## Longer-lasting colour

Croda is putting an end to dull hair colour with its two defining factors in vibrancy, shine and colour, new hair colour intensifying active, VibraRiche. This new liquid technology offers hair colour formulators the ability to deliver shinier, more vibrant and longer lasting colour to their customers, while sharpening the colour of the hair for intense visual impact. VibraRiche not only allows for amplified colour vibrance, it improves the condition of the hair for stunning shades of touchable, soft, healthy-looking locks.

While the vibrance of hair colour is a perceivable attribute, measuring it for the purpose of comparison is quite new and revolutionary. Croda has developed a new methodology to quantify the vibrancy of hair, the Hair Colour Vibrance Factor (HCVF). Using the

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Croda's analysis of the interaction of light with hair identified two specific incidents of reflection: lustre and chroma. Lustre is the initial reflection of light from the hair surface, and chroma is the second reflection of light after it penetrates the hair fibre. Using these reflections and their overlap, Croda has been able to quantitatively measure hair vibrance, creating a basis for comparison in their studies. The HCVF was calculated for hair dyed with and without VibraRiche, and the resulting data showed that the hair dyed with VibraRiche had an HCVF almost 10% higher than the control.

Along with intensity of colour, another important attribute of hair colorants is their staying power. Customers not only want bright, intense



hair colour, they want it to last. In addition to increasing the vibrancy of the hair, Croda has found that VibraRiche doubles the longevity of a hair dye's initial colour. In a colourwash fastness study, hair dyed with VibraRiche maintained its colour for twice as long as the control product not containing VibraRiche. This longer-lasting colour translates into an increase in value as customers save both time and money by having to dye their hair less frequently.

## SQAS assessment

As a European chemical distribution company, Cornelius has long been committed not only to providing added value to its customers and partners, but also to placing emphasis on community, safety and responsibility in the supply chain.

While it has adhered to the principals of the Global Responsible Care programme for many years, Cornelius has now been successfully

assessed to Responsible Care, through Third Party Verification (TPV), via the SQAS/ESAD scheme. Cornelius CEO, Dr Neville Prior, said: "Whilst our Responsible Care programmes gives our customers, suppliers and partners every confidence in how we manage our products and the supply chain, TPV assessment puts us at the top of the distribution tree. We at Cornelius are very proud of this achievement."

COMMENT

## **Naturally promoting** healthy hair

Hair is one of the most immediate and important visual signals as to a person's personality. Within seconds of meeting someone for the first time, their hair has related information ranging from the person's cleanliness, tidiness, musical taste, health, political persuasion, and socio-economic background. These factors go some way to revealing why hair care is so important to consumers and why finding hair care products that work effectively with their particular hair type is vital.

In this issue of Personal Care Croda examines a novel ingredient that restores hair by mimicking the proteins found in the hair's natural composition. This biomimetic approach ties in well with the desire of consumers to use products that take their inspiration from nature and at the same time delivering care to the hair

that mirrors the way in which the body naturally nourishes itself.

Also this month, Sinerga offers an analysis of a new ingredient that will help consumers keep up with the trend for straight hair, a trend which itself delivers a range of problems for maintaining healthy hair associated with heat and chemical damage. This new ingredient helps straighten hair while also protecting it from heat damage and moisture loss.

It is very important to keep in touch with the latest developments in this market, and so Personal Care will be at SCS Formulate in Coventry this November to hear more about the latest hair care ingredients from companies such as Croda, DSM, and BASF. We look forward to seeing you there.

> **Richard Scott** Editor

## **Actives company acquired**

The Lubrizol Corporation has announced that it has signed an agreement to purchase Lipotec SA, a leader in the development, manufacturing and sales of personal care ingredients based on three core technologies: peptide-based active cosmetic ingredients, delivery systems and biotechnology products. The purchase includes Lipotec's cosmetic active ingredients business and its subsidiaries, Diverdrugs and Lipofoods.

Founded in 1987 and headquartered in Barcelona, Spain, Lipotec, part of Lipotec Group, is a leading global supplier of cosmetic peptides, a key performance ingredient in skin care products. In addition to peptides and delivery systems, Lipotec has a growing business in biotechnology ingredients for personal care. Recognised Lipotec brands include Argireline, Snap 8, Antarcticine and Eyeseryl. Diverdrugs is the research and development division of Lipotec, specialising in new active compounds in the field of cosmetics and dermatology. Lipofoods develops and manufactures functional health ingredients for the food and beverage industry. The current owners of Lipotec Group will continue their activities in the pharmaceutical and cosmetic finished goods segments through BCN Peptides, GP Pharm and Prima-Derm which are not part of this transaction.

