MWSCC CHAPTER EDUCATIONAL DINNER MEETING

“Stewardship and Compliance Strategies Facilitate Global Growth”
John Phillips, Vice President and Technical Director, Cardno ENTRIX

ABSTRACT
Changing societal norms are influencing chemical policy on a global basis. Consumer demand in the US and Europe for safer and more environmentally sound chemical alternatives is driving the promulgation of more rigorous laws and regulations. In many cases, it is actually bypassing the regulatory process and is driving “greening” of the market place. This trend is directly related to affluence and is expected to spread as affluence increases in emerging economies.

An understanding of this trend and the global regulatory landscape provides multi-national companies with a competitive advantage in the global marketplace. This is certainly the case for companies that manufacture, use, and sell chemicals internationally. The companies that understand these requirements and related dynamics can incorporate them into their business strategies and plans. Such strategies support global growth and sustainable business practices.

BIO
As Vice President and Technical Director, John Phillips leads the Global Product Stewardship and Regulatory Affairs practice at Cardno ENTRIX. He is responsible for broadening the firm’s consulting services in regulatory compliance, chemical registration, and product stewardship for clients that manufacture chemicals and consumer products.

His clients include major multination chemical, plastics, agricultural chemical and consumer products companies.
Dear MWSCC,

Greetings again from cold and rainy Indianapolis. I thought March was supposed to be a warmer month! We celebrated a wonderful meeting at the Copernicus Center on March 12, with an excellent speaker, Dr. David Koenig, from Kimberly-Clark. We were joined by the St. Louis Chapter via Go Meet Now, and Shannon Vondrak volunteered to be there to help organize the online portion for them. I am so pleased the attendance in St. Louis was strong, and the quality of the speaker was outstanding. Thank you to Lora Ruppert for organizing the event on the St. Louis end as well!

I believe that was the first time in the history of the SCC that two chapters held a joint meeting together via the internet. Thank you Melissa for having the vision a few years ago that this was a good direction for our chapter to go in, and all the individuals that have put forward effort and knowledge to make our chapter a leader in using technology to spread the word about Cosmetic Science.

I am also pleased to announce that Katie Anderson and Allured have donated several books to our Chapter. We thought of a special way to spread these books around the chapter. At our April meeting, we are going to hold a silent auction for the books, many of which are extremely valuable, in order to fund our newest committee, Community Outreach. Our chapter does so many activities around the community, and it’s time that we have an organized approach to share our knowledge and experience with those who wish to learn it. A huge thank you to Allured for the donation!

We have made excellent progress on our events this year, and there is still time to volunteer to help our Technical Symposium crew. Please keep your calendars marked for our night aboard the Anita Dee II on May 29th as well, it should be a very special evening.

Our next meeting is April 9th at the Parthenon downtown. Besides the wonderful food and excellent atmosphere, our speakers have been really outstanding so far this year, and this is going to be another dinner meeting you won’t want to miss. A big thank you to our Program Committee for lining up such talented speakers. They really put a lot of time into making sure the quality of our speakers is top notch, so if you see Debbie Zartler or Peggy Bennett, please stop them and say thank you for their efforts.

Our attendance this year is better at this point, then many years before, so let’s keep the momentum going! Please consider bringing a colleague, friend, coworker, or client to a meeting with you in April. The meetings are always enjoyable and educational, and something different than just another business dinner.

Thank you to everyone who makes this chapter so successful, and I look forward to seeing all of you in April.

Best,

Tom

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Engineering natural active ingredients
April 9th MWSCC Chapter Meeting

Schedule:
5:15 Board Meeting
5:30 Social Hour (Cash Bar)
6:30 Speaker
7:30 Dinner

Location:
THE PARTHENON
314 South Halsted Street
Chicago, Illinois
(312) 726-2407

Menu

Appetizers
Sanganki
Gyros
Taramosalata (Fish - Roe Spread)

Salad
Greek

Main Course
Pastitso
Moussaka
Dolmades
Athenian Chicken
Rice Pilaf and Roasted Potatoes

Dessert
Baklava - Galaktoboureko and Coffee

1 Bottle Roditys Red Wine Per Table
Midwest SCC Social Night 2013

A beautiful evening cruise along the shores of Lake Michigan on the Anita Dee II.

