

Green and sustainable emulsifier

Vantage announced the newest addition to their product line with the Lipomulse Eco Series.

Green and sustainable non-ethoxylated emulsifiers are a key area of growth in the personal care market. Vantage has been focused on the development of a new EO-free emulsifier platform that contains products with a broad range of formulation applications, at reasonable cost when compared to alternatives currently found in the market. With a focus on developing several green and sustainable materials, Vantage has now developed an emulsifier platform with a range of HLBs under the Lipomulse Eco brand name. These materials

are naturally-derived and non-ethoxylated.

The new molecules utilise Dupont Tate & Lyle's Zemea propanediol as the naturally-derived starting raw material. Zemea propanediol is made from the fermentation of a renewable resource vs. alternative glycols which are derived from petroleum. A peer-reviewed life cycle assessment shows that from 'cradle-to-gate', the production of biobased propanediol consumes 40% less energy and reduces greenhouse gas emissions by 40% vs. petroleum-based glycols. Zemea has been certified by the USDA as 100% biobased, making this a key raw material in the Lipomulse Eco line.



R&D centre officially open

The Hallstar Company has announced the official opening of its Asia Pacific R&D centre in Suzhou China. Situated in the Suzhou New District (SND), Hallstar New Material Science & Technology (Suzhou) Company Ltd will serve as the company's R&D and technical support base in the Asia Pacific region. In the near future, it is expected to house additional functional groups for the company.

The new laboratory is housed in the MedPark of SND, a state of the art research and development area invested by the Suzhou government. In addition to the advanced facilities established by Hallstar, researchers in

the R&D centre have full access to the various platforms provided by MedPark and SND, including a complete analytical centre equipped with various chemical and biological analytic instruments run by a team of chemists.

The facility will conduct advanced research work for the beauty and personal care market, including frontier research in sun protection, anti-ageing, whitening, and functional natural ingredients. It will also carry out research work in industrial polymer modification focusing on technologies such as polymer plasticising, surface enhancement, and processing improvements.

North European distributor deal

DKSH has acquired Andreas Jennow, a specialty chemicals distributor in Northern Europe. Founded in 1916, Andreas Jennow is a specialty chemicals distributor and major supplier of raw materials in Northern Europe and in the Baltics. The company has activities in Denmark, Sweden, Finland, Norway, Iceland, Estonia, Latvia and Lithuania. Andreas Jennow offers the full product range for the specialty chemicals and personal care industries. Peter From, managing director of Andreas Jennow stated: "With this transaction, we create an ideal succession solution and a solid foundation for the future development of our company. DKSH's global platform makes the company an ideal new owner. Beyond ensuring the successful continuation of our business, DKSH will provide our clients and customers the opportunity for regional expansion and access to a larger product portfolio."

COMMENT

Food can be an active source of inspiration

As the preview to the in-cosmetics Summit in this issue suggests, many formulators believe texture and sensoriality to be the biggest challenge in their professions. Creating novel textures that capture the consumer's imagination and provide individuality to a brand is not easy, but incredibly powerful if achieved.

Developing new textures requires a certain amount of 'thinking outside the box' and this can be helped by searching for inspiration within other industries, particularly food. There has already been some crosspollination of ideas with tapenades and suchlike, but there is surely more to come. The food industry over the past decade or so has seen a real explosion in creativity with chefs such as Ferran Adrià

and Heston Blumenthal thinking in minute detail about the relationship between the molecular structure of a product and its sensorial attributes. Textures are key to this relationship and can completely transform the experience, and as a result, the likelihood of re-purchasing or recommending.

This re-purposing of food industry techniques goes hand-in-hand with a growing trend for food ingredients being used in cosmetics, such as rice, oats, cucumber, grapes and coconut. It will be fascinating to see what else crosses over from our friends in food over the coming months.

Richard Scott
Editor

CSR gold award

Alban Muller's CSR performance has been awarded the highest recognition level (gold) following a recent evaluation by the independent rating platform EcoVadis.