"This acquisition follows our 2011 acquisitions of Nalco's conditioning polymer business and Active Organics botanical extracts and natural performance ingredients," commented Rick Tolin, Lubrizol vice president and general manager, personal and home care. "Adding Lipotec further illustrates our commitment to providing a broad product portfolio, new technology and applications expertise that enhance Lubrizol's ability to make customers successful through expanded access to innovative ingredients."

Lipotec has a strong history of innovation and focuses on high-performance applications in skin care that include anti-ageing, anti-wrinkle, sensitive skin protection and moisturising. This innovation is exemplified by Argireline, one of the most successful active ingredients ever launched in the cosmetic market. The company serves an international portfolio of customers in more than 45 countries, from multinational corporations to regional leaders.

Once the transaction closes, Lipotec will become a part of Lubrizol Advanced Materials, with Lipotec, Diverdrugs and Lipofoods retaining their respective names.



#### Website relaunch

Dr Straetmans has launched a new website with a new design. The general motif of the new design is a fusion of human beauty and the aesthetics of natural resources – two main drivers for the company. For 30 years, Dr Straetmans has being inspired by biological systems and natural ingredient sources for the creation of modern and effective cosmetic ingredients.

Dr Straetmans also presents its sustainability strategy in a new section on the homepage, along with this is also new content on the company's services regarding formulation development, regulatory affairs, hair care performance testing or microbiological assessment of finished products as well as hundreds of prototype formulations.

# Natural salicylic acid introduced

Alban Muller International has presented a major innovation: a natural salicylic acid, a pure molecule extracted from wintergreen. This ingredient provides a natural alternative to salicylic acid commonly used in a synthetic form in cosmetics.

This innovation has lead to two new ingredients. Firstly, Amipreserve is the only completely natural, ecoresponsible cosmetic preservative on the market to have been accepted by the regulations. Its effectiveness has been tested on bacterias, yeasts and moulds, and provides a safe anti-microbial solution to protect cosmetic products.

Amipreserve is colourless and odourless and is therefore an effective, natural alternative to synthetic preservatives (parabens, phenoxyethanol, etc.) or essential oils.

Secondly, Amiperfect is a completely natural,



ecoresponsible active ingredient dedicated to achieving a perfect, radiant complexion. Its keratolytic, antimicrobial, anti-inflammatory action purifies the skin and promotes the elimination of dead cells, smoothes blemishes and wrinkles, and encourages the regeneration of the epidermis. Used in skin care products, Amiperfect refines the skin texture for a smoother, softer epidermis and a glowing, luminous complexion.

### **Eco-sustainability discussed in New York**

Dr Roberto Dal Toso, IRB R&D manager, was invited to speak at the HBA New York exhibition during a session dedicated to green concepts and eco-sustainability.

The Green and Natural Products session introduced a wide range of topics including the organic consumer profile and organic certifications, new developments and trends in European and US markets and a sustainability and ecosustainability discussion about packaging choices, ingredient sourcing and manufacturing process. The rapid growth of green biotechnologies in cosmetics is made obvious by the increased number of products based on plant stem cells. Since 2003, IRB oriented its R&D efforts in the set up of the HTN technology, an exclusive biotech method able to source non-GMO plant stem cell ingredients with a higher level of safety and standardised active substances. This can be obtained also from rare or endangered species, thus safeguarding biodiversity, and with a tremendous environmental impact reduction. In fact, comparative data with conventional agriculture and extraction procedures have shown 99.9% water reduction and negligible soil occupation, which thus remains available for food cultivation, an 80% decrease of extraction solvents together with the total abolition of pesticides and a reduction of industrial waste. Thanks to all these advantages, HTN technology was the winner of the 2011 Italian Business Awards for the Environment in the category 'best process and technology'.

## **Innovative skin care**

Lipotec has recently launched two new solutions from its Aimtec brand.

Delisens offers an innovative mechanism of action directed at treating several inflammatory and/or pruritogenic skin disorders, decreasing sensations of itching, redness or stinging in sensitive skin while helping to recover its physiological tolerance threshold. It is also recommended for dry-

sensitive skin; hydration increased by 34%, compared to placebo, after only one week of applying a cream with 2% Delisens solution.

Telangyn is a tetrapeptide specially developed to treat facial redness and telangiectasia. The



dermatological evaluation showed its efficacy in decreasing erythema intensity by 19.2% or skin redness by 17.7% after applying a cream with 2% Telangyn solution at the end of a 4-week treatment.