Enjoy skyline views, fireworks, delicious food and drink.

Wednesday, May 29th 2013
6:30 pm - 10:00 pm
600 East Grand Avenue
Chicago, IL 60611

Ticket Cost includes all food and beverages
$115 per person prior to May 1;
$125 per person May 1- May 13
Absolutely no reservations after May 13

Space is limited so please reserve early

Tables of 10 & Individual seats are available

Questions: Margie Best (773) 334-4845 or Margie.Best@cognis.com

Reservations may be made via www.midwestscc.org with payment via PayPal or check.
Cash payments will no longer be accepted at the door.

Only credit card payments and checks are allowed.
Non-nano Inorganic UV Filters

Yun Shao, Pascal Delrieu and David Schlossman
Kobo Product, Inc.

1. Introduction

Titanium dioxide and zinc oxide are two widely used inorganic UV filters in global markets. They are insoluble and inert, and do not cause any known allergies. Therefore, they can be used at a very high level to offer high SPF and broad-spectrum coverage. However, because of their particulate nature and high refractive indices, they can scatter visible light to cause whitening. To make them transparent on the skin, their primary particles have been made to be very small since 1980s. For example, ultrafine TiO₂ primary particle, typically acicular, has a width of 15 nm and length of 80 nm while ultrafine ZnO primary particle has a diameter of 20 – 40 nm.

Recently, there are concerns in the market that they might be able to penetrate skin structures and bio-accumulate. Many consumer groups have pressed regulatory bodies to classify nano materials as new substances and regulate with new standards. As a result, European Parliament approved in March 2009 new ruling on safer cosmetics requiring labeling for nano materials that is defined as an insoluble or bio-resistant and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nm. Many other countries followed and released the similar definitions.

2. Size measurement

Although there are still some debates on the definition of nano material, the real concern is the size measurement. First, there is no official or a generally accepted test method. Secondly, there are many size measurement methods, but each has its own merit and limitation (Table 1). And lastly, some nano particles form hard aggregates that do not break into discrete primary particles even with most aggressive grinding. In such a case, aggregate size rather than primary particle size can be properly measured.

<table>
<thead>
<tr>
<th>Method</th>
<th>Pro</th>
<th>Con</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electron Microscopy (SEM, TEM, Cryo-SEM etc.)</td>
<td>Primary particle are measured</td>
<td>Statistic analysis is hard when size distribution is wide. Expensive and not always available</td>
</tr>
<tr>
<td>Acoustic Size analysis</td>
<td>No sample dilution</td>
<td>Measure aggregate size</td>
</tr>
<tr>
<td>Light Scattering Size analysis</td>
<td>Generally available and ease of use</td>
<td>Need to know parameters of medium</td>
</tr>
<tr>
<td>BET Specific Surface Area</td>
<td>Easy to use, measure primary particle</td>
<td>Only report mean size, but not distribution</td>
</tr>
</tbody>
</table>

Particles with large primary size (> ~ 150 nm) also form aggregates. Because of their relatively large size and small surface area, the aggregation force is much weaker than that for nano particles. The aggregates can be easily broken down to primary particles of which size can be measured.

3. Interpretation of nano material definition

Ever since the definition of nano material became public, its interpretations and the corresponding test methods have always been on debate because of the complexity of size measurement and the roles of primary and aggregated particles in the applications. Regulators in EU have been the front runner in regulation development and there are currently two interpretations as shows in Table 2.