EcoVadis methodology is built on international CSR standards including the ISO 26000, the Global Reporting Initiative and the United Nations Global Compact. It covers four themes: environment, fair labour practices, ethics/fair business practices, and supply chain.

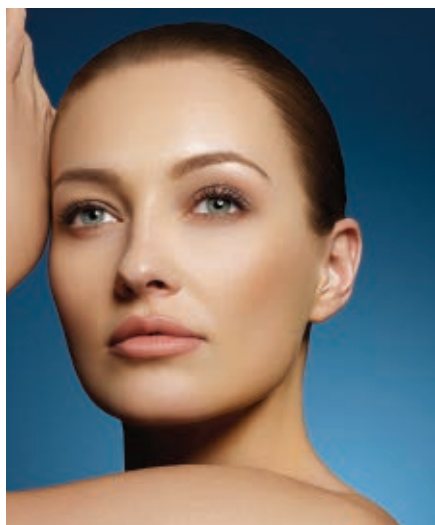
"We are very proud to receive this recognition from an independent organisation, trusted and reputed such as EcoVadis. It highlights our commitment and our advancements in favour of CSR. It has fostered our innovation strength while giving it a real meaning. Thanks to this approach, we catch the attention of major groups seeking partners involved in a virtuous circle," explained Alban Muller, chairman of the group.

Efficacy data revealed

DSM has shared new research findings confirming extra efficacy on skin by Regu-Scence, a pure white asparagus extract from the Navarra region. The molecule, launched by DSM in 2014, proved to be highly effective in anti-ageing applications. Thanks to its mechanism of action it delays the cellular ageing process by stimulating the skin's own autophagy capabilities.

The findings, in a pair of published studies by Murase *et al* and De Mazière *et al*, as well as new DSM *in vitro* data, suggest that the autophagy process plays a key role in melanogenesis. Several proteins, such as Melan-A and Pmel-17, are involved in early melanosome formation. Stimulation of the autophagy pathway leads to increased synthesis of lysosomes, which are capable of degrading these proteins, leading to a reduction of melanosomes, and ultimately, a more even skin tone.

Recent scientific tests on pigmented epidermis equivalents conducted by DSM indicates the efficacy of Regu-Scence at 3%



to enhance the appearance of a more even skin tone. *In vitro*, this ingredient has shown a significant down-regulation of tyrosinase marker by up to 65% and of the recently discovered Melan-A marker by up to 30% in a 9-day test.

Report updates on sustainability activity

Naturex's new 2015 Pathfinder Report includes both an update on current sustainability actions and the company's new global 2020 goals.

Olivier Rigaud, Naturex's CEO, comments:

"Sustainability is vital for our business because nature nurtures all our future developments. It is a key pillar of our Bright 2020 Strategic Plan. Our long-term growth relies on our capability to take into account sustainability in our daily work."

Recently added to the company's portfolio,

Quillaia is an example of the company's approach toward people and environment.

Native to Chile, *Quillaia saponaria*, the soap bark tree, is a hardy perennial evergreen.

The extract obtained from the wood is used in the food, cosmetics and health industries as a natural foaming agent and as an emulsifier.

The extract is harvested in accordance with Chilean Forest Authority's requirements, locally extracted and responsibly processed.

Award dedicated to show supporter

The Society of Cosmetic Scientists (SCS) is to introduce a new competition to find the year's most Innovative Cosmetic Formulation. The challenge is to create the most innovative cosmetic formulation of 2015 and the competition is open to all exhibitors at this year's SCS Formulate (17-18 November, Ricoh Arena, Coventry, UK). The winning formulation will be announced during SCS Formulate 2015.

"I recently saw a quote saying 'The best way to kill an idea is to take it to a meeting'," said SCS President, Steve Barton. "I believe the best way to grow an idea is to share it. And if it's an idea for a cosmetic formulation, there's nowhere better than SCS Formulate!"

The SCS is dedicating the Innovative Cosmetic Formulation award to Laura Marshall, who passed away so suddenly and tragically in October 2014. Laura made a huge contribution to the Society, organising many events, but she was particularly closely associated with SCS Formulate. The SCS wants to mark her contributions and remember her.

