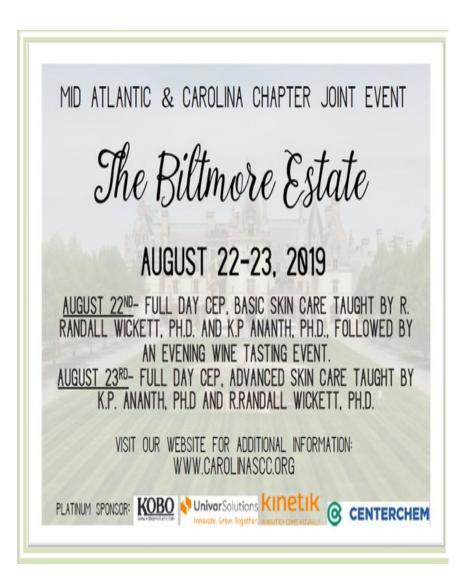
Carolina Chapter



Society of Cosmetic Chemists Carolina Chapter July 2019 Volume 117

JOIN US FOR THE MID ATLANTIC & CAROLINA CHAPTERS JOINT MEETING!



MEET OUR SPEAKERS ON PAGE 3

2019 OFFICERS

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Chair-Elect Steve O'Connor Innospec



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Secretary Samuel Cooper



Area IV Directors





Dennis Abbeduto Colonial Chemical



Newsletter Editor Angie Paez KOBO Products, Inc. scccarolinas@gmail.com

Website Editor Maggie Ghanem Formulator Sample Shop



Carolina Chapter

LETTER FROM THE CHAIR: ANGIE PAEZ

Dear Chapter Members,

Hope you are all having a wonderful summer! Thank you again for the opportunity to serve as your Chair for 2019. The other officers and I would like to thank all of you for your support to date in 2019 and we are looking forward to a continued successful year!

As a reminder, I would like to encourage all of our chapter members to attend a career day at your local middle or high school to introduce Cosmetic Chemistry as a career option. If you are interested, please email me at scccarolinas@gmail.com and I will send you a presentation you can use during your visit. Afterwards, you can send us a picture at scccarolinas@gmail.com and the Chapter will cover your meeting fee for our annual November inaugural meeting scheduled for Thursday, November 21.

Thank you to our second speaker of 2019, world renowned clinical and research dermatologist, Zoe Diana Draelos, MD. Dr. Draelos presentation on "New Cosmetic Ingredient Concepts in Action" was extremely well received, interesting and educational. Thank you also to Dr. Christopher Fowler, High Point University Associate Professor of Chemistry and High Point University for organizing and hosting this event. We gave the "Career in Cosmetic Chemistry" presentation to students prior to Dr. Draelos presentation, and feedback was positive. According to Dr. Fowler, two students came out very inspired by the directions their academics can take them.

We hope to see you at our next Joint Chapter event with the Mid-Atlantic Chapter at the Historic Biltmore Estate where we will host a two day CEP Course Basic Skin Science - [NextGen] & Advanced Skin Science by K.P. Ananth, Ph.D. & Randall Wickett, Ph. D. Details can be found on our website, www.carolinascc.org

Mark your calendars for our last technical seminar and officer installation on Thursday, November 21st.

Kind regards—Angie Paez

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Carolina Chapter

2020 Officer Officer Positions

It's almost time to VOTE for our new 2020 Officers!

The SCC Carolina Chapter election is fast approaching and we wanted to let you know that there are three open officer positions for the 2019 election. These positions include:

- 1. Chapter Chair-Elect
- 2. Chapter Treasurer
- 3. Chapter Secretary

If you have any interest in running for office or know of a member who would make a great potential candidate, please let us know by August 30th so we can add the name to the election ballot. Any questions regarding officer expectations, the election process, or the chapter in general please do not hesitate to contact us. We look forward to hearing from you and thank you for your participation in the Carolina Chapter of the Society of Cosmetic Chemists. Email scccarolinas@gmail.com