<table>
<thead>
<tr>
<th>EU Commission</th>
<th>Cosmetics Europe (CE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date issued</td>
<td>October 2011</td>
</tr>
<tr>
<td>Particle measured</td>
<td>Primary particle</td>
</tr>
<tr>
<td>Size Distribution weighting</td>
<td>By number</td>
</tr>
<tr>
<td>Threshold</td>
<td>50%</td>
</tr>
<tr>
<td>Other measurements</td>
<td>Specific Surface Area</td>
</tr>
<tr>
<td>Test method likely</td>
<td>Electron Microscopy</td>
</tr>
<tr>
<td>Used for</td>
<td>All industries</td>
</tr>
</tbody>
</table>

Health Canada tends to evaluate nano material based on the primary particle size. However, it has not published any guidance for the test method and result analysis. The clarity of interpretation and test method is also lacking in many other regions.

Based on the above discussion, both image analysis and light scattering size analysis were used in this work to screen non-nano materials in order to provide a choice of selection. Image analysis is used for particles that aggregate loosely while light scattering method is used when aggregates do not break down to primary particles.

4. Non-nano UV filters by Light scattering size analysis

In this study, the powders are dispersed in solvent and sonicated in a 90 W sonication bath before being measured on Horiba LA-910. Ethanol and hexane were used to represent polar and non-polar media. Volume weighted size distribution was acquired. Although the size of aggregates is secondary and bigger than the primary size, it does represent the state of particles in which they react with light, skin and surrounding ingredients in many circumstances. Therefore, this size distribution has a practical meaning in regard to the actual application of sunscreen. Materials with almost all sizes over 100 nm are considered to be non-nano.
1) TiO2 and ZnO with hydrophilic coating

It was found particles with silica coating had a high tendency to cause hard aggregation. This could be due to the facts that 1) silica coating may wrap around several primary particles and act like a binder when dried and, 2) silica surface can associate with each other through hydrogen bonding in a manner that is similar to fumed silica. Even so, other factors like the ratio of silica to other coatings, shape and primary size can affect the degree of aggregation.

After screening, TEL-100, a TiO2 with silica and alumina coating was identified as a non-nano TiO2. The SEM photo shows that almost all primary particles are aggregated. The populations of particles under 100 nm measured were listed in Table 3. TEL-100 was then dispersed in esters and aggressively milled in a media mill to improve its transparency. The dispersions had a transparency comparable to that of nano TiO2 while almost all particles remained over 100 nm (Table 3 and Fig 2).

Silica coating on ZnO is not as common as for TiO2. Some existing commercial grades were examined but all failed. ZnO has higher solubility than TiO2, and is alkaline. This may lead to high charge at the surface of silica coated ZnO that prevent heavy aggregation.

2) TiO2 and ZnO with hydrophobic coating

The surface TiO2 and ZnO are often hydrophobically modified in order for them to disperse well in a formula and to have a nice skin feel. Jojoba esters treatment was found to be able to cause primary particles to aggregate more tightly. However, the level of coating needed to be optimized so that the aggregation was sufficient but not overdone to avoid reduction of its ability to attenuate UV light.

When Jojoba esters treated TiO2 and ZnO were dispersed and milled, the sizes measured were still all over 100 nm. Therefore, it is believed that when they are used in actual sun care formulation the non-nano characteristics will be retained.

### Table 3. Nano particle in TEL-100 and its dispersions

<table>
<thead>
<tr>
<th>Sample</th>
<th>Carrier</th>
<th>% of particle &lt; 100 nm (in Ethanol)</th>
<th>% of particle &lt; 100 nm (in Hexane)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEL-100 powder</td>
<td>--</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50% Dispersion</td>
<td>C12-15 alkyl benzoate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>55% Dispersion</td>
<td>Caprylic/Capric Triglyceride</td>
<td>1.7</td>
<td>0</td>
</tr>
</tbody>
</table>

