



24th SWISS SCC Winter Seminar

»Cosmetics between Tradition and Technology«

Champfèr, February 2006

Every human being TODAY is a child of our new modern time, with its technical achievements and challenges – and yet each of us is still a part of YESTERDAY, traditional, profound knowledge that we rely on and originates from our ancestors. As consequence, the cosmetic sector also moves between this tension of tradition and technology. Based on the proverb »only who knows the past can create the future«, the SWISS SCC winter seminar in Champfèr focused on current scientific cosmetic aspects based on traditional approaches. There were about 70 participants – more than ever – from industry, university and ministry. *Catherine Schneider* (Rausch AG) and *Dr. Marion Fröschle* (Givaudan AG) were responsible for the conceptual/organisational part of the conference and the presentation of the lectures, the technical part was performed by *Birgit Haemel* (Chesham GmbH).

The opening plenary lectures of days 1 and 2, highlighted the topic of »**cosmetics between tradition and technology**« from a higher point of view. *Dr. Ulrich Kellwolf*, Zollikon opened the conference concentrating on aspects of »Inside and outside beauty, based on cosmetics: How does the bible consider the human being, its beauty and the attitude towards cosmetics – and how can we transfer this knowledge to today's world. The bible and the use of cosmetics are not at all contradictory – a lot of paragraphs prove this. *Rudi Josuran* (DRS) radio presenter highlighted in his plenary lecture the topic »fear and uncertainty«. Each level of employee and each worker in whatever job – and therefore also in cosmetics – deals, much more now than in earlier times, with perhaps changed but intensive fears – *i.e.* the questions of »workaholics«, »redundancy« and »increasing unemployment figures«.

From scientific point of view the first day

was under the headline of *protection against UV rays and effective ingredients for sun protection*. The 3 speakers concentrated on their points of view: *Dr. Margret Schlumpf* (Greentox) from the Universität, Zürich dealt with new dimensions of ecology with the question, considering our way of life in using UV fil-

ters, to what extent – the modern human being possibly influences the nature of endocrine circulation, especially foetal. The aim of the university approach is to evaluate hazards and risk potentials taking as example certain substance categories *i.e.* sun protection filters to assure an intact environment and a safe life for the next generation. For *Dr. Michel Donat* (Gesundheitsamt – health ministry, Bern) the benefit of sun protection is much higher than the risk even if some details *ref.* absolute quantity to be used and the *ref.* sun protection levels are still under discussion. From industry point of view, according to *Dr. Björna Windisch* (Beiersdorf Hamburg, Germany) sun protection products – with their SCCP/Brussels approved and registered filters – offer optimal protection against UVA and/or UVB rays – the safety and efficacy are ensured for raw materials as well as on a finished product level. The UVB protection is established and agreed internationally as SPF level – for UVA protection a new UV balance method from BDF is under evaluation.

After these 3 morning lectures, the »*discussion-arena sun protection*« took place in the afternoon. The 3 speakers answered



Picture: Conference hotel Europa, Champfèr (near St. Moritz)

questions from the audience and the participants highly appreciated the opportunity of an open, very vivid discussion. Different point of views were recognizable especially regarding the timing of publishing very complex, combined study results, sometimes still with some question marks: *Dr. Margeret Schlumpf*, university voted for a quick publication, going public as soon as possible via press, radio and/or television, mainly based on the reason that financial support is needed from the State, so as to continue running these studies urgently – and that getting financial support is also based on if/how much publication exist. The health ministry and industry however vote much more for clear and complete finished study results, even if these would take a much longer time. The main reason for industry and health ministry is the aspect that the consumer should not be confused with these very complex backgrounds and sometimes difficult interpretations of these studies. However, in general all parties agreed that even more cooperation, transparency and confidence should be established between university, health ministry and industry to ensure and protect the safety and integrity of man and the environment in the shorter and longer term.