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Carolina Chapter

Meet Our Speakers



_K.P. Ananth, Ph.D. University of Cincinnati

Dr. Kavssery P. Ananthapadmanabhan (K.P. Ananth) is a professor and the director of the Cosmetic Science Program at the College of Pharmacy at University of Cincinnati. Ananth obtained his B. Tech from Indian Institute of Technology in Mumbai in 1974. He obtained his MS and D. Eng. Sci. degrees in 1976 and 1980 respectively from Columbia University in New York, specializing in surfactants and colloids. Ananth spent 3 years as a post-doctoral fellow and adjunct faculty at Columbia University and then joined Union Carbide Corporation, at their Surface Chemistry Skill Center in Tarrytown, New York. In 1990, Ananth moved to Unilever R & D, initially in Edgewater, NJ and then in Trumbull CT and spent the next 26+ years in various capacities in the personal care area including leading their longerterm skin cleansing research. He is an author/co-author in 120+ publications and 35+ patents. He also co-edited a book titled, "Interactions of surfactants with polymers and proteins: with Des Goddard. Career achievements include Unilever's Lifetime Achievement Award for Contributions to Science in 2016. After retiring from Unilever in 2016, Ananth joined the College of Pharmacy as a professor and director of their Cosmetic Science program.



R. Randall Wickett, Ph.D.

University of Cincinnati

Dr. Wickett holds a Ph.D. in Biophysics from Oregon State University. During his industrial career he worked at Procter and Gamble and the SC Johnson Company performing research on skin and hair care products at both companies. Since 1991 he has been at University of Cincinnati and is now Emeritus Professor of Cosmetic Science in the James L. Winkle College of Pharmacy. He has had an extensive consulting practice for more than 25 years. Dr. Wickett has authored more than 120 scientific publications and several patents and given more than 100 invited presentations. He is a Fellow of the Society of Cosmetic Chemists (SCC) and has received numerous technical awards from the SCC including the Maison G. de Navarre Medal Award, the SCC's highest honor for technical achievement. He was editor of the Journal of the Society of Cosmetic Chemists from 1991 to 1997, chairman of the International Society for Bioengineering and the Skin from.2000-2005, is past President of the SCC (2011) and is currently chairman of the International Society for Stratum Corneum Research.







Carolina Chapter

Moisturizing Products Through the eyes of

a Cosmetic Formulator

Moisturizing products represent a major category in the skin care business. Moisturizers are essential in the skin care routine, and proper skin hydration is critical to maintain a healthy skin. Keeping the right water flow and balance its amount among various skin layers is essential for keeping skin's health and its proper functionality. The Skin contains about 20% of the total water of our body, 60-70% of it resides in the dermis. Good cell hydration results in healthy skin condition; when cells are dehydrated, they become dull, spongy, without luster. Regardless the skin type, dry, oily, combination, sensitive, etc., moisturizing skin consistently helps bringing back its radiance, brightness, healthy look, refining of lines and wrinkles.

Environmental factors are mainly the cause of changes in a healthy skin condition, and pharmaceutical and cosmetic products are formulated to address various stages of depleted skin moisture.

The challenge for the chemist is to create formulations that are desirable for all the skin conditions with a large appeal to the customer. In this respect, a cosmetic product is highly challenged as it needs to deliver the expected benefits along with cosmetic and beauty attributes. A pharmaceutical topical cream will be easily accepted as a "treatment" product regardless its appearance, odor or application.

How can a chemist formulate a good moisturizer with great cosmetic attributes?







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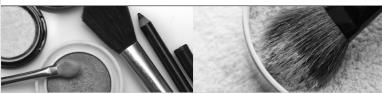
Active Ingredients
Conditioning Agents
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Micronized Powders

Polymers Preservatives Rheology Modifiers Silicones & Emulsion Blends Solvents Sunscreen Actives

Surfactants

Vitamin Derivatives



First, when the formulator starts with a blank page on the Lab Notebook (or computer), he must have in mind skin's anatomy, and the skin condition of epidermis/dermis. He also needs to have a clear understanding of what's the difference between Hydration and Moisturization, knowing that moisturizers and hydrators both address the skin water balance, yet the two mechanisms are different. While hydration refers to the water content within the cells, moisturizing is the action of "sealing in" the moisture and with this, Transepidermal Water Loss (TEWL) is kept at the minimum.

