

# COSSMA

COSMETICS | SPRAY TECHNOLOGY | MARKETING

WWW.COSSMA.COM

## GO FUTURE: NEW IDEAS

The pleasure of texture

## SPOTLIGHT: CAPS

Sophistication and convenience are in the vanguard

Dr Karl Lintner,  
Kal'Idées

# “WHAT CONSUMERS WANT”

VIP of the Month

DR STEFAN HETTWER

Rahn Group

Improving the dermal structure





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# CONTENTS

COSSMA 3/2017

## 12

How to deliver actives to target sites

## 22

Four active ingredients for multiple anti-pollution effects



## 26

How tannins and silicon tighten the collagen network



VIP of the Month



3 Editorial

## 10 MARKETS & COMPANIES

10 News

## 12 GO FUTURE: NEW IDEAS

12 **Belinda Carli, IPCS:** Enhanced delivery options

16 **Encapsulation choices**

18 **Michelle Strutton, Mintel:** International launches

19 **Star of the Month:** 360° dispensing to the last drop

20 **Heike Störmer-Kuk, SpringPool:** The pleasure of texture

## 22 INGREDIENTS

22 **Julia Lorin-Bazile, Louis Danoux, Sabrina Leoty-Okombi, Philippe Moussou, Valérie Andre-Frei, BASF Beauty Care Solutions:** Multi-dimensional protection

26 **Dr. Stefan Hettwer, Rahn:** Improving the dermal structure

32 **Amy Goddard, Bhaven Chavan, Robert Sayer, Hannah Critchley, Croda:** Sun care – Looking young for longer

33 **Ingredients news**

34 **Formulations:** Cleansing

## 36 PACKAGING

36 **Cosmopack:** Not just premium touch options

39 **Packaging news**

# THE START OF SOMETHING GREAT.



## Innovative Cosmetic Ingredients

Sabinsa manufactures and markets over 40 natural cosmeceutical extracts and proprietary blends for use in cosmetics and personal care products, and in nutritional products delivering "beauty from within". Derived primarily from herbal raw materials with a long history of traditional use, each ingredient is supported by application-oriented scientific research and clinically validated safety data. Importantly, Sabinsa scientists have developed and patented novel approaches to retain the biological activity of actives while simultaneously addressing formulation challenges. Biostandardization ensures consistent formulation and delivery of bioactives from diverse compositions.



Discover more about these patented and branded ingredients at [www.sabinsa.eu](http://www.sabinsa.eu). Use the QR code below to download our latest white papers.



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# CONTENTS

COSSMA 3/2017



## 36

Highlights to be expected at Cosmopack

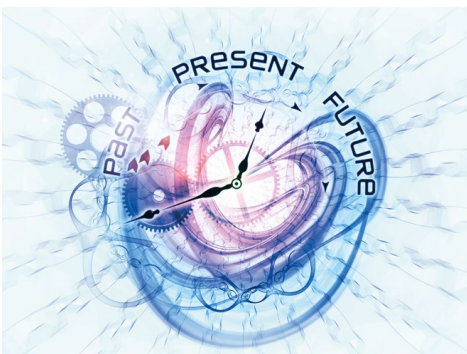
## 48

What are the challenges when proving claims?



## 52

The “father” of cosmetic peptides tackles highly controversial issues



### 40 SPOTLIGHT: CAPS

40 Sophistication and convenience are in the vanguard

### 44 BACKGROUND

44 Imogen Matthews, Consultant to In-Cosmetics:  
A look at global trends

48 Dr Gerd Mildau, Cosmetics Central Laboratory, Chemical and Veterinary Investigation Office (CVUA):  
The challenge of proving claims

### 52 PERSONALITIES & PROFILES

52 Interview with Dr Karl Lintner from Kal’Idées:  
Visions of the present, past and future

57 People

### 58 SERVICES

8 Download List

58 BEAUTY FORUM LEIPZIG – an inspiring event

61 Events Diary

62 Suppliers’ Guide

65 Advertisers’ Index

66 Masthead Page

66 Preview

Front cover picture: Novexpert

# EXCEPTIONAL "PACKAGING" FOR ACTIVE INGREDIENTS FROM NATURE

Natural cosmetics, plant extracts, essential oils or natural raw materials – the trend towards more nature runs like a red thread from cosmetics, to the food and feed industry, or washing and cleaning agents.