From Biointec, Hyanify is a biotechnological marine-based ingredient with excellent hyaluronic acid boosting properties, leading to

replenishing effect against dehydration and wrinkles. The mean depth of nasogenian folds decreased by 14.7% in only 14 days of applying a cream containing 1% Hyanify solution, as showed *in vivo*.

## Floral oil range unveiled

A new range of floral oils has been launched by French company, Leticc. The new ingredients are designed to be introduced into every kind of cosmetic product.

The range, called Prodhyskin, are obtained thanks to the combination of a selected range

of botanicals and specific oils. This new range of macerates offers an almost unlimited number of solutions for the formulator and the marketing department. The raw materials bring emolliency to the skin and a smooth texture to the formula.

#### Plant cell culture acquisition

Croda International Plc has announced the acquisition of IRB (Istituto di Ricerche Biotecnologiche SpA). IRB entered the active ingredients market in 2009 after 10 years of research and as a result of its cutting edge technology and 'know how', it has become a leader in the emerging market of plant cell culture actives both in personal care and healthcare.

A Croda spokesperson said: "This is an exciting acquisition for Croda and the personal care industry. Croda, via the Sederma brand will use our knowledge, expertise and global positioning to bring IRB's world leading plant cell culture technology to all of our customers. Plant cell culture biotechnology is the leading new technology for delivering proven activity as well as true sustainability."

The IRB products will add to the Sederma product portfolio, already widely acclaimed for their peptide anti-ageing ingredients as well as other bioactive molecules. IRB will benefit from significant investment as part of the Croda group.

Aimtec

telangyn

Takes out the thread of redness

DERMATOLOGICAL EVALUATION





0 days

28 days

Barghok, B & November 201 VISIT US ON STAND E50 The intensity of erythema, redness and its extent decreased by 19.2%, 17.7% and 17.9%, respectively after 28 days of applying a cream containing 2% **Telangyn™** Solution, as shown in the dermatological evaluation.



# **Anti-ageing peptide launch**

The DSM Personal Care Business Unit has announced the global launch of its new antiageing peptide complex, SYN-TC. This product extends DSM's successful SYN-Peptides product range, offering a new anti-ageing cosmetic ingredient with rapid action for skin smoothing.

The beauty of smooth skin is greatly valued by consumers. They seek personal care solutions for the skin that are not only effective but also fastacting. SYN-TC sets high standards on both counts, delivering results in only 28 days.

The group of naturally occurring proteins known collectively as collagen is the most abundant protein in skin. It is the main component in connective tissue and anchors the

#### Norwegian chitosan business acquired

Chitinor AS has reached an agreement with BASF SE to acquire BASF's marine biopolymers chitosan business operations. The deal marks a strategic milestone for Chitinor's business development plans for expanding its biopolymer product ranges and business-to-business operations.

Under the agreement Chitinor will acquire production facilities in Tromsø, Norway, inventories, patents, Chitopharm trademark, product and application technologies, and global customer portfolio for all chitosan product ranges, including functional cosmetic ingredients and Chitopharm pharmaceutical ingredients with corresponding Drug Master Files. The transaction is expected to be formally completed in August 2012.

"With the acquisition of BASF's chitosan business operations, we are significantly strengthening our product and customer portfolio for our arine biopolymer business area. The inclusion of BASF's production facilities in Tromsø is a strategic and synergistic fit to our existing biopolymer operations in Troms, Northern Norway," said Thorleif Thormodsen, CEO of Seagarden ASA and Chairman of the Board of Seagarden ASA's fully-owned daughter company, Chitinor AS. "The combination of BASF's proprietary technology for tailored manufacture of high quality chitosans for cosmetic and pharmaceutical uses and Chitinor's track-record and know-how related to chitin based biopolymers will provide our customers with a strong supply-chain for top quality products unmatched by anyone. Importantly, the acquisition also represents a valuable addition to our customer portfolio in the cosmetic and pharmaceutical markets," added Bjarte Langhelle, commercial director.

epidermis (the outermost layer of skin) to the dermis, which in turn protects the body's subcutaneous tissues. Collagen therefore makes a major contribution to the appearance of the skin, producing the firm and smooth look desired by consumers. Collagen levels in the body naturally decrease with age, however, the use of state-of-the-art skin care ingredients helps to experience the unique role of collagen against the signs of premature skin ageing.

Various types of collagen exist. Skin care products have traditionally focused primarily on collagen I. They use ingredients to stimulate this form of collagen to smooth the skin. Other types of collagen, however – most notably types III, IV, VII, and XVII – also make a major contribution to the functionality of the skin.