Cold weather protection for the skin

The latest *in vivo* study carried out by Lipotec on Antarctic marine ingredient confirmed the active's ability to counteract the effects of extreme weather on the skin. This biotechnological ingredient with cryoprotective properties shields and regenerates the skin as well as reduces wrinkles for a firm and young complexion.

In the new efficacy assessment, the volunteers with signs of dry skin and wrinkles were asked to spend 1 hour a day outdoors in cold weather conditions. Over 30 days, they applied a cream with 1% of Antarctic marine ingredient on one side of the face and a placebo on the other, twice a day.

The participants experienced a significant increase in moisturisation after one week, reaching a 13.5% after 15 days. The Transepidermal Water Loss (TEWL) level decreased by 12.1% after 15 days and up to 14.7% after 30 days. The red complexion, a very common result of the skin being exposed to cold, was reduced significantly in all the measurements, and a more toned and compact skin appearance was observed.

Ingredient review panel

Croda contributed its expertise to the Cosmetic Ingredient Review (CIR) panel in Washington DC earlier this summer through its Sederma division.

The Cosmetic Ingredient Review (CIR) panel routinely analyses and assesses the safety of individual ingredients that are used in cosmetic products, and has worked for 35 years in partnership with the US Food and Drug Administration (FDA) and the cosmetic industry to make sure the most up-to-date information is captured for cosmetic ingredients. On 15 June 2015, a representative from Sederma delivered expert contributions to a discussion around ingredients produced from plant cell technology that falls under the expertise of

IRB by Sederma (Istituto di Ricerche Biotechnologiche SpA), a pioneer in the use of this technology for the cosmetic industry. To assist their review of various cosmetic ingredients derived from *Centella asiatica*, the panel had requested an expert to provide them with a better understanding of *Centella* derivatives from plant cell culture, namely callus culture and meristem cell culture, and how those products might differ in composition compared to other plant extracts.

Sederma's presentation on plant cell culture technology for the cosmetic industry provided the panel with an understanding that allowed them to issue a final ruling, concluding that these products are safe for cosmetic use.

Scientific symposium looks at trends

Science and skin care merged at Induchem Companies' 3rd Scientific Symposium: The Future Omics of the Skin. The conference, held at the Apella Center, New York, featured presentations by panellists Dr Stuart Lindsey, Dr Patrick Robe, Dr Denis Wahler, and Sarah Jindal and covered single molecule technologies, metagenomics, enzymomics, the application of omics to understand molecular basis of disease, and where we stand with omics in skin care.

Sarah Jindal, senior beauty and personal care innovation and insights analyst at Mintel, closed the symposium with consumer data, product examples, and trend implications that bridged the

gap and connected to links of omics and skin care. By taking advantage of the developments in the cost and efficiency of genomics (the study of genes and their function), lipidomics (large-scale study of pathways and networks of cellular lipids in biological systems), and proteomics (large-scale study of proteins, particularly their structures and functions), scientists and brands are able to better predict skin care needs with more extensive gene maps. So what does that mean for the future of skin care? What does today's skin care consumer want? From convenience to ultra-personalisation, customisation is the future and brands have

begun to tailor skin care regimens using genetics in both the luxury and mass categories. With continued technological advances, the cost of testing will drop and greater competition and nuances to services and products will become available. As the industry progresses, brands will be able to focus on more niche concerns, such as protection from smog and urban dust.

These same procedures will also lead to a parallel path in dermacosmetics and create customised formulas for patients with issues such as eczema and rosacea in the future. As science progresses, ultimately, so will all of the skin care industry.

Production sites certified

Evonik's two new production facilities for cosmetics ingredients in Shanghai (China) and Americana (Brazil) were recently certified in accordance with the Roundtable on Sustainable Palm Oil (RSPO) standard.