However, the handling of natural raw materials is often a particular challenge: For certain applications, pure extracts or essential oils have a too high concentration, insufficient dosing properties, limited shelf life, volatilize too fast, irritate the skin, mucosa and eyes or react in a undesirable way with other substances or components. Conventional powder products show bad flow properties, insufficient dosing properties, are hygroscopic or have an insufficient solubility.

It is precisely these kind of problems that the Swiss spray technology company **ERBO Spraytec AG** takes care about. In close collaboration with the customers there are elaborated individual solutions for their problems, developed new processes and finally manufactured their products in large size. The manufacturing of innovative and high-quality spray products requires a lot of experience, both with regard to the plant technology, and to the properties of the used raw materials.

By a clever combination of the processes (e.g. "onion shell granulation", single or multiple layer coating, matrix encapsulation) with the encapsulation or carrier substances the required product properties can be adjusted and the handling and processing properties of the end product can considerable be improved.

**These innovative spray products provide numerous advantages:**

- Excellent dosing properties

- Amelioration of the flow properties of powder products
- Longer durability, better storage stability
- Better handling of volatile or irritating substances (essential oils, aromatic substances, etc.)
- Reduction of hygroscopicity
- Avoiding of undesirable reactions with other substances/components
- Controlled release of the active substances
- Possible additional effects, as e.g. peeling effect
- Etc.

The exciting thing is, that the fields of application of the customized spray products are not limited to specific industries. The customers of **ERBO Spraytec AG** are located in the food, feed or cosmetic sector, in chemistry or in the technical industry. The range of services of **ERBO Spraytec AG** is completed with the quality control in the laboratory in-house, organisation of the logistics and a wide range of packaging solutions. If you are facing as well a problem or an idea but you lack the expertise and/or the technology for a production in large scale, the spray technology experts of **ERBO Spraytec AG** love to be at your disposal.

► **Contact:** ERBO Spraytec AG,  
Dr. Markus Wysshaar,  
wysshaar.markus@erbo.ch,  
Phone: +41 (0)62 958 88 25  
www.erbo-spraytec.ch



## Erbo Spraytec AG



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Spray agglomeration



Instantisation

Spray granulation



Spray crystallisation

Microencapsulation



Coating (incl. hot melt)



Multiple layer coating

Etc.

- Development of spray processes and spray products
- Manufacturing of spray products
- Quality control
- Packaging & logistic services

### Erbo Spraytec AG

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info@erbo-spraytec.ch  
www.erbo-spraytec.ch

ENCAPSULATION AND TAILOR-MADE GRANULES

## NEW R&D HUBS



New R&D centre for hair care

**CLARIANT** | The company has opened a new **Active Ingredients Unit** in Toulouse, France. Its priorities will be to extend the existing portfolio of naturally-sourced products from **BioSpectrum** and **Beraca** with the new development of nature-inspired active ingredients. The company also opened its first global **R&D Competence Centre for Hair Care** in São Paulo, Brazil.

[www.clariant.com](http://www.clariant.com)



### Growth for GCC

**BEAUTYWORLD MIDDLE EAST** | The retail value of the **Gulf Cooperation Council (GCC)** beauty and personal care market increased by 10% to USD 9.3 billion in 2016\*. This promising market sets the tone for this year's Beautyworld Middle East, taking place from 14-16 May 2017 in Dubai.