The second part of the first afternoon covered topics like »*ingredients of sun protection products*«. According to *Dr. Klaus Jenni* (Goldschmidt, Essen, Germany) the benefits of a cationic emulsion technology is clearly recognisable as *i.e.* the moisture content of elder skin can be stabilized and even in w/o emulsion a SPF Boosting can be reached. *Heide Moser* (Pentapharm AG) concentrated beside the self tanner »Erythrulose« on new conceptual approaches for healthy tanning. Pentapharm offers other various ingredients with valid and detailed studies which primarily *i.e.* activate the energy-metabolism (»Phepha®-Ctive«), the collagen I synthesis (»Syn®-Coll«), which inhibit matrix-metalloproteinases (»Pepha®Timp«) or protect the DNA with compatible solutes (»Pepha®Protect«). Based on these concepts, a healthy tanning is proven and can be reached.

The second day of the conference was under the headline of »*natural ingredients*«. *Dr. Torsten Clarius* (Cognis, Düsseldorf, Germany) focused on »energy« in cosmetics. ATP of the mitochondria is the major supplier of the energy of our body. Mitochondrial DNA however is a central element in the cascade of sun induced skin aging. Detailed study results were presented for the special protection of the mitochondrial DNA via the extract of flavonoids, taken from the Candle Bush plant. *Dr. Christian Schuster* (Universität Zürich) showed the »provocateur of allergies – sun, natural ingredients, chemistry« using a lot of very illustrative dermatological photographs. The difference between irritative-toxic and irritative-allergic reaction was explained. Any case of allergy in Germany is registered centrally via the IVDK (www.ivdk.gwdg.de), whereas in Switzerland this kind of system has, so far, not been used.

In the afternoon Maria Lüder (Oberswil) shared her knowledge of toxicological profiles of plants with the audience. Special procedures to obtain these plants or parts of plants were described, concentrating on 5 major ingredient groups: the etheric oils, the alkaloids, glycosides, polyine and proteins/peptides. *Dr. Fred Züllli* (Mibelle Cosmetics AG, Buchs) drew to attention the porphyra algae, as it contains mycosperms like amino acids (MAAs) with high UVA protection quali-

ties. It is already known to many people from the food sector – under the name »nori«, with food grade, being used in Japanese sushi. Problems of odour and color inhibiting the use in cosmetics have

been solved, encapsulating the ingredients/MAA's in liposomes. The product, available under »Heliaguard 365« offers a kind of natural protection against UVA and free radicals, it additionally inhibits lipid-peroxidation and is photostable. Effective anti-irritants taken from nature, especially oats, and based on this approach new synthesised avenanthramids were the central topic of *Dr. Joachim Röding* (Symrise). The effective use of these new substances primarily for the indication »itching« is proven in studies and will be presented in Osaka at the IFSCC this year.

The third main day of the winter seminar covered »innovative and creative fields of cosmetics«. The first speaker *Dr. Sven Gohla* (La prairie group, Volketswil) introduced the participants to the generations of lipid carriers, lipidnanopellets, the lipidnanopartikel (SLN) and the nanostructured carriers (NLC). The NLC technology was developed in cooperation with *Prof. Dr. Müller* (Berlin, Germany, distribution partner is CLR Dr. Kurt Richter). Certain application fields are patented, therefore use in cosmetics is only partially possible. As alternative carrier system of the 3rd generation NLC shows the advantages of a high physical stability, protection for the encapsulated actives and an easy technology. *Marie-Helène Boos* (Ciba Speciality Chemicals, Basel) indicated the consequences of the new chemical law (REACH) for cosmetics: Possible issues seem to be conflicts of REACH with the »Cosmetic Directive« especially for raw materials which are not only used in cosmetics, the required animal experiments (forbidden in cosmetics) and the safety assessment for humans. Possible scenarios of the consequences for cosmetic companies were discussed. The 2nd reading in Parliament will take place in May/June 2006. REACH should come into force in 2007. The audi-



