A conversation with Dr. Sarah Pütsch, Technical Marketing Lead, Sederma about the product launch of Amberstem[™]

Dr. Sarah Pütsch studied "Molecular Life Sciences" at Maastricht University and graduated as Top 3% student in 2011. She continued her studies and performed her PhD in the Department of Experimental Molecular Imaging at the university hospital of the RWTH Aachen. In her PhD project, Dr. Sarah Pütsch investigated and visualised tumor angiogenesis and anti-angiogenic therapy effects by using multiple molecular imaging modalities, such as ultrasound and micro-computed tomography. After successfully completing her PhD, she joined Croda as Technical Marketing Lead in May 2017 and is responsible for the Technical Marketing of Sederma's active ingredients for Personal Care.



EURO COSMETICS: At in-cosmetics in Paris, you presented your new product $Amberstem^{TM}$ for the first time; it was developed especially for olive-toned skin. What special challenge does this skin type present?

Dr. Sarah Pütsch: Olive complexion is associated with skin phototypes III to V, which are distributed worldwide among multiple ethnic groups including Latin America, Middle East, South East Asia and the Mediterranean region. This skin type is recognised as hyper-inflammatory and hypersensitive promoting pro-inflammatory hyperpigmentations and a dull and greenish complexion and, therefore, needs specific care.

EURO COSMETICS: And what can AmberstemTM do to fulfill the special needs of this kind of skin?

Dr. Sarah Pütsch: Amberstem[™] is a plant cell culture extract of Buddleja Davidii, known as the butterfly-bush, that responds to the unique beauty concerns of olive complexions. As an eco-conscious, COSMOS-compliant active ingredient, Amberstem[™] reduces inflammatory hyperpigmentations, dullness and redness, due to its anti-oxidative and anti-inflammatory properties and its pigmentation control inhibiting the melanin production and providing a new glow to olive-toned skins. Furthermore, Amberstem[™] reinforces the skin barrier and improves skin hydration by stimulating the hyaluronic acid synthesis.

EURO COSMETICS: What tests were conducted and what were the results?

Dr. Sarah Pütsch: Besides numerous *in vitro* tests demonstrating the anti-oxidative, anti-inflammatory and moisturising properties of Amberstem[™] as well as its pigmentation control, a clinical study including a panel of 26 female volunteers with an average age of 36 years, skin phototype IV, irregular and dull complexion with dark areas was performed. These volunteers applied a cream containing 2% Amberstem[™] twice daily on the face against a pla-

cebo in contralateral for one month. The clinical study confirmed, that the application of Amberstem[™] for one month leads to fading of dark areas and a reduction in skin redness. The majority of the volunteers noticed a decrease in the intensity of dark areas and recognised their skin as more luminous and well moisturised. Amberstem[™] evens the skin tone, reduces skin redness and fades dark areas providing a lucent and healthy amber tone for olive complexions.

EURO COSMETICS: With which ecological considerations was this active ingredient developed? And what can you tell us about the manufacturing process?

Dr. Sarah Pütsch: With AmberstemTM, Sederma is pleased to offer a natural and ultra-customised solution to the specific beauty concerns of olive complexions associated to phototypes III to V. AmberstemTM is obtained by plant cell culture, which is a safe and eco-designed technology. Plant cell culture allows access to a wide range of plant extracts showing the highest reduction in terms of water consumption and negligible soil occupation to preserve the natural balance of the ecosystem. Sederma has developed an indepth knowledge in this technology and offers a broad range of active ingredients with a defined and reproducible composition and proven efficacy.

EURO COSMETICS: What advantages does this environmentally-friendly technology provide?

Dr. Sarah Pütsch: Due to the increasing consumer awareness and demand for more natural and sustainable products for personal care, plant cell culture as eco-designed technology can serve the demands of the consumers by combining efficacy, sustainability and safety. It is a green and eco-friendly technology, which shows the highest reduction in terms of water consumption and negligible soil occupation, in comparison with traditional agriculture, with the complete absence of pesticides and other contaminants to



decrease the toxicity risk to humans and to preserve the natural balance of the ecosystem. Additional benefits of the plant cell culture technology are no widespread use of solvents, no GMOs, no pollutants, no preservatives, no need for transportation, no over exploitation of land, protection of the plant and biodiversity and an unlimited availability together with a high and standardised quantity of active molecules.

EURO COSMETICS: In which care products is AmberstemTM used? **Dr. Sarah Pütsch:** Formulating with AmberstemTM seems to be unlimited: AmberstemTM is water soluble and does not contain any preservatives. As COSMOS-compliant active, AmberstemTM is of special interest for natural cosmetics. AmberstemTM can be incorporated into any type of facial care, make-up, sun and after-sun products.

EURO COSMETICS: What are you trying to express with your slogan "Beauty in Diversity"?

Dr. Sarah Pütsch: Currently, "Beauty in Diversity" is a hot topic, since diversity has become a huge trend in the beauty industry, especially for the make-up category. This modern vision of beauty claims a more inclusive approach regarding the multitude of ethnicities, genders and ages. Sederma embraces this global trend by offering a dedicated solution for olive complexions, which are common in numerous ethnic groups, through its recent product launch of Amberstem[™]. In addition, Croda's diverse product portfolio offers solutions for every skin- and hair type reflecting the huge diversity and meeting the specific desires and needs of the end consumers, while respecting and valuing individuality.

EURO COSMETICS: And how do you implement this philosophy in your products?

Dr. Sarah Pütsch: Croda offers a broad product portfolio for skin and hair care applications and is dedicated to the development of

unique and innovative textures for cosmetic formulations, which are attractive for the diverse desires of the end consumers. Sederma as international leader in the development of active ingredients adds innovative solutions to numerous skin problems with its multifaceted active ingredients with proven efficacy. Crodarom completes our product portfolio with Crodarom's natural extracts. We are convinced that our diverse products appeal to and meet the individual desires and demands of the individual end consumers and are able to reflect the diversity in beauty.

EURO COSMETICS: What do we have to look forward to at Cosmetic Business in Munich?

Dr. Sarah Pütsch: At the Cosmetic Business exhibition, Sederma will present several innovative textures and novel formulations with Amberstem[™], such as the "Amber-toned skin primer". This tinted primer serum is great for evening out skin tone and neutralising pigmentation disorders. Suitable for the use as a primer before applying make-up, it is enhanced with Amberstem[™] to decrease the appearance of dark areas and to provide moisture to olive skin.

Furthermore, our customers and visitors can be curious about our innovative products from Croda and Crodarom. Croda will present its newest product Infraveil[™] IT-100, a physical shield to Infrared-A (IRA) rays, delivering instant skin protection from IR-ageing. Crodarom will present its Banana Flower Extract and Manuka Honey. My colleagues and I are looking forward to welcome you at our booth (hall 2, stand D11) to introduce you to our recent product launches from Sederma, Croda and Crodarom.

EURO COSMETICS: We thank you for the conversation.

* Sederma GmbH is a subsidiary of Croda International PLC.