SYN-TC makes use of three tailor-made peptides (short polymers of amino acid monomers linked by peptide bonds) to increase *in vitro* the formation of undamaged, stable and homogenous collagen types in the skin. These best-in-class synthetic peptides have been formulated and combined to achieve a visible benefit for smoother skin and an overall improved young looking skin appearance.

Extended *in vivo* studies using macro photographs and computer-based threedimensional skin imaging have confirmed a visible anti-ageing benefit in only 28 days.

# Sustainable production of natural alpha bisabolol

The candeia tree (*Eremanthus erythropappus*) is a species from Brazil, with natural occurrence concentrated mainly in Serra da Mantiqueira and Serra do Espinhaço in the state of Minas Gerais. The essential oil extracted from this wood is rich in

(-)-alpha-bisabolol, widely used in cosmetics and pharmaceutical industries due to its well-known anti-inflammatory properties.

Through appropriate

stewardship techniques, it is possible to explore this natural resource according to sustainable practices.

In Brazil, thanks to research supported by Cltróleo and CNPq, the Federal University of Lavras (UFLA) defined the ideal approache for conservation of natural forests of candeia. As a result, this research has lead to the



publication of Brazilian laws referring to the sustainable use of candeia. The candeia tree is the first species to receive exclusive regulation thanks to this research.

Besides the implementation of a stewardship plan on its private forests, which concerns not only planned removal of trees but also preservation of good trees for sowing and natural regeneration, Citróleo maintains

a programme for seedling production.

This programme, which includes the production and distribution of more than 100,000 seedlings of candeia trees per year, is conducted on Citróleo's farm in Baependi, Minas Gerais, where experimental studies are also developed in partnership with UFLA, focusing on sustainable management of natural forests.

# **Technical training for new hair care ingredients**

In July, IMCD's personal care team attended an advanced technical training session on new Belsil grades with Wacker Chemie's technical team. In-depth technical presentations and workshops were followed by formulation sessions carried out at IMCD's application laboratory based in Italy, where the team displayed its technical expertise.

Among the several new Wacker products, the main focus was on hair care with new amodimethicone emulsions and gums that fit perfectly with the latest hair care trends in the market: colour retention and heat protection for the hair. These products in hair conditioners and shampoo formulations are easy to use and have shown excellent test results as protectors of hair damage caused by heat, as well as enhancing of high gloss, silky touch and the colour retention of hair.



# Natural and organic certification

Honeywell has announced that one of its Asensa personal care ingredients, Asensa NFF 11E, has been certified by Groupe Ecocert for use in natural and organic cosmetics. Asensa NFF 11E (INCI: Hydrolyzed Corn Starch) is a film-former for the European market made from corn starch derived from non-geneticallymodified corn. NFF 11E can be dispersed to form a latex, and third-party studies have shown that it performs equally as well as synthetic polymers in hair fixative applications. It can also be used in skin care formulations. NFF 11E is the first Honeywell Asensa product to be based on renewable ingredients and is ideal for formulations that have a high concentration of renewable ingredient content.

Ecocert is an inspection and certification body established in France in 1991 by agronomists aware of the need to develop environmentally friendly agriculture and of the importance of offering some form of recognition to those committed to this method of production.

Honeywell Asensa products are used in a

variety of end-use applications ranging from lipsticks to moisturisers to pressed powders. Asensa products increase permanency, emolliency, moisture retention, water resistance and thermal stability. They act as film-formers and structuring agents for oils. The line also includes size-regulated materials for exfoliation as well as micronised products (some as small in size as 3 micron) for dry lubrication and binding. The Asensa DS line of zeolites includes odour-absorbing and warming materials.

## New technology for cosmetics manufacture

At this year's Beyond Beauty in Paris, Romaco will present the FrymaKoruma Dinex Lab vacuum processing plant and the toothed colloid mill FrymaKoruma MZ 110 for the manufacture of cosmetics and healthcare products.

FrymaKoruma Dinex Lab vacuum processing unit featuring a new homogeniser generation facilitates optimal processing times, droplet



distribution and product quality. The improved tool geometry enables the product processing time within the homogeniser to be extended and increases the overall efficiency of the system. The optimised energy input is a particular advantage for shear-sensitive products. The tiny droplet sizes achieved with this system

enhances the very high quality of the creams, ointments, lotions and dispersions being manufactured. The toothed colloid mills in the

FrymaKoruma MZ series assure each product is always milled to the correct size. The technology is suited for wet grinding cosmetic applications and healthcare products of almost any viscosity. Users can choose between coarse, standard or cross-toothed tools depending on the product type. The milling gap can be individually adjusted. MZ mills show excellent capability for hygiene management and product safety owing to the systematic elimination of dead spaces from the milling interior and the integration of CIP (Cleaning in Place) and SIP (Sterilisation in Place).

