

Society of Cosmetic Chemists

Carolina Chapter



SOCIETY OF COSMETIC CHEMISTS
SERVING GREATER NORTH AMERICA SINCE 1945

Society of Cosmetic Chemists
Carolina Chapter

March 2021
Volume 122

SCC Area IV – Tech Talks

Free Webinar – Hosted by The Southeast Chapter

Thursday, April 15th, 2021

2:00 p.m. EDT

“Taking Safe Synthetics to the Next Level:

What comes after Vitamins C & E?”

[Southeast Chapter of the SCC is inviting you to a scheduled Zoom meeting.](#)

[Limited Space Available – Reserve your spot soon!](#)

Thomas A. Meyer, PhD

Meyer Sun & Skin Care Consulting, LLC

Where: <https://us02web.zoom.us/j/82462471662?pwd=cG5xSUZwYXZCc3YxVih5b01VSUgxUT09>

Join Zoom Meeting

<https://us02web.zoom.us/j/82462471662?pwd=cG5xSUZwYXZCc3YxVih5b01VSUgxUT09>

Meeting ID: 824 6247 1662

Passcode: 668495

One tap mobile

+13017158592,,82462471662#,,,,*668495# US (Washington DC)

+13126266799,,82462471662#,,,,*668495# US (Chicago)

Dial by your location Find your local number: <https://us02web.zoom.us/j/82462471662?pwd=cG5xSUZwYXZCc3YxVih5b01VSUgxUT09>

+1 301 715 8592 US (Washington DC) +1 312 626 6799 US (Chicago) +1 929 205 6099 US (New York)

+1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston) +1 669 900 6833 US (San Jose)

Meeting ID: 824 6247 1662 Passcode: 668495

For more information contact Stephen Baldwin: Stephen.Baldwin@sanofi.com or

Michelle Linscott: michellelinscott@xytrus.com

Taking Safe Synthetics to the Next Level:

What comes after Vitamins C & E?

Thomas A. Meyer, PhD

Meyer Sun & Skin Care Consulting, LLC

Problem. Daily exposure to environmental stressors can induce such an excess of Reactive Oxygen Species (ROS) that skin's intrinsic antioxidant defenses become easily overwhelmed. This leads to multiple consequences in the skin, from premature aging to development of skin cancer.

How to Solve: Topical application of antioxidants has been one of the answers to manage excess ROS levels in skin. However, not all antioxidants are equal in their ability to manage ROS levels effectively. They commonly need to be used in combination, generally are short-lived and can be photochemically unstable, which limits their usefulness in sun-exposed skin.

Next generation of antioxidants: Inspired by the chemistry of Zingerone from ginger, Acetyl Zingerone is like no other conventional antioxidant: photochemically stable, it provides long lasting performance in contrast to Vitamin C or E and many others. It also functions as a physical quencher and a selective chelator, boosting neutralization capabilities and even preventing ROS formation.

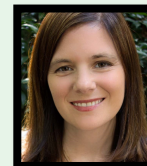
The Results? Acetyl Zingerone clinically strengthens skin's resistance to sun damage and reverses the visible signs of photoaging (wrinkles, pigmentation, redness) within 4 weeks.

Your perception of skin protection against photoaging will never be the same with Acetyl Zingerone.

2021 OFFICERS

Chair

Cheryl Seidell
EverCare



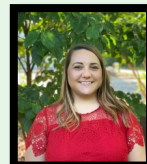
Chair-Elect

Amy Carter
Univar Solutions



Treasurer

Leslie Webb
Xytrus



Secretary

Kristie Hammontree
Siltech Corporation

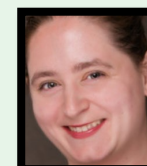


Area IV Directors

Michelle Linscott
Xytrus



Angela Eppler
Pfizer Consumer
Healthcare



Social Media Editor

Harper Grace Shore
P&G

Newsletter Editor

scccarolinas@gmail.com

Website Editor

LETTER FROM THE CHAIR: CHERYL SEIDELL



Hello Carolina Chapter Members and Friends,

After a year of lock down we have made it to Spring of 2021, and I hope things are looking up for everyone. I am very much enjoying working with the new and returning members of the Carolina SCC board to plan for a year that is sure to bring many new opportunities.

As you know, last year was a challenge for the SCC. Our 1st event of 2020 was cancelled due to weather (remember snow days?) After that, we had to rethink how we operate when in person meetings were no longer an option.

Despite the challenges of last year, the board worked hard to stay engaged and look to the future. We teamed up with the Florida, Mid-Atlantic and Southeast Chapter chairs for tech talks and started planning for even better events when we can all meet again. There were few learnings from last year that I think will

help us in the future:

We found platforms to make virtual meetings work. Even when we go back to in person meetings, there may still be a place for virtual events. These could allow us to book top speakers from anywhere in the world and get everyone together at times when it is difficult to travel from different locations in our spread-out area.