\*[www.euromonitor.com](http://www.euromonitor.com); [www.beautyworldme.com](http://www.beautyworldme.com)

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## ACQUISITION

**ELEMENTIS** | The company has acquired **SRLH Holdings (SummitReheis)** from an affiliate of **One Rock Capital Partners** for an enterprise value of USD 360 million. SummitReheis' antiperspirant actives business accounts for more than 60% of its sales.

[www.elementisplc.com](http://www.elementisplc.com)

## BIO-BASED POLYMERS

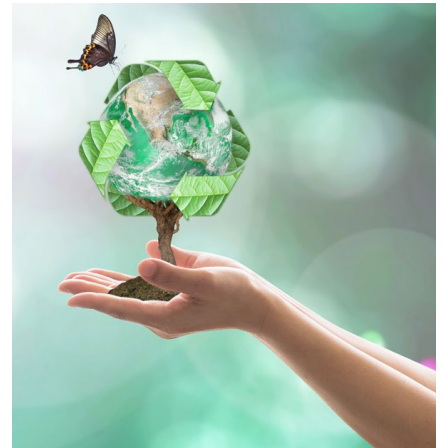
**NOVA-INSTITUTE** | The worldwide production capacity for bio-based polymers grew by 4% in 2016\*. This slower increase is due to low oil prices, poor political support and a slower-than-expected growth of utilisation. Not all bio-based polymers are biodegradable. Strong political support can only be found in Italy and France for biodegradable solutions in the packaging sector. Here, the global demand for biodegradable packaging still shows a double-digit growth. Additional demand could come from the increasing microplastic problem (marine littering), but so far biodegradable plastics have not benefitted from this debate.

\* market study Bio-based Building Blocks and Polymers  
[www.bio-based.eu/reports](http://www.bio-based.eu/reports)

# 20%

Brazil currently represents 20% of the global growth in the hair care segment and is home to a broad diversity of hair types and textures.

[www.clariant.com](http://www.clariant.com)



Biodegradable solutions are politically supported in Italy and France

photos: Clariant, Chinnopong (tree), Cosmopolitan, Luciano Mortula (Dubai), Nstudio (lemon), Sofaworld (green), Shutterstock.com



Prestigious finished product award

## 25 YEARS OF PRIX DE BEAUTÉ

**COSMOPOLITAN** | Celebrating its 25<sup>th</sup> anniversary, the German **Cosmopolitan's Prix de Beauté** awarded 14 prizes this year. In five categories, it was readers' voting that determined the winners. 500 products from 150 companies had been submitted for the competition.

[www.cosmopolitan.de](http://www.cosmopolitan.de)

## Natural cosmetics with slowed growth

**NATURKOSMETIK KONZEPTE** | With a growth of 4.5%, natural cosmetics remains a stable growth market, just like near-natural cosmetics (+7.9%), while the cosmetics market in general only saw a growth of 1.7% in 2016 according to the **IKW\***. The again-increased consumer penetration in Germany now amounts to 23.1%\*\* . In drugstores, the sales of natural cosmetics increased by about 7% and online sales by 10%. However, sales in traditional health food stores remained stable and even decreased in pharmacies.

\* German Cosmetic, Toiletry, Perfumery and Detergent Association  
\*\* source: GfK

[www.naturkosmetik-konzepte.de](http://www.naturkosmetik-konzepte.de)



Natural cosmetics grew by 4.5 % in 2016

### SUSTAINABLE

**EVONIK** | Nearly 90% of the company's personal care products are now based on sustainable raw materials, and more than 50% of these have been subjected to life cycle assessments. Over 80% of the products make a significant contribution to resource efficiency within the supply chain and during use.

<https://personal-care.evonik.com>

### PRIZE-WINNER

**AZELIS** | The company's **Genu pHresh DF Pectin** won an innovation award at this year's **PCh** exhibition. The ingredient extracted from citrus peel forms a protective weak acid film which helps to restore the skin's own acid protective barrier.