# Expanded manufacturing

Grant Industries, a global supplier in personal care, announces the addition of its new 100,000 ft<sup>2</sup> manufacturing facility in northern New Jersey. The facility represents the company's commitment to future growth and sustainability in the personal care industry. Along with three other New Jersey manufacturing sites and global R&D headquarters, Grant also conducts operations out of Beijing, China to fully support the Asia-Pacific region.

### Mobile website launched

After the recent launch of its new website, Silab has now has unveiled a new mobile version of the site.

The Silab mobile website (m.silab.fr) has been optimised to improve accessibility in terms of its content as well as its ergonomics: simple navigation, optimised window, improved functionality and quick page download.

## New look website and scent profile

Düllberg Konzentra has developed a new scent profile in the shape of a clear, timeless visual language which eloquently communicates the company's values and competencies. The new look will be featured on the redesigned website, a specially developed smartphone version of the site and in the new brochure.

"It was time to unveil a modern face that shows our customers at first glance just what it is that makes us so unique," says Christian Düllberg, managing director of Düllberg Konzentra. The new website and print brochure feature attractive, large-format photos; a dark background gives a clear-cut, sophisticated lookand-feel. The photos play with light and shadow; they depict portraits, impressions from within the company, technical details and stylised images of natural ingredients and products.

"Perfumery is something that is very aesthetic, almost magical," explains Christian Düllberg. "We not only create captivating, fragrant works of art, we also set incredibly high standards in technology, precision and quality. The fact that these contrasts harmonise so wonderfully is captured in our new visual language – and, naturally, in our day-to-day work. We give our customers the space for their visions and at the same time put our expertise at their service to help make these visions a reality."

The clarity of the visual language is continued in the menu structure of the new website. A new feature is the news section, which provides customers and all those interested in the company with information about the latest developments at Düllberg Konzentra.

## **Sustainable sourcing featured in Rio**

Dr Fred Zülli, managing director of Mibelle Biochemistry, Switzerland, was invited to discuss sustainable sourcing of raw material for the beauty industry during Rio+20, the UN Conference on Sustainable Development. Rio+20 was the biggest UN conference ever held, with broad participation of leaders from government, business and civil society, as well as UN officials and academics. Furthermore it brought together



industry professionals to look ahead and to further contribute to sustainable development in the various industries.

Dr Fred Zülli discussed the company's PhytoCellTec technology which was highlighted as an ecobreakthrough in natural cosmetic ingredients as it allows cultivation of plant stem cells. On one side these plant stem cells contain the most active molecules which have shown

## Innovative photostabiliser

The HallStar Company has launched Polycrylene S1, a new singlet-quenching photostabiliser that helps formulators meet FDA standards for broad-spectrum claims and enhances the water resistance of sun care and daily wear products.

Polycrylene S1 allows formulators to combine active ingredients once considered too photounstable to be effective. Polycrylene S1 replaces the triplet-quenching portion of Polycrylene (INCI: Polyester-8) with a singlet-state quencher. The result is a powerful photostabiliser that improves sunscreens and daily wear products, providing better UV protection. Like Polycrylene, Polycrylene S1 is also a film-forming polymer that enhances the substantivity of sunscreen formulations.

"The sun is a powerful adversary to many active ingredients. For instance, it makes UV filters like Avobenzone start to lose effectiveness almost immediately upon exposure," said John Paro, HallStar president, chairman, and CEO. "Innovative photostabilisers like Polycrylene S1 help skin and sun care formulators meet and exceed consumer requirements for better UVA and UVB protection." excellent benefits on skin. And, on the other side they can be used in cosmetics without harming the environment. In particular because only very little plant material (e.g. one fruit or one leaf) is used to establish the plant stem cells culture. Therefore, this biotechnology protects and helps to preserve rare and endangered plants. Also, no agricultural land is required to produce biomass and there is a significant reduction of water consumption compared to conventional biomass production.

# South American affiliate

Gattefossé Group has announced the creation of its eleventh worldwide affiliate: Gattefossé Do Brasil, located in São Paulo.

The objective of this new entity is to reinforce Gattefossé's presence in Latin America, a growing market and a place for opportunities for both personal care and pharmaceutical ingredients. Lead by Mrs Amanda Botelho Pimentel, Gattefossé do Brasil will support distributors and facilitate contacts with all customers in Latin America.



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