

With a rapid pace of innovations – Aiming to expand into even more personal care applications

A conversation with Rishabh Pande, Senior Director Global Marketing and Innovation Personal Care at DSM

EURO COSMETICS: *Rishabh, DSM achieved its greatest results in 2016 and is continuing to deliver on its strategies. What strategy does DSM pursue in particular?*

Rishabh Pande: At its Capital Markets Day in November 2015 DSM made a commitment to achieve profitable, above-market sales growth in all markets, and we in Personal Care are fully engaged with this ambition. To deliver on the promises we made at the Capital Markets Day we made clear strategic decisions. Firstly, we would attract top talent from across the industry; secondly, we would build strong partnerships with our customers; and thirdly, we would maximize the strengths of all three segments of our business: Sun, Skin and Hair.

As regards innovation, DSM's strategy rests on two pillars. We invest in internal R&D, focusing on strategic areas that maximize the potential of DSM's expertise. At the same time, we seek to expand this expertise through external collaborations and licensing projects.

EURO COSMETICS: *You've been head of Marketing & Innovation Personal Care since April this year. What are your own plans and objectives for the future?*

Rishabh Pande: We are aiming for a rapid pace of innovation through both internal R&D and external collaborations. At the moment we're delivering five innovations a year, and I'd like to maintain that pace.

We've already introduced four new products this year, two in Sun and two in Skin Care, while our Hair Care team has launched a whole range of new and exciting formulations based on recently launched TILAMAR® polymers. Last year our synthetic peptides platform produced the dipeptide derivative SYN-UP™, a skin



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resilience booster that combats dry skin over a sustained period, and there are other promising candidates under development. We also have a very strong portfolio of natural ingredients and actives to meet the growing demand for these products. And we're probably the only company

today working on an entirely new UV filter. One of my biggest ambitions, though, is to expand our performance ingredients business and extend it into even more personal care applications, not only hair care, but body care, make-up and more. We want to bring science to life through skin care innovations and novel visualization techniques. To me, innovation does not only mean new products or novel molecules. It can be a new take on an old favorite, new data that reveal unsuspected activities of known ingredients, or maybe a novel combination of existing ingredients that synergistically provides improved benefits. But of course we will continue to bring new products to the market, and already have several in the pipeline.

A major ambition is to deliver more consumer-driven innovation and concepts to our customers. Today we are probably the only ingredient supplier to invest in qualitative consumer research. We want to be seen as partners, rather than suppliers. We want to put ourselves in our customers' shoes and walk that extra mile along the value chain. By doing so, we will understand better their ambitions and frustrations, and be able to engage in a process of co-creation.

On the marketing side, our efforts will be directed towards increasing the relevance of what we have to offer. By engaging with key customers we can exploit the incredible diversity of one of the broadest portfolios in the industry to create bespoke solutions and on-trend concepts like the Blue Light formulations we launched at *in-cosmetics* in London this year.

EURO COSMETICS: *Innovation is clearly one of the key factors in your success. How do you and your team implement this?*



Rishabh Pande: In terms of internal R&D, we identified four key research platforms: UV filters, peptides, naturals, and polymers. These platforms yield most of our internal innovation. Where possible we make sure that our innovation is based on the insights we acquire through qualitative research.

In terms of external collaborations, for example we are collaborating with Nanjing Cosmos Ltd to expand our production capabilities and supply chain for our latest UV filters.

Overall, we have been accelerating our drive for innovation, and this is providing a firm basis for even faster growth.

EURO COSMETICS: *DSM Personal Care already provides innovative ingredients and solutions for some of the world's best-selling beauty products. What are your advantages over your competitors?*

Rishabh Pande: We offer one of the broadest portfolios in the personal care arena. We were the first to offer vitamins specifically for cosmetic use and have been expanding in this direction ever since. Then we added UV filters and other skin actives. More recently we entered the Hair Care market, and we have now added sensory modifiers to round off our portfolio, enabling us to deliver across all major PC applications.

And while we capitalize on the power of the DSM 'machine', which has over 20,000 employees and is able to deliver in 225 countries, we have adopted a hybrid positioning strategy. Hence our new BU is a modestly-sized structure that has the flexibility to come up with innovative concepts and to be reactive and demonstrate a genuine sense of customer service. It's in the

area of customer service that we really aim to set ourselves apart from the competition.

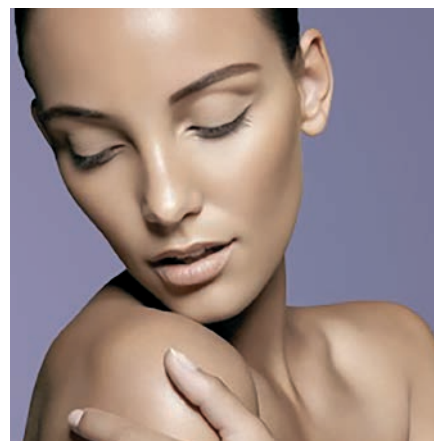
EURO COSMETICS: *What is your particular focus for meeting customer needs?*

Rishabh Pande: We already do much more than simply supply ingredients: our extensive service package includes technical support, support for product development, a global supply chain, regulatory support, and formulations and applications expertise. Now, in addition to these services, we want to inspire our customers with concepts that build on our original consumer insights. Our ambition is to be our customers' first point of contact for ideas as well as ingredients.