### Table 4. Size measurement of Jojoba ester coated TiO2 and ZnO

<table>
<thead>
<tr>
<th>Sample</th>
<th>Base</th>
<th>Inorganic Coating</th>
<th>Jojoba ester coating %</th>
<th>Primary size (nm)</th>
<th>% Secondary size &lt; 100 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- TiO2</td>
<td>TiO2</td>
<td>Alumina</td>
<td>5</td>
<td>15</td>
<td>~ 10 -- Fail</td>
</tr>
<tr>
<td>B- TiO2</td>
<td>TiO2</td>
<td>Alumina</td>
<td>8</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>C- ZnO</td>
<td>ZnO</td>
<td>None</td>
<td>5</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>
3) In-vivo efficacy testing

The powders in Table 4 were dispersed in esters or vegetable oil and formulated into sunscreen lotions. SPF and PFA were tested in-vivo on 3 panelists. The results are listed below and indicate that the UV attenuation power of these non-nano TiO2 and ZnO is equivalent to that of their nano counterparts. In addition, their transparency on skin was good.

Table 5. UV attenuation efficacy of non-nano TiO2 and ZnO

<table>
<thead>
<tr>
<th>Formula Type</th>
<th>B- TiO2 (O/W)</th>
<th>TEL-100 (O/W)</th>
<th>C-ZnO (W/O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS in disp. (nm)</td>
<td>all &gt; 100</td>
<td>10.29</td>
<td>15</td>
</tr>
<tr>
<td>Active (%)</td>
<td>32.9</td>
<td>31.4</td>
<td>22.4</td>
</tr>
<tr>
<td>SPF</td>
<td>8.07</td>
<td>8.69</td>
<td>8.67</td>
</tr>
<tr>
<td>PFA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Non-nano UV filters by primary particle size

A few grades of TiO2 and ZnO with large primary particles have recently been developed to meet the demand for non-nano sunscreens. Since the aggregates are loose and discrete primary particles do exist, electron microscopy was used to examine the size.

1) Non-nano TiO2

A series of cocoons shaped TiO2 were recently developed by Titan Kogyo Kabushiki Kaisha. The TEM photo in Fig. 4 shows clearly that all particles are over 100 nm. However, since the titanium dioxide has a very high refractive index (2.75 for rutile), the whitening resulted from such a large size was very strong and the aesthetics were not good on skin. Therefore, its use in actual formulation will be very limited.

Fig. 4. TEM photo of cocoons shaped TiO2

2) Non-nano ZnO

Zinc oxide has a relatively lower refractive index (1.99). As a result, the whitening will be much less noticeable when compared with TiO2. A large size, thus, has more utility in sun care formulations. A non-nano ZnO (ZnO-C) was developed recently by Sumitomo Osaka Cement. The primary particles of ZnO-C are in the range of 100 - 400 nm (Fig. 5) and have a specific surface area of 4 - 5 m2/g.

Particle sizes were measured using Scanning Electron Microscopy and the image analysis was performed with Mac-View software. Results are presented in Table 6.

Table 6. Particle size analysis of ZnO-C

<table>
<thead>
<tr>
<th>Weighting</th>
<th>Measurement</th>
<th>D10 (nm)</th>
<th>D50 (nm)</th>
<th>D90 (nm)</th>
<th>% of particles &lt; 100 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>2-axis mean diameter</td>
<td>147</td>
<td>214</td>
<td>285</td>
<td>214</td>
</tr>
<tr>
<td>Short axis</td>
<td>210</td>
<td>312</td>
<td>427</td>
<td>320</td>
<td>0</td>
</tr>
<tr>
<td>Number</td>
<td>2-axis mean diameter</td>
<td>122</td>
<td>169</td>
<td>246</td>
<td>177</td>
</tr>
<tr>
<td>Short axis</td>
<td>161</td>
<td>239</td>
<td>349</td>
<td>429</td>
<td>0</td>
</tr>
</tbody>
</table>

The mean size and specific surface area show that ZnO-C is similar to pigmentary ZnO. However, ZnO-C is very unique because it has a very narrow particle size distribution due to its proprietary production process to avoid nano or overly large particles.

