 days of treatment, and, a hydrating effect translated by an increase of 37% of comeometric values after 28 days of treatment.

All tests were performed with a concentration of 0.1% of a powder made of 100% whole plant cells. Pure Light Chinese peony is an active ingredient that can be used in any formulation from skin care to makeup applications.