[www.azelis.com](http://www.azelis.com)



Ingredient extracted from citrus peel

### GREEN CHEMISTRY

**CRODA** | The **NYSCC Award** for green chemistry went to Croda's 100% bio-based **Eco Range** of ethoxylates. They are 100% renewable high-performing products reducing the US reliance on fossil fuels. Around 70% of the company's raw materials come from renewable sources.

[www.crodapersonalcare.com](http://www.crodapersonalcare.com)



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# ENCAPSULATION CHOICES

**Ingredients** | This selection shows some recent developments in encapsulation technology: vegetarian microcapsules, customisable natural liposomes, a multiple W/O/W nanoemulsion, and a broad choice of microencapsulated products.

**L**ambson's **Vida-Caps** range of vegetarian microcapsules is based on a patented process for core-shell microencapsulation. In this particular process only entirely vegetarian food-grade ingredients are used. This development expands the benefits of gelatine-based core-shell (complex coacervate) systems into an entirely animal-free formulation. This perfectly matches the increasing market desire for non-animal-derived ingredients and overcomes issues related to religious or cultural restrictions.

Suitable for encapsulating a range of ingredients, such as fragrances, bo-

tanicals and active ingredients, the microcapsules can be specifically designed in a range of colours in sizes ranging from 5–1,500 µm to match the application intended.

[www.lambson.com](http://www.lambson.com)

## Customisable natural liposomes

**Lucas Meyer** presents **Pro-Lipo Neo**, a technology developed to easily create customisable homemade natural liposomes, allowing for complete control over the type and concentration of the entrapped ingredients for optimal efficacy.

It increases skin penetration and bioavailability of entrapped hydrophilic and/or lipophilic active ingredients for better and faster results. It is a ready-to-use mixture of selected phospholipids already organised in lamellar bilayers by their solubilisation in an appropriate medium.

This pro-liposome structure requires only the addition of a water phase to spontaneously form, at room temperature, an alcohol-free suspension of multilamellar liposomes (mainly bilamellar) of a mean size of 250 nm. This type of liposome is small enough to present high cutaneous absorption and release the entrapped ingredients while membranes merge with the skin one by one.

[www.lucasmeyercosmetics.com](http://www.lucasmeyercosmetics.com)

## Stable multiple W/O/W nanoemulsion

Multiple water-in-oil-in-water emulsions (W/O/W) are complex systems consisting of reverse micelles dispersed within larger oil droplets, which are again surrounded by a water phase. Therefore, hydrophilic active ingredients are stored inside the oil phase and are extremely well-protected. The W/O/W emulsions mainly described in the literature show

photos: Lambson (shell), Lucas Meyer, Sophiarco (nanoemulsion), Alexander Maksimenko (capsules), Shutterstock.com

### DOWNLOADS

Additional information at

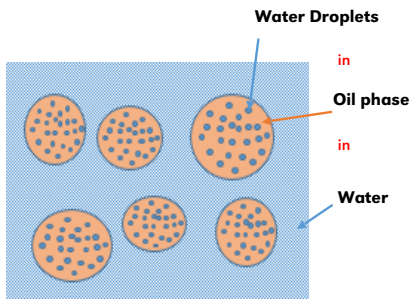
[www.cosma.com/qr00178](http://www.cosma.com/qr00178)

Your access codes for **March**:

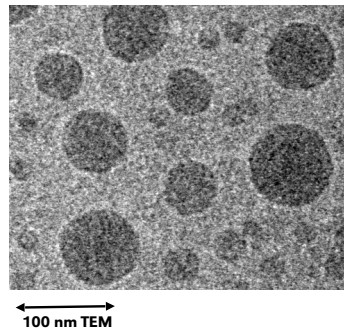
User name: **cosma3**

Password: **future**

**W/O/W Emulsion**



**W/O/W Nanoemulsion**



The dermal delivery system W/O/W nanoemulsion is formulated with only one emulsifier in only one step (right)

high particle sizes of approximately 10–20 µm and are largely produced with several different emulsifiers (O/W- as well as W/O-emulsifiers)<sup>1,2</sup>

**Sopharcos** presents a stable multiple W/O/W nanoemulsion as a dermal delivery system for cosmetics and pharmacy. The new nanoemulsion is formulated with one skin-friendly O/W emulsifier of renewable plant origin with a HLB-value of 11. It is emulsified in only one step at room temperature.