Collaborating with other area chapters has been very rewarding. Continuing this collaboration will be of great benefit to members as we share ideas and get to know members in other areas.

For the next few months we will be continuing the Area IV Tech Talk series. The next webinar, April 15th, is hosted by the Southwest SCC Chapter and open to other Area members. The topic is:

“Taking Safe Synthetics to the Next Level: What comes after Vitamins C & E?” presented by Tom Meyer, PhD, who an industry expert in chemistry and sun/skin interactions.

Keep an eye out for another tech talk and social event from the Carolina SCC that we are looking to schedule for the spring and summer.

Looking ahead to Fall 2021, there is a lot of excitement for the Sunscreen Symposium and I hope many of you can attend. There will also be a Kiawah announcement very soon, so stay in touch!

You may have received a member survey via email, or you will soon. Please give your feedback so we can make the SCC experience more rewarding!

If you would like to be more involved in our SCC chapter, we are currently looking for a newsletter editor. In addition, we are always on the lookout for newsletter content, so if you have an article to you would like to submit, please let us know. You can contact us at scccarolinas@gmail.com

Keep staying safe everyone. I hope to see you soon!

Cheryl

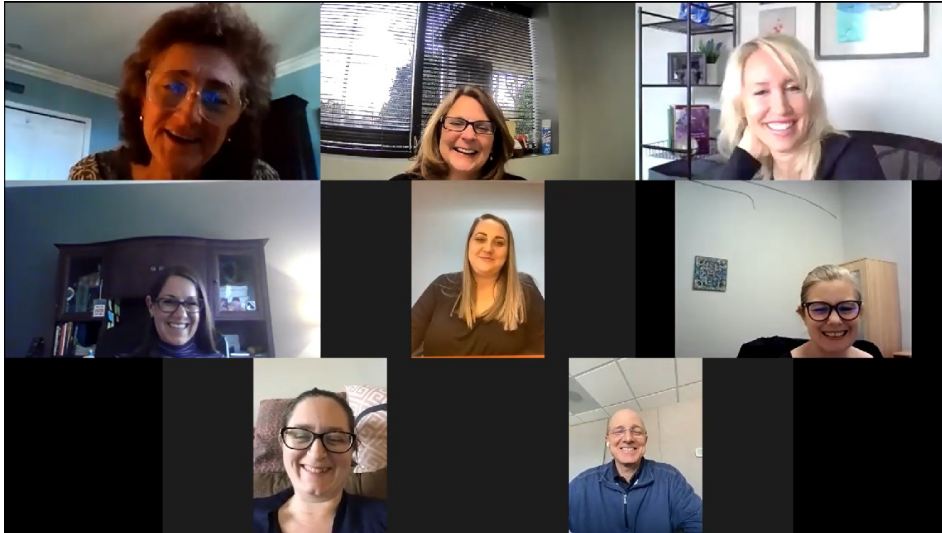
Cheryl Seidell
2021 Chair



SOCIETY OF COSMETIC CHEMISTS
SERVING GREATER NORTH AMERICA SINCE 1945

Society of Cosmetic Chemists

Carolina Chapter



Our 2020 Officer installation looked a little different this year! Our 2021 Chapter Officers were installed by the 2021 Upcoming SCC President, Liz Streland, along with Area IV Directors, Michelle Linscott and Angela Epler. Our 2021 Chapter Officers are looking forward to what 2021 holds and are hopeful for a year that we can return to in-person meetings! Our officer installation will be available for viewing by our members soon. On behalf of our 2020 Chapter Officers, thank you to our members for the patience and understanding of our crazy 2020!



**Distributing
Ingredients
from the Finest
Manufacturers**



770.831.9010 • essentialingredients.com



The Powder & Dispersion Specialist

- Sunscreen Technology • Surface Treatments
- Special Effect Pigments • Dispersions
- Microspheres • Natural Origin Ingredients
- Film Formers • Delivery Systems
- Custom Development • Global Manufacturing

Angie Paez - apaez@koboproductsinc.com

Innovation
Technology
Service



www.koboproducts.com



LeBaronBrown
Specialties

*Time Saving Blends,
Extracts, Oils, Polymers,
and much more from the
Specialty Chemical
Specialists!*

brought to you by

Charkit Chemical Company
— an LBB Specialties Company —

Custom INGREDIENTS, LLC.
uniquely qualified for innovation
— a subsidiary of Charkit Chemical Company —

sales@charkit.com | www.charkit.com | 203-299-3220

Your source
for speciality
chemicals
worldwide



RITA Corporation
850 South Route 31
Crystal Lake,
IL 60014 USA
T 815.337.2500 or
toll free 1.800.426.7759
F 815.337.2522
www.ritacorp.com

Natural Based Cosmetic Oils, Waxes, and Essential Oils

By: George Deckner



The natural based global cosmetic ingredient is hot and expected to grow at a compound annual growth rate of 6.1% from 2019 to 2025 to reach \$1,543.9 million by 2025 due to growing consumer desire to purchase natural based products. Much of this growth recently has been driven due to the interest in CBD containing products (1).