Picture: Participants

ence was fascinated by *PD Dr. René Rüdlinger* (dermatologist, Zürich) who lectured to the topic Botox and laser technology. Different laser technologies are used for the indication of skin aging, birthmarks/moles, pigments/sun spots or tattoos. A new indication for laser is acne, and shows very good results. Until now, the use of lasers is possible for any medical physician, a special qualification is not necessary. *Jacqueline Altenaichinger* (cosmetician, Zürich) introduced the audience in the world of the cosmetic institutes of yesterday, today and of tomorrow. In the future, this business field will develop much more towards wellness and highly qualified consultancy for skin and foot care. Starting in 2007 the profession of a »medical cosmetician« will exist with a qualified education and continued training in care consulting/treatment of problematic skin/rosacea. *Prof. Dr. Ulrike Heinrich* (DermaTronnier, Witten, Germany) indicated that also an »excess of care« will lead to skin irritations – in this case, only the subsequent discontinuation of use of products can be recommended. For her, interesting new concepts to achieve beautiful skin can be seen in the synergy of cosmetics with food supplements/nutriceuticals based on *i.e.* antioxidants as vitamin C or E or glutathione. First oral studies with glutathione, *e.g.* red clover, isoflavons and carotinoids already show promising results.

The final contribution of the 3 day main conference came from *Dr. Christine Rothenbühler* (Academia Engiadina-Samedan). She enchanted the participants not with »wrinkles« of the human's skin but with »furrows« of the Swiss/Engadine mountains – based on photo simulation models resp. photographs taken from a helicopter, the influences of the change of the yesterday's, today's and tomorrow's climate were demonstrated

showing its dramatic results in these Swiss mountain regions. However all these models are still based on high factors of uncertainty – and fortunately these climate changes are not in mankind's hands alone.

The 3-day main seminar with its 19 lectures was finished. As with previous the years, the time management – consciously admitting a longer lunch interval starting lectures earlier in the morning and later in the afternoon/evening – was highly appreciated by all participants. All acknowledged the personal atmosphere and the open exchange of ideas which will surely lead to some new ideas or put some points of view into perspective.

In the second part of the seminar 3 speakers shared their knowledge of the following topics: *Dr. Reto Hess* (Impag AG, Zürich) entered into the »raw material water« – from a technical and alternative point of view. He foresees that, based on its special properties, water will perhaps be positioned as »effective ingredient« in the future. *Dr. Heide Zerban Michelfelder* (Krebsforschungsinstitut Universität, Heidelberg, Germany) showed new forms of cancer therapy via *i.e.* monoclonal antibodies. These antibodies will only be released in the cancer cell with the relevant effective ingredient. The healthy tissue therefore will not be attacked or involved. *Dr. Walter Lier* (Genf) acquainted the audience with »alchemy«. The alchemy started already centuries ago, even in the ancient times with Hermes Trismegistos. Brewing beer in cloisters during the Middle Ages already was alchemy – and famous alchemists, such as Isaac Newton or Paracelsus, in reality did basic research work. Nevertheless, this old knowledge of the alchemists is still valid today »The philosopher's stone lies in oneself«.

Two companies briefly presented their offers in consulting fields: Cobbex Consulting, *Josef und Hildegard Ruegg* for the establishment and the support of model development, processes, coaching audits, auditor training and teambuilding (j.ruegg@cobbex.ch) and *Dr. Bernd Komp*, Consulting for innovation managements and in the field of staff development, laboratory equipment, technology scouting, supporting services, claim support, QS,

regulatory, safety, MSDS and dossiers (b.komp@tiscali.nl).

Main sponsors of this conference were: Mibelle Cosmetics AG, Buchs, Pentapharm AG, Basel, and Univar AG, Zürich. As well it was sponsored by Cognis, Düsseldorf, Germany, S&D Chesham GmbH, Bergisch Gladbach, Germany, SITA Rohstoffwirtschaft GmbH, Mannheim, Germany, Degussa/Goldschmidt AG, Essen, Germany, SWISS SCC, Prochem AG, Zürich, S. Black, Duisburg, Germany, Cobbex Consulting AG, Wohlen, and Georges Walther AG, Päfikon. Special thanks go also to the directors of the conference hotel »Europa« in Champfèr, *Mr. and Mrs. Bützberger*.

The winter seminar Champfèr 2006 was highly appreciated closed by all participants – and the date for the next winter seminar in 2007, its 25th anniversary, is **27th January – 3rd February 2007**.

You will find the abstracts (in German) of the various lectures – if available – in the SÖFW Journal, 132, 5 & 6 (2006) and at the SWISS SCC homepage: www.swissccc.ch.

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