With this knowledge in mind, the formulator will know that they are two different classes of substances that enable this. If they'll be part of a formulation strategy to form the "backbone" of the moisturization action, the product efficacy will be there, guaranteed! These two classes represent the core ingredients needed in a moisturizing formula; they work synergistically.

- 1. Hydrators (Glycerin, polyglycols, Sugars, Hyaluronic acid, Honey, Sodium PCA, Aloe, etc.)
- 2. Moisturizers (oils, esters, waxes, ceramides, silicones, dimethicone, butters, etc.)

Another factor that contributes to product efficacy is the penetration rate. As we all know, cosmetic raw ingredients are tested and proved to help enhance skin conditions when incorporated in a product. The formulator uses them wisely, yet only certain ones can really attest to the claim. Why is that? The explanation is that the actives penetrate easily when they meet certain conditions. The penetration is suboptimal when influenced by series of factors like chemical structures and polarities, solubility in a certain media, the nature of the vehicle (base). If the base contains obstructing substances (film formers, powders, polymers, heavy emulsifiers, etc.), the actives may not be able to be released optimally.

- 1. Therefore, the formulator would need to pay attention to the "vehicle" or the type of formula used. What will be the optimal format? A cream, lotion, serum, gel?
- 2. And let's not forget the ingredients to provide marketing claims, THE STORY!!!

In conclusion, with all these in mind someone can create a moisturizer with a sensorial texture, pleasant smell, easy application, and great efficacy that customers will come back and repurchase over and over!

Good Luck!

Article by Domnica Cernasov Probeauty Consultancy domnica@probeautyconsultancy.com

Visualcv.com/ka4ik90

Dominica is a creative, dynamic, results-focused manager with a diverse skill set.

Known for bringing inspirational leadership,

strategy and vision to R&D teams, highly supportive of marketing initiatives. Experience spanning in skin, sun care and color cosmetics. Passionate about cosmetics and consumer benefits; highly regarded manager experienced in leading multicultural R&D teams operating in a global environment.



Society of Cosmetic Chemists Carolina Chapter







Job Opportunity—Burts Bees—Process Development Engineer

As a Process Development Engineer for Burt's Bees, you will work with a team of engineers and scientists located in Durham, North Carolina to deliver and maintain a robust pipeline of innovative personal care and cosmetic products for this fast paced, exciting and growing business. You will have a variety of assignments within the Burt's Bees Product Lab, Pilot Plant, and Manufacturing facility. This is a full time position, with the expectation that you will work 40 hours per week.



Make your mark

At Clorox, we build big brands that make everyday life better, every day. We value our differences, and challenge each other to think and act boldly. We try new things, succeed, fail and keep learning. We work hard, and have busy personal lives. And we're all able to make a positive impact -- at Clorox, in our communities, and in the lives of millions of people who invite us into their homes. Make your mark and help us drive Good Growth -- growth that is profitable, sustainable and responsible.

Key responsibilities:

Collaborate with cross functional team to develop, evaluate, and qualify new processes, equipment, and locations Collaborate with Packaging Team members to lead Manufacturing Readiness Planning and Execution as well as author Manufacturing Processes for manufacturing guidance Analyze and interpret data to meet project targets and objectives, and make recommendations that drive efficiency and manage risk Support efforts to improve upon manufacturing efficiencies of existing products Define and use SOPs, best practices, and test methods to ensure a robust and rigorous development process Identify and execute against opportunities to develop pilot equipment and lab capabilities Years and Type of Experience:

3 years process development

Prefer experience in Natural Personal Care Skills and Abilities:

Confident self-starter, capable of working independently and cross-functionally with minimal supervision and direction in a fast paced environment required Proven ability to learn quickly required Excellent communication and interpersonal skills required Demonstrated strong leadership and influencing skills required Excellent organization skills with the ability to handle multiple projects simultaneously and effectively required Preferred experience, knowledge, and/or interests include:

Macro and micro emulsions

Wax and/or polymer chemistry

Thin liquid mixing

Over the Counter Drug Monographs

Tracking and understanding Personal Care and Beauty Category trends Education Level/Degree:

Bachelor's degree in Chemical Engineering or Mechanical Engineering from an accredited institution required More about Research & Development (R&D) - stephanie.lorino@clorox.com | 510-561-9018

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Student Requests

If you can support either of these, please email us at scccarolinas@gmail.com

- I'm currently a high school senior in Goldsboro, North Carolina. I'm currently contacting the Society of Cosmetic Chemist because my school requires a senior project in order for its students to graduate and I've chosen to do mine on beauty products. Specifically on colorism within the beauty market. I've already written my paper on this topic, however I now need a tangible product to go along with it. I would like to make a sample of some beauty products for example concealer, foundation, primer and other stuff like that, in varying pigments as a way to combat the lack of diversity in some beauty products color ranges. I, however have no idea how to do this and was hoping that maybe someone from your team could become my mentor and help me to make these products safely, or point me in the direction of someone that is able to help me. Regardless of whether you're able to help me or not, I'd like to thank you for taking the time to read this.
- I'm a rising Chemistry student at UNC-Chapel Hill in Chapel Hill, North Carolina. I have just registered to become a student member of the Society of Cosmetic Chemists even though my university is not apart of the listed registered universities. I am excited to participate in the society and the Carolina Chapter! Going into the school year, I am inquiring about any potential opportunities to work in the cosmetic formulation industry as a part-time Co-Op (so as to capture a more in-depth and extensive work experience) in this upcoming school year (September 2019 June 2020) specifically in the Research Triangle area. I was wondering if your organization would be able to help me in any way possible! I am interested in gaining experience in production concerning the principles of formulation, emulsions, and both physical and analytical testing methods. I would be delighted to have the opportunity to personally be in contact with you for any potential opportunities that I can apply to. Feel free to contact me at a suitable time. I appreciate your time and consideration.

Society of Cosmetic Chemists Carolina Chapter



National News



You can now support the Society of Cosmetic Chemists every time you shop on Amazon! It's a simple and easy way to contribute, at no additional cost to you, to the SCC education fund to help us provide new education opportunities! When you shop Amazon using the link https://smile.amazon.com/ch/13-1976655, you'll find the exact same low prices and convenient shopping experience you're used to with Amazon, with the added bonus that Amazon donates a percentage of the price of eligible items to the Society of Cosmetic Chemists, at no extra cost to you!









The Society of Cosmetic Chemists organization is dedicated to the advancement of cosmetic science, the Society strives to increase and disseminate scientific information. Our mission is to further the interests and recognition of cosmetic scientists while maintaining the confidence of the public in the cosmetic and toiletries industry.

The California Chapter Suppliers' Day 2019 will host over 350 booths with global exhibitors to present new innovative ingredients and solutions. This highly anticipated biennial West Coast show is a must attend event to add to your calendar for 2019.

Two days of excellent networking apportunity to meet with leading R&D Chemists, formulators, entrepreneurs, executives, manufacturers, retailers, regulatory specialists and distributors.

Suppliers' Day is a beneficial vehicle to maximize visibility, display what sets you apart, and ensuring your products are part of the ever evolving personal care market. Do not limit your possibilities by not realizing the continuous revenue potential of the Personal Care Market exposure.

The Suppliers' Day Exposition is an opportunity to build strategic partnerships, while discovering new innovative ingredients, packaging and services.

When: October 2nd & 3rd, 2019
Where: Long Beach California

Events: Educational events, Key Industry Speakers, Technical Posters

Who Exhibits

Raw Material Suppliers and Distributors, Testing Laboratories, Regulatory, Packaging, Equipment, and Contract Manufacturers.

Who Should Attend:

R&D Chemists, Formulators, Marketing, Quality Assurance, Brand Owners, Sourcing Managers.