"This creates an important prerequisite for offering additional certified products to our customers," said Dr Tammo Boinowitz, the head of the Personal Care Business Line at Evonik. As a member of the RSPO, Evonik advocates the use of sustainably produced palm oil in the supply chain. "We strive to use the largest possible share of RSPO certified fatty acids and fatty alcohols from palm oil in our products for cosmetics, detergents and cleaning agents," said Boinowitz. Evonik has introduced a corresponding supply chain system for this purpose.



The first production sites in Essen and Steinau became RSPO certified in late 2013, followed by the sites in Shanghai and Americana in the spring of 2015. Certification of additional Evonik production sites is planned in the near future.

Infographic to change sun care attitudes

A recent survey by the Royal Pharmaceutical Society has highlighted that a quarter of British adults have no idea what the labels on their sunscreen mean and thus what protection they are offering. As a result, it is perhaps of little surprise that one fifth of 18-24 year olds say they would never wear sunscreen in the UK.

Research from Croda's Solaveil team revealed that messages surrounding sun care and the risks of skin cancer are being lost among the young, while forgetful Britons are often 'caught out' by weather in the UK. As a result, the campaign has launched a new infographic to shine a light on UV radiation and sunscreen labelling.

With the summer holiday season upon the UK, Solaveil were keen to gauge Britons' attitudes towards the sun and noticed a strong 'macho' culture emerging which was putting many men at risk of skin burning and damage. In the poll of 1,000 UK adults, nearly one half (44 per cent) of all men surveyed confessed to getting sun burn at a sporting or music festival in the UK, with 15 per cent believing they never had to wear sun cream in the UK.

Helene Hine, marketing manager for Solaveil, said: "Our research clearly shows strong gender and age divides when it comes to sun care, and with the rising popularity of the 'staycation' we're keen to help consumers understand their sunscreen as much as possible.

"Our new infographic has been especially designed to tackle some of the most commonly misunderstood aspects of sunscreen labels and help put these in context of sunlight and its impact on the skin."

Bulgarian distributor

Safic-Alcan has announced that it has acquired the distribution business of Chimsnab BG, a Bulgarian distributor.

Chimsnab BG is focused on the distribution of high-quality polymer compounds and specialty chemicals. Spelling out the rationale behind the sale, Martial Lecat, CEO of Safic-Alcan explained: "This acquisition will be used as a sourcing platform to further enlarge the product range of Safic-Alcan with some selected polymers and high performance compounds allowing it to serve most of its customers in the South Eastern Europe zone."

Chimsnab BG operates with two regional offices, in Sofia and Ruse. Strategically located on the Romanian border and near Serbia, Ruse will also be used as a regional logistics hub.

Expansion plans

Princeton Consumer Research announced plans to expand their North American operations with a newly constructed consumer research facility opening in Florida later this year.

Following the development of the Princeton, NJ, facility, opened in September 2014, PCR has seen an increase in the demand for its services across the US and globally. This growth can be attributed in part to the ever rising pressure for products to comply with stringent safety guidelines. However, more and more organisations are testing their products to substantiate the bold claims made by their marketing departments in a bid to win their share of the market and avoid costly legal action.

"The demand for safety, efficacy and acceptability studies is on the rise daily. So, we're happy to introduce our latest expansion plan and look forward to continuing to provide the highest level of service to our clients," said Jane Tervooren, global director, Client Services.

Skin regeneration – new research promises much

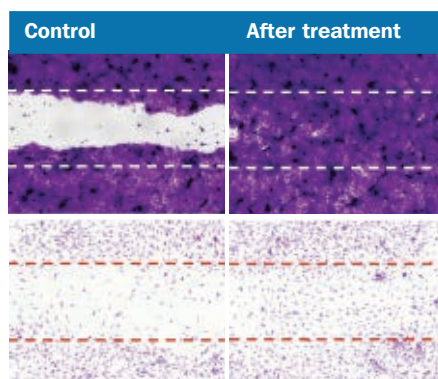
Recently, a brand-new research strategy has emerged to support the tissue regeneration process during repair to damaged skin. It consists of applying biocompatible and biodegradable materials on lesions, promoting cellular migration and neocolonisation and the high mobilisation of growth factors, which are biological substances essential to this process.