The lipophilic ingredients are solubilised and mixed, then the water solution including the active ingredients is added. The extremely homogeneous size of the vesicles in the area of 100–150 nm is achieved by simple high-pressure homogenisation. The W/O/W nanoemulsion can be incor-

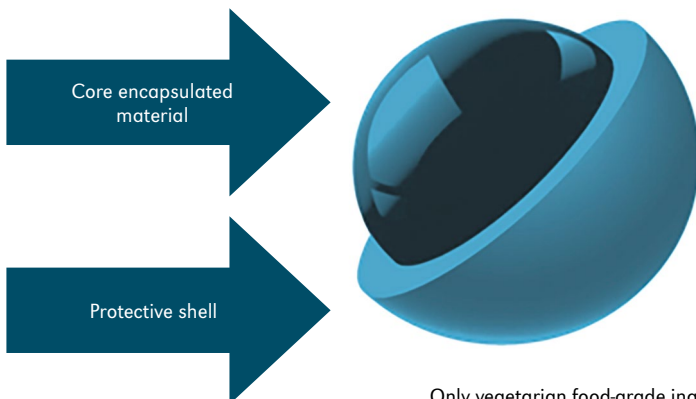
porated in gels, lotions, creams and also masks (e.g. cellulose) and then is able to transport the enclosed active substances into the skin.

In comparison to customary flexible liposomes, higher encapsulation efficiencies of active substances could be proven with a better penetration potential at the same time. Moreover, this nanoemulsion also indicates cosmetic effects such as smoothing of the skin and an increase of the skin's moisturisation without encapsulated active substances<sup>3</sup>.

[www.sopharcos.de](http://www.sopharcos.de)

**Broad choice of micro-encapsulated products**

**Tagra** has developed more than 50 microencapsulated products. **SunCaps** are non-breakable and trans-



Only vegetarian food-grade ingredients are used in Lambson's process for core-shell microencapsulation

parent microcapsules containing UV filters both organic and inorganic. They are made of a single layer cellulose-based polymer shell, which provides optimal isolation of the UV filter and prevents its degradation while improving its UV protection profile. Since the EU regulations for zinc oxide allow it to be used as a sunscreen agent, **ZinoCap** is particularly suited for Europe.

**CelluCaps** are new capsules made from cellulose-based polymers for the encapsulation of vitamins such as pure retinol, vitamin C derivatives and more. **Tagravit R1** microcapsules are 30–40 µm in diameter and loaded with 7% pure retinol based on Tagra's Release on Demand (RND) technology, which enables optimal isolation of the retinol. Therefore it protects it from instabilities and overcomes incompatibilities.

**CameleonCaps** are microencapsulated pigments for colour transformation. They are made from a biodegradable cellulose-based polymer. The original shade is hidden, whilst maintaining the formulation's white appearance and texture. At the moment of application, the pigment is released.

**CelluOils** are new cellulose-based capsules for the stabilisation and long-lasting effect of essential oils/fragrances.

**WS Tech** is a new technology based on nanoemulsion for converting non-water-soluble ingredients into water-soluble ones. The first product to promote within this range is the **WS SA50**, a water-soluble form of salicylic acid.