Natural based cosmetic oils and waxes are important ingredients used in personal care formulations to structure formulations and impart a smooth, soft, moisturized feel to skin or hair. Some have also been shown to reduce fine lines and wrinkles, soothe skin, reduce TEWL, reduce sebum and have antimicrobial activity.

All-natural cosmetic oils, using no chemical modification in their production, are comprised of liquid oils, waxes, butters, unsaponifiables, and essential oils.

Oils containing high levels of unsaturation are normally liquid and are prone to oxidation. Solid waxes or butters contain higher levels of saturated C12-30 chains and have melting points greater than ~40°C. Plant based oils/waxes/butters are normally mixtures of hydrocarbons, triglycerides, esters, and alcohols depending on the type of plant and processing used.

Plant unsaponifiables are ingredients that do not hydrolyze or saponify when reacted with caustic. These include tocopherols, sterols, carotenoids, hydrocarbons, alcohols, and triterpenoids. Carotenoids are highly colored antioxidants commonly found in plants that are potent scavengers of singlet oxygen free radicals. It is believed they are the important antioxidants that protect skin from free radical attack. The main sterols found in plants are beta sitosterol, campesterol, and stigmasterol. These are similar to sterols like cholesterol needed to produce biologically active sterols in the body. Many have also been shown to have anti-inflammatory activity and help repair the skin barrier function (3,4).

Essential oils are concentrated hydrophobic liquids containing volatile chemical compounds from plants. Essential oils are called volatile oils, ethereal oils, or as the oil of the plant from which they were extracted (ex. oil of clove). An essential oil contains the characteristic fragrance of the plant from which it is derived, and many are used to provide a natural scent to products (2). Additionally, many essential oils have antioxidant, antimicrobial, sebum reducing, and skin soothing properties.

COMMONLY USED PLANT DERIVED LIQUID EMOLLIENTS

Castor oil (*Ricinus communis* seed oil) is obtained by pressing the seeds of the castor oil plant and is one of the most important seed oils produced globally with over 3,000 claimed uses. Castor oil is a very stable, pure, triglyceride which contains over 90% Ricinoleic acid. Castor oil is most frequently used in lipsticks due to its excellent pigment dispersing, shine, and lubricating properties. It is one of the most popular of all-natural based emollients currently sold.

Squalane is a very popular methyl branched hydrocarbon emollient used in skin care products. It was originally extracted from shark liver oil but currently is produced from olive oil and by fermentation. Squalane has been shown clinically to reduce TEWL, increase cell turnover, and significantly reduce the appearance of fine lines and wrinkles.

Jobba oil (*Simmondsia chinensis* seed oil) is a stable, liquid wax ester produced from a shrub native to southern Arizona, southern California, and northwestern Mexico. Jojoba oil has an excellent skin feel and is quickly absorbed into skin. Recently in vivo skin efficacy tests have demonstrated that a 10% jojoba oil containing cream provided a significant improvement in skin radiance and a reduction in sebum versus a placebo cream containing 10% capric/caprylic triglyceride. It also was shown to significantly improve skin and lip hydration (5).

Sunflower oil (*Helianthus annuus* (sunflower) seed oil) is the oil extracted from sunflower seeds. It is probably one of the least expensive natural oils making it popular for use in foaming face and body wash products.

Olive oil (*Olea europaea* (olive) fruit oil) obtained from pressing the fruit of the olive tree contains a high level of oleic acid and unsaponifiables. It is a monounsaturated oil making it more stable to oxidation.

Coconut oil (*Cocos nucifera* (coconut) oil) is extracted from the meat of the coconut and contains large amounts of C8-C16 saturated fatty acids. Coconut oil is widely used in lip balms and recreational sunscreen products.

NATIONAL NEWS



Society of Cosmetic Chemists Elects Executive Officers and Area Directors for 2021— The Society of Cosmetic Chemists (SCC) announced the election results for the organization’s 2021 executive officers and area directors. Together with the Board of Directors, they are the governing body focused on the mission, strategy and goals of the Society and are responsible for representing the interests of nearly 6,000 individual cosmetics and personal care industry members globally.

Effective January 1, 2021, SCC’s executive officers are:

- President is **Elizabeth ‘Liz’ Streland**
- Vice President **Michelle Hines, PhD**
- Vice President-Elect **Mark