There are many grades of pigmentary ZnO on the market with mean sizes in the range of 200 - 400 nm. Under microscope, they all show wide size distributions with a significant portion under 100 nm. In addition, a good percentage of particles are too large, which is detrimental to its UV attenuation power as well as to its aesthetics.

Table 7. Size range comparison of ZnO-C and pigmentary ZnO

<table>
<thead>
<tr>
<th>Sample</th>
<th>SSA (m2/g)</th>
<th>Particle size range (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial A</td>
<td>4.0 - 5.5</td>
<td>50 - 1200</td>
</tr>
<tr>
<td>Commercial B</td>
<td>3.0 - 5.0</td>
<td>50 - 720</td>
</tr>
<tr>
<td>Commercial C</td>
<td>5.0 - 7.0</td>
<td>50 - 1600</td>
</tr>
<tr>
<td>ZnO-C</td>
<td>4.0 - 5.0</td>
<td>100 - 400</td>
</tr>
</tbody>
</table>
ZnO-C was dispersed in C12-15 alkyl benzoate and formulated into a W/O formulation. Its performance was tested and compared with commercial grades of ultrafine ZnO on the current market. The results showed that ZnO-C was about 75% effective as ultrafine ZnO in UVA or UVB protection when the testing was performed in-vivo. This corresponds to our previous finding that a smaller particle size of ZnO provides higher SPF and there is an optimal size range for maximum PFA. Although the size of ZnO-C is too large to be highly effective, its performance can be satisfactory in many applications especially when it is used in combination with other sunscreen actives. It is worth noting that ZnO-C delivered a critical wavelength over 380 nm that can rarely be achieved with other grades of ZnO.

The skin aesthetics of ZnO-C sunscreen lotion was compared with that of an ultrafine ZnO. ZnO-C did show more whitening, but the difference was not very big. The difference was even smaller when the lotion was rubbed out on skin. When used in combination with other organic sunscreens, ZnO is often used at a low level typically around 5%. Our recently internal study has shown that the effect of the primary particle size on SPF, PFA and degree of whitening becomes almost negligible when the use level of organic sunscreens is high. Therefore, non-nano ZnO-C can be successfully used in combination to boost both UVA and UVB protection.

### Table 8. UV attenuation efficacy of ZnO-C

<table>
<thead>
<tr>
<th>Active</th>
<th>ZnO-C</th>
<th>Typical Nano ZnO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF</td>
<td>12.1</td>
<td>~15</td>
</tr>
<tr>
<td>PFA</td>
<td>5.52</td>
<td>~7.5</td>
</tr>
<tr>
<td>UVA/B ratio</td>
<td>0.88</td>
<td>0.6 – 0.85</td>
</tr>
<tr>
<td>Critical wavelength (nm)</td>
<td>381</td>
<td>370 - 375</td>
</tr>
</tbody>
</table>

The skin aesthetics of ZnO-C sunscreen lotion was compared with that of an ultrafine ZnO. ZnO-C did show more whitening, but the difference was not very big. The difference was even smaller when the lotion was rubbed out on skin. When used in combination with other organic sunscreens, ZnO is often used at a low level typically around 5%. Our recently internal study has shown that the effect of the primary particle size on SPF, PFA and degree of whitening becomes almost negligible when the use level of organic sunscreens is high. Therefore, non-nano ZnO-C can be successfully used in combination to boost both UVA and UVB protection.

### Summary

Concerns over safety of nano materials have led to the development of non-nano inorganic UV filters. Silica or Jojoba esters surface treatment can force primary particles to aggregate to a size over 100 nm and stay at this scale in application when measured by light scattering size analyzer. TiO2 and ZnO with a primary particle size over 100 nm were also developed. Non-nano TiO2 was found to be too whitening. Non-nano ZnO showed an acceptable transparency and UV attenuation power.
MWSCC FALL TECHNICAL SYMPOSIUM
SAVE THE DATE!