**SiCaps** are encapsulated silicones for sensorial benefits. They are designed to overcome formulation challenges resulting from the inclusion of silicones. □

[www.tagra.com](http://www.tagra.com)

References Sopharcos:  
<sup>1</sup> T. Schmidts et al.; Int. J. Pharm 398 (2010) 107-113, "Development of W/O/W Emulsions as dermal carrier system for oligonucleotides"

<sup>2</sup> M. Hoppel et al.; J Drug Deliv Sci Tec 25 (2015) 16-22, "Multiple W/O/W Emulsions as dermal peptide delivery system"

<sup>3</sup> K. Heinrich; Dissertation 2012, Universität Witten/Herdecke

Additional information can be found on the Internet - see download panel



# LEIPZIG – AN INSPIRING EVENT

Events | The seventh edition of BEAUTY FORUM LEIPZIG on April 22–23 is a must-see this year with lots to look forward to.

This April, the seventh annual BEAUTY FORUM LEIPZIG not only lets one explore the latest developments of approximately 320 exhibitors covering all areas of professional beauty, but visitors can also look forward to a versatile programme of further education, competitions and shows. In other words, BEAUTY FORUM LEIPZIG is definitely an event not to be missed.

### Scientific congresses

This year's BEAUTY FORUM LEIPZIG features two congresses: the 8<sup>th</sup> Podology Congress\* focusing on diabetic foot syndrome on Sunday, April

23, and the 3<sup>rd</sup> Anti-Ageing Congress\*\* on April 22.

The Anti-Ageing Congress\*\* will feature topics such as anti-ageing active ingredients for dermo-cosmetics as well as new approaches for anti-ageing actives, liposuction and its necessary and sensible follow-up treatments, an update on micro-needling, a natural look at any age with e.g. fillers, Botox and thread lifting as well as anti-ageing treatments for hands.

### Exhibition area: Market Square Cosmetics

Established in 2016, the exhibition area Market Square Cosmetics is ide-

al for shopping and will feature companies such as Aloe Vera Service, Celine Blush, Dr J. Effekt Cosmetic, New Vision Media, Scarcare, Orly and Wunderfrollein.

### Top industry brands

The area shared by VCP members (the German Association of Cosmetic Professionals) will present top brands such as: Dr Belter, Dalton Marine Cosmetics, Dr Grandel, Dr Rimpler, Gertraud Gruber, Jean d'Arce, Heitland & Petre International, Rosa Graf, and Sothys. □

\*certified by both the German Association of Podology (ZFD)\* and Saxony's National Chamber of Pharmacists for all ZFD members, admission to the show is free of charge.

\*\*certified with two further education points by Saxony's National Chamber of Pharmacists.

A discount for all international trade show visitors is available at [www.beauty-fairs.de/ticketshop](http://www.beauty-fairs.de/ticketshop) All tickets include free of charge public transport to and from the show

### FACTS AND FIGURES

Show: BEAUTY FORUM LEIPZIG at a glance  
 Dates: 22–23 April 2017  
 Place: Leipziger Messe, Hall 2  
 More information: [www.beauty-fairs.de/leipzig](http://www.beauty-fairs.de/leipzig)

photo: Pauline Fabry

# YOU LIKED WHAT YOU READ? WOULD YOU LIKE MORE?!



The image shows a hand holding a COSSMA magazine cover on the left and a screenshot of the COSSMA website's download page on the right. The magazine cover features the title 'COSSMA' in large blue letters, the issue number '6 / 2016', and the subtitle 'COSMETICS | SPRAY TECHNOLOGY | MARKETING'. The main article is 'GO FUTURE: HAIR CARE' by Siân Sutherland, with a sub-headline 'Checking out the latest ingredient concepts'. Other articles include 'SPOTLIGHT: FORMULATION CONCEPTS' and 'PRODUKT: El Umbrachen für Friseurarbeiten'. The website screenshot shows the 'www.cossma.com/download' page with a navigation menu and a list of 'Latest Articles' including 'Innovative Textures: Creamy delights', 'Hair Care: Ingredients for tomorrow's products', and 'Cosmetic Business: Meeting the suppliers'.

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