This innovative approach has been one of the main focuses of Silab's advanced research laboratories for several years. To manage this ambitious research programme and see it through to completion, Silab has two necessary and complementary internal assets which are know-how in the production of natural biopolymer matrices and extensive expertise in cutaneous biology.

The first phase of this project was formalised in 2007, with the marketing of Glyco-Repair. This biomolecule, a genuine network of natural oligo-galactomannans, stimulates the migratory potential of the skin cells and the endogenous production of key growth factors in the skin

repair process. Studies undertaken *in vivo* have confirmed that this active ingredient accelerates the reconstruction of damaged skin and helps restore its essential functions.

The next phase of this project will be implemented soon with the marketing of a new technology which will provide an innovative approach to cutaneous regeneration by significantly improving the reorganisation of matrices.



Agreement for skin model development

BASF and Poietis, a specialist in 3D laser-assisted bioprinting, have signed an agreement on research and development in cosmetics. Based on the combined expertise of both companies in tissue engineering and bioprinting, the agreement aims to apply the bioprinting technology of Poietis to improve BASF's skin equivalent model Mimeskin.

The 3D laser-assisted bioprinting technology, by which organic tissues can be reproduced, allows for a precise positioning of the skin cells

in three-dimensional structures. Through this, cells are cultivated within BASF's skin model Mimeskin, which is a close equivalent to the original physiological tissue of human skin.

Poietis' bioprinting technology refines BASF's skin model Mimeskin due to its advanced printing resolution. The laser-assisted bioprinting technology will be used in a first step to allow for automated reproduction of Mimeskin, followed by more advanced models containing additional cell types.

Ethical labels boosting Nordic naturals

The Nordic market for natural cosmetics is showing healthy growth, with sales doubling between 2008 and 2014. A new study by Organic Monitor predicts sales revenues to climb to €200 million in the coming years.

Denmark has the largest market for natural cosmetics in the Nordic region; natural & organic products comprise 4% of total cosmetic & personal care product sales. The country also has very high market share for organic foods, 7%; the highest in the world. Danish consumers are high spenders on natural & organic products because of ethical and environmental concerns.

Widening availability is also driving market growth. Natural & organic cosmetics are making inroads in department stores, beauty retailers, supermarkets, drugstores and non-retail channels.

Although imported brands are highly established, Nordic brands are showing a rise in market share. The Danish company Urtekram has taken market leadership.

Organic Monitor finds green labels are becoming increasingly important in the Nordic region. Consumers are increasingly looking for logos and symbols that represent ethical / environmental attributes. The Nordic Swan is most established for personal care products, recognised by over 90% of consumers.

Ethical labels will be featured in the upcoming Sustainable Cosmetics Summit Europe. Hosted in Paris on 21-23 October, an update will be given on the growing myriad of ethical labelling schemes for cosmetics & personal care products. Urtekram will be sharing its experiences with such labels at the summit.

Ten year anniversary celebrated

Blue Sky Botanics, a UK manufacturer of natural botanical extracts and hydrolats, celebrates its 10 year anniversary this autumn.

Blue Sky has grown over the course of the past decade, sourcing botanicals and developing authentic extracts. In accordance with membership of the Union for Ethical Biotrade, provenance, ethical sourcing and attention to quality and traceability are key elements of a Blue Sky Extract.

With investment in efficient manufacturing facilities for the production of hydrolats and a plan to develop more green chemistry, active extracts, the company is focused on continuing to grow into the future. As an important aspect of this vision, Blue Sky is working in collaboration with industry and academia and has recently won a research grant from the High Value Chemicals from Plants Network. James Lambe, who leads the Blue Sky team, said:

"When we started growing a small area of herbs for the food industry nearly forty years ago I didn't imagine that this would develop into such a successful business. Using ethically sourced botanicals, Blue Sky's range of products is satisfying the demand for natural and authentic extracts in both the food and cosmetic industries. Blue Sky will continue to make the case for natural products for many years to come!"