Attendance is Free









2019 Fall Technical Symposium

The Society of Cosmetic Chemists Midwest Chapter, Inc. blaneual Fall Technical Symposium is the Midwest's technical event where scientists in the cosmetic and personal care community gather to educate, collaborate and inno vate in an effort to advance the field of cosmetic science. This year's theme is Cosmetic Science in the Digital Age.

Date: October 8, 2019 — 8:00 am – 3:30 pm Location: Belvedere Banquets, Elk Grove Village, IL

CALL FOR SPEAKERS

Submit Your Abstract for Presentation at the

SCC Midwest Chapter's Fall Technical Symposium

We are seeking individuals, companies, and universities to ANSWER THE CALL FOR SPEAKERS and discuss how to innovate, market, sell and address the needs of consumers that have emerged in our current digital environment. Deadline to submit an abstract for presentation is June 1, 2019. Selected speakers will be notified by July 1, 2019.

Students: SUBMIT YOUR POSTERS



Topic to Present at

The SCC Midwest Chapter's Fall Technical Symposium

In support of the NextGen Initiative, once again we will have a student poster section at the Society of Cosmetic Chemists Midwest Chapter's biannual Fall Technical Symposium. We strongly encourage both undergraduate and graduate students studying any scientific field to SUBMIT A POSTER TOPIC. Deadline to submit a topic for presentation is September 1, 2019. Hotel rooms can be arranged for students traveling from a distance. Travel expenses will also be covered.

Every student poster participant will receive a \$50 gift card to and may qualify for a free SCC membership. First place winner will receive an all expenses paid two-night trip to New York City to participate in the New York SCC Suppliers' Day Future.

Chemist Workshop in May 2020, Second place winner will receive \$150 and Third place winner will receive \$100.

For additional information and to submit abstracts or posters go to: https://www.midwestscc.org/technical-



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2019



SYMPOSIUM EVENTS

Thursday, September 12th, 2019

- Free Continuing Educational Course
- Golf Outing
- Registration
- Poster Presentations
- Poster and Tabletop Exhibits
- VVelcome Cocktail Reception

Friday, September 13th, 2019

- Registration
- Podium Presentations
- Poster Presentations
- Poster and Tabletop Exhibits
- Symposium Party

Saturday, September 14th, 2019

- Podium Presentations
- Poster and Tabletop Exhibits

Admission Rates

\$495 - Single \$395 - Five+ per company Rates Increase by \$150.00 on August 1st Special Resort Rates Available

Tabletop Exhibit Spaces
Available
Only a few left!

Disney's Magnolia Golf Course

Shotgun Starts at 9:00 am, Open to first 80 golfers



To register contact: Stephen@aigtechnologies.net

CEP Course

Modern Sunscreen Formulation – Is it Possible to Please Everyone?

Instructed by: Mark Chandler & Julian Hewitt

Symposium Party Caribbean Carnival Disney's Epcot[®] World Showplace Event[®]

...Don't miss the Congo Line! Dinner, Games & Entertainment

Highlighted Topics

Proposed Rule/Final Rule: What's changing and what does this all Mean?
 Sunscreens in America: A Dermatologist Dilemma
 Evaluating Metal Oxides for full Spectrum Solar Protection
 Alternate SPF Methods: Imminent Breakthrough
 Skin Microbiome:
 Potential Preventative Solution to UV induced Skin Cancer
 Sunscreens-A Challenge for Preservation
 Photochemistry of Avovenzone
 In Polymeric Matrices and it's Implications on Sunscreen Performance
 Natural Approaches to Repairing the Damage caused by Sunburns
 Is there a Connection between Sun Exposure, Skin Microbiome and Skin Cancer
 Green and Blue Sunscreens: Natural and Cold Process Sunscreen Formulations
 How Sunscreen Behavior is Influenced by Prevention Communication & Product Features
 Fish Lives Matter: Rheology Modifier with Minimal Marine Environment Impact
 Sunscreens and the Factors Affecting the Water
 Resistance In Vivo
 How to Make Protective Sunscreen Products
 Further Exploring IR Damage and Protection on the Skin and more!

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Meeting Photos