Thursday, October 10th 2013

NEW LOCATION!!
Belvedere Events and Banquets
1170 West Devon
Elk Grove Village, IL 60007

For the second time during the Technical Symposium, a Student Poster Session will be held from 9 a.m. - 3 p.m.

We are looking for students from across the Nation to present their scientific work.

The posters will be judged and awards will be given. This will be a great opportunity for students to present their ideas and findings and meet members of the MWSCC.

If you would like to submit an abstract for a student poster, please write to symposium@midwestsccl.org.
Cosmetic Chemists invited to gather at Social Night in St. Louis!

ST. LOUIS. The Chapters of Area II of the Society of Cosmetic Chemists today announced they will be hosting a cocktail reception on Wednesday, June 5, 2013 at the beautiful Missouri Botanical Garden in St. Louis. The event will be held in conjunction with the annual mid-year Scientific Seminar which will take place at the St. Louis Union Station Hotel on June 6th and 7th. Online registration is now open for the social event and SCC members who register before May 4, 2013 can save $20 on the ticket price. More information can be found at the St. Louis SCC chapter website (http://www.stlouisscc.org/scientific-seminar-society-cosmetic-chemists-2013.html)

This social event will provide an excellent opportunity for cosmetic formulators, scientists and raw material suppliers from around the country to network and discuss the latest developments in cosmetic science and the cosmetic industry. Passed hors d’oeuvres will be served for the first three hours and there will be a full bar. As an added bonus, during the event, the Whitaker Music Festival will be taking place. Attendees are invited to explore the garden and enjoy the jazz as part of the reception experience.

Founded in 1859, the Missouri Botanical Garden is the nation’s oldest botanical garden in continuous operation and a National Historic Landmark. The Garden is a center for botanical research and science education, as well as an oasis in the city of St. Louis.

Details for the event are as follows:

Date: June 5, 2013  
Time: 7 to 11 pm  
Location: Missouri Botanical Garden  
4344 Shaw Boulevard  
St. Louis MO 63110  
Transportation: Shuttle bus transportation between St. Louis Union Station Hotel and the Botanical Garden provided

About the Society of Cosmetic Chemists

The Society of Cosmetic Chemists was established in 1945 and is dedicated to the advancement of cosmetic science and strives to increase and disseminate scientific information through meetings and publications. For information please visit http://www.scconline.org. Information on the Annual Scientific Seminar will be available on the website by early March.

Contact  
To learn more about this event, please contact:  
Kelly Dobos  
Kao USA, Inc  
2535 Spring Grove Ave  
Cincinnati, OH 45214-1729  
kelly.dobos@kao.com
New York Summit Hones in on Green Ingredients and Consumer Behavior

London – How can the environmental impact of cosmetic & personal care products be reduced by using green ingredients and changing consumer behaviour? This is the main premise of the North American edition of the Sustainable Cosmetics Summit (http://www.sustainablecosmeticssummit.com), taking place in New York City on 16-18th May 2013.

A number of life-cycle analysis studies show the highest environmental impact of cosmetic products is from raw materials, consumers (consumption phase) and post-use (disposal). With most cosmetic and ingredient firms focusing on raw materials and production processes, the consumption phase is often ignored. For the first time, the Sustainable Cosmetics Summit will discuss methods of encouraging responsible consumption of cosmetic and personal care products. A major question to be addressed is: how can consumers be motivated to encourage the responsible purchase, use and disposal of cosmetic products to minimise environmental impacts?

Green ingredients in cosmetic formulations are another focus. The move towards green formulations is gaining momentum because of high consumer demand for natural & organic cosmetics, as well as diminishing supply of petrochemical feedstock. A number of speakers will discuss the growing use of plant and marine raw materials. Mibelle Biochemistry and IRB (Croda) will look at the use of stem cell technology to cultivate cosmetic ingredients from plant sources. Another paper by Heliae will explore the potential of marine algae as a sustainable source of cosmetic ingredients. With a growing number of food ingredients crossing over into cosmetic applications, Horst Rechelbacher (founder of Aveda and Intelligent Nutrients) will state the difficulties in formulating with organic food ingredients.