EURO COSMETICS: *Can you tell our readers more about blue light and your novel concept?*

Rishabh Pande: Our developments in blue light protection are very exciting and perfectly illustrate our approach to innovation. It's becoming widely known that blue light from electronic devices can have negative effects on health, disturbing sleep patterns and causing eye damage, and consumers are looking for ways to mitigate these effects. Since blue light is very close in the spectrum to the UV radiation that can be so damaging to skin, we decided to investigate this aspect.

We discovered that blue light rays penetrate deep into the skin and cause oxidative stress at the skin surface through the formation of reactive oxygen and nitrogen species. Through a process known as pro-



tein carbonylation, this may cause proteins to lose their functionality and lead to weakening of the epidermal barrier, hyperpigmentation, and damage to the extracellular matrix, resulting in accelerated aging.

We developed our own method to evaluate the damage to skin cells, using a light source which excluded UV rays, and tested our UV filters for their ability to block blue light. This allowed us to identify a filter from our PARSOL® range, PARSOL® Max, as offering the broadest protection currently available, including blue light protection. PARSOL® Max can easily be combined with other UV filters, and its compatibility with micro-pigments such as PARSOL® TX has recently been improved, thanks to investments in new DSM research.

We then expanded the scope of our research and examined our skin actives portfolio for relevant protective properties. We found that our new microalgal bioactive, PEPHA®-AGE, shows broad activity against sunlight-induced cutaneous damage, and selected Niacinamide PC for its ability to protect against oxidative stress. Our formulations experts developed two formulations containing these skin actives as well as the UV filters, and our sensory panel helped refine the formulations for consumer appeal, adding sensory modifiers from the VALVANCE™ range to give them a slightly silky finish. We're calling these formulations Total Protection into the Blue and Indoor Blue Defense.

Because we identified this need early, our customers can now be first on the market with two superb, claim-substantiated, ready-to-use formulations.

EURO COSMETICS: *With 40 years of experience in skin care, DSM has developed a broad portfolio of claim-substantiated skin actives. Can you tell us something about your latest skin active, BEAUACTIVE®?*

Rishabh Pande: Our consumer research in the Asian market, in particular China, highlighted the fact that fine lines and wrinkles are not the only concerns with regard to aging. Conspicuous facial pores and age spots may be equally troubling. These arise after the age of 30 and may be exacerbated by sun damage. BEAUACTIVE® addresses both concerns.

In-vitro research revealed that BEAUACTIVE® activates the master cell regulator PPARα, triggering multi-target effects. In response to UVB stress BEAUACTIVE® hinders the production of both sunburn cells and the stress marker p53 which can increase skin pigmentation. BEAUACTIVE® also helps the skin to make more collagen, a key structural factor in the prevention of conspicuous facial pores. The outstanding efficacy of this potent hydroxystearic acid of high purity has since been confirmed by *in-vivo* studies. And, incidentally, BEAUACTIVE® is manufactured using green technology, so it fits well with our sustainability drive.

EURO COSMETICS: *What is the importance of sustainability at DSM, and how else do you and your team contribute to it?*

Rishabh Pande: Here at DSM sustainability rapidly evolved from an adherence to corporate social responsibility to becoming one of our four business drivers. We define sustainability as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs, and it is integral to everything we do. We are proud to report that our sustainability efforts have already been recognized in the market place. At the end of 2016, and not for the first time, DSM was named the worldwide leader in the Materials industry group in the Dow Jones Sustainability World Index. DSM has consistently been recognized for integrating sustainability into its business, having been named among the global leaders in each of the last 13 years and holding the



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number one position in the sector seven times. And the Corporate Knights Global 100 Index 2016 of the most sustainable corporations in the world listed DSM as the highest-ranked chemical company and 23rd overall.

We've made enormous strides in this regard in Personal Care. All our vitamins now come with the Quality for Life™ seal that promises Quality, Reliability, Traceability and Sustainability. Our vitamin production is exemplary for its achievements in improving sustainability, and in Scotland the Dalry vitamin production site won a CEFIC European Responsible Care Award for its sustainability program. Then last year our Vouvry production site in France, home of the ALPAFLOR® portfolio, was awarded Fair Trade certification.

EURO COSMETICS: *DSM's slogan is Bright Science. Brighter Living™. What is the meaning behind this slogan?*

Rishabh Pande: Our slogan reflects our purpose, which is to make life brighter. DSM uses its Bright Science to create Brighter Living for people today and for generations to come. We connect our unique competencies in Life Sciences and Materials Sciences to create solutions that nourish, protect, and improve performance. We co-create more sustainable, healthier, more nutritious and better performing solutions with our partners and

customers, so that together we can address societal challenges resulting from global shifts, from health and wellness needs to climate and energy concerns.

Let me give you an example of what this means in concrete terms. For us in Personal Care a major focus is protecting skin from UV radiation damage. Despite the availability of UV filters that can deliver complete protection, the World Health Organization, among others, reported that skin damage from UV radiation is still on the rise. There is widespread recognition that consumers are reluctant to apply sun protection often enough and in sufficient quantities.

It is increasingly apparent that formulations and sensory properties are crucial to the success of sun care products. With our leading position in the UV filters market, the broadest portfolio of UV filters in the industry and an extensive portfolio of skin actives and sensory modifiers, we are in a prime position to develop novel, consumer-friendly applications that will encourage people to protect themselves and their families adequately. We are currently investing heavily in this area, and seeking to cooperate closely with our customers to meet this global health challenge.

EURO COSMETICS: *Thank you for talking to us, Rishabh.* ■