



SkinNEWvation - the virtual SOFW eEVENT! The Facts

With over 800 registrations, the SKIN eVENT on September 9, 2021 was the most successful of the new SOFW eEVENT series so far.



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Under the name **"SkinNEWvation"**, important questions and new research results concerning our **skin** were answered.

How do active ingredients penetrate the skin? How can we measure this? What are the best carriers? How can formulators use this knowledge for cosmetic efficacy? And, of course, a few more.

8 hours of concentrated knowledge and new research results about our largest organ, **the skin**. The following presentations were given:

Keynote lectures

Prof. Dr. Dr. Jürgen Lademann, Charité: "The hair follicle as a major penetration route for topically applied active ingredients"

Recently, it could be demonstrated that hair follicle delivery clearly depends on the activity status, size and density of the hair follicles. Especially nanoparticles have been shown to be effective drug carriers deep into the hair follicles.

Prof. Dr. Cornelia Keck, University Marburg: "How does an active ingredient progress from the cream into the skin? A keynote lecture on the new understanding of the mechanisms of dermal active ingredient penetration."

New pathways for dermal drug delivery were recently discovered. Most relevant findings include that dermal penetration occurs in three steps. In the first step, active compounds enter the skin via a solvent drag mechanism. The second step is passive diffusion and the third step is the formation of liquid menisci between formulation and skin that allow for long-lasting penetration.

Prof. Dr. Martina Meinke, Charité: "EPR application to monitor cutaneous penetration of actives"

Electron paramagnetic resonance (EPR) spectroscopy can be used to monitor the penetration of substances into the skin. The substances have to be EPR active or must be labeled with a spin probe and can be loaded to several nanocarriers or

applied as nanocrystals. EPR can contribute to obtain quantitative data and to observe drug release in skin tissue non-invasively thus complementing optical methods.

Dr. Maxim Darvin, Charité: "Raman microspectroscopy for analysing the penetration and influence of topically applied substances on the stratum corneum"

This presentation described the recent developments and advantages of confocal Raman microspectroscopy in determining both penetration depth profiles and influence of topically applied formulations on the human stratum corneum in vivo and completely non-invasively. It was shown how the topically applied exemplary cosmetic oils affect the lateral packing order of intercellular lipids and water-binding properties and how this is associated with the penetration depth, skin occlusion and swelling of the *stratum corneum*.

Dr. Sabilla Digel, Berg & Schmidt GmbH: "smartLipids - carriers for barrier protection and improved active ingredient transport"

Very small in size, but with a very big impact: BergaCare SmartLipids are the 3rd and latest generation of lipid-based carrier systems. In this presentation, the participants found out how they act on the skin and what benefits they exhibit in cosmetic skin care formulations. No matter if Anti- Aging, Whitening or the restoration of the Skin Barrier – many different applications of SmartLipids have been commercialized, making them even more effective and easy to use.

Dr. Christian Rimpler, Dr. Rimpler GmbH: "smartCrystals - innovative vehicles for poorly soluble molecules"

The incorporation of identified active ingredients into cosmetics often presents the developer with major challenges. In collaboration with the Free University of Berlin, research has been done on solutions that nanotechnology has opened up. Today we basically have 2 different systems, which have become known as Smart Lipids and Smart Crystal technology. The performance of these technologies to protect active substances and to enable their penetration and increase in bioavailability at the site of action was demonstrated using a number of examples.

Dr. Maria Reichenbach, Symrise AG: “New Retinol Alternative: Screening approach utilizing next generation sequencing”

Retinol is the star ingredient in anti-aging cosmetic care, but retinol and its derivatives elicits side effects including inflammation, redness and dryness especially during long-term use. Thus, there is a current need to find retinol alternatives exhibiting the same biological effects while lacking the unwanted side effects. For this purpose, Symrise performed whole transcriptome profiling utilizing next generation sequencing to identify ontological gene clusters constituting relevant marker genes reflecting several areas of barrier improvement induced by retinol. In a holistic screening approach of a 1500 compound library, Hydroxypinacolone retinoate was identified as the best candidate helping the upregulation of the relevant marker genes and exhibiting epidermal thickness and skin barrier improvement, thus constituting a convenient retinol alternative.

“Help! I’m Covered in Adjectives” - Cosmetic Claims & The Consumer” by Dr. Theresa Callaghan, Callaghan Consulting International

A book on this lecture has also been published, which you are welcome to order in our book shop www.sofw.com/en/shop:



Our Highlight

More live moderation in the new lobby



Now that the **SOFW eVENT** series is really well established in the market, it is time to upgrade the technology and the look of the live stream to a new level. For this we have bought **new furniture, technology and decoration**. We have also extended the live moments with summaries of the presentations by an industry expert, **Martin Albrecht**. We are responding to customer requests and are happy to see that this is going down well!

Sponsors and their presentations

Léa Schmidt, Symrise AG: “Supporting the skin microbiome for a healthy balanced skin”

A healthy skin microbiome has a diverse microbial population that acts as a first line of defense against pathogens. Symrise is exploring new ways to care for the skin and its microbiome in developing efficient cosmetic solutions. The paraprobiotic ingredient SymReboot™ L19 supports the skin’s health and provides a strengthened healthy environment for the skin and scalp microbiomes without altering their natural composition. And the latest study shows that the refreshing ingredient Frescolat® ML decreases sweat odor by acting selectively on anaerobic axillary bacteria and supports deodorant activity.

Marco Wolf, Woresan GmbH: “How to support the skin’s microbiome?”

Short training on the benefits of ferments in cosmetic products. Like any ecosystem, the skin is confronted with a variety of influences on its different parts. Every ecosystem consists of inanimate (abiotic) and animate (biotic) elements. In the case of the skin, the biotic elements are the numerous microorganisms that colonize the skin’s surface. This lecture showed how to support the skin’s microbiome by using ferments.

The skin is the largest and most versatile organ of our organism and therefore a very important linchpin in the personal care industry. The intensive researches of the different universities, institutes and free market economy are therefore indispensable and show in the presented lectures how important they are. This was also confirmed by our participants. On average, **92 listeners** attended the presentations.

You couldn’t attend the SKIN eVENT?

Don’t worry! Now you have the opportunity to watch all presentations and interviews for only 75€. Our **>>AFTER eVENT<<** is now open and all presentations of our SKIN eVENT are available for you.



On **December 2, 2021**, we will host the last **eVENT** of the series for this year under the theme **“Rapunzel, don’t let your HAIR down!”**. Beard and scalp hair care, styling, coloring, protection and prevention of grease and graying will be among the topics covered.

For more information on the upcoming and past eVENTS, visit www.SOFWeVENTS.com or sign up for **our newsletter**.