Discussions will also cover the social dimension of cosmetic products. Most cosmetic and raw material suppliers are preoccupied with environmental impacts when considering sustainability. How can cosmetic and ingredient firms make a social difference with their products? Dr. Bronner’s Magic Soaps will state how its fair trade sourcing projects have improved the lives of marginalized producers in Palestine and Sri Lanka. A large cosmetics company will demonstrate how social value can be created by CSR initiatives, human resources procedures, and customer-supplier relationships. In another presentation, Johnson & Johnson will highlight the challenges when juggling a diverse range of environmental and social issues in sustainability programs.

Michelle Thew, CEO of Cruelty Free International, will discuss alternatives to animal testing methods. Considering the European ban on animal-tested cosmetic products is imminent, many companies are adopting alternative testing methods. With a growing number of countries aiming to ban such products, she will outline the options available to cosmetic brands present in various continents.

For the third consecutive year, the summit will host a CEO roundtable. Heads of natural & organic cosmetic brands will discuss key challenges concerning sustainability, market conditions, and consumer expectations (behaviour). The roundtable will comprise CEOs /founders of Weleda, Caudalie, Intelligent Nutrients, Hugo Naturals and Apivita.

An interactive workshop on green formulations will cap the 3-day program. Judi Beerling of Organic Monitor will tackle the technical issues associated with using green ingredients. Although the palette of green raw materials has expanded considerably in recent years, technical issues remain. A review will be undertaken of the green alternatives to synthetic preservatives, emulsifiers, surfactants, emollients, etc. Practical advice will be given to formulators and product developers on how to use these green ingredients in formulations.

About the Sustainable Cosmetics Summit

The aim of the Sustainable Cosmetics Summit is to encourage sustainability in the beauty industry by bringing together key stake-holders and debate major sustainability issues in a high-level forum. The North American edition will take place at InterContinental New York Barclay hotel on 16-18th May 2013. More information is available from http://www.sustainablecosmeticssummit.com

About Organic Monitor

Organic Monitor is a London-based specialist research, consulting & training company that focuses on the global organic & related product industries. Since 2001, we have been providing a range of business services to operators in high-growth ethical & sustainable industries. Our services include market research publications, business & technical consulting, seminars & workshops, and sustainability summits. Visit us at www.organicmonitor.com

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Regional Sales Manager
Lucas Meyer Cosmetics

Lucas Meyer Cosmetics develops, manufactures and markets innovative ingredients for the global cosmetic and personal care industry. Its wide range of ingredients is supported by rigorous scientific research and marketing expertise.

Lucas Meyer Cosmetics’ portfolio of actives and functional ingredients are available world-wide through a network of distributors and professional agents in more than 50 countries mainly in North America, Europe and Asia. Lucas Meyer Cosmetics has over 150 employees in 5 different offices in North America and Europe.

Candidate Profile:
- Bachelor degree in Chemistry, Science or Chemical Engineering from an accredited college/university.
- Minimum of 5 years of professional sales experience in cosmetic, pharmaceutical or specialty chemical industry.
- Strong knowledge of the personal care market.
- Solid understanding and past application of value proposition.
- Experience in managing large, complex accounts.
- Experience in collaboration with international key accounts.
- Demonstrated ability to work independently from a home office.
- Must be able to travel up to 50% (within the US).

Please contact Stephen Weinberg for more information: Stephen.Weinberg@lucasmeyercosmetics.com

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Do you have any employment opportunities in your company?

Don’t forget to post them in the Midwest SCC Chapter’s newsletter and website. It is easy, there is no fee, and all of our chapter members throughout the industry can view them. Contact chair-elect@midwestscC.org to submit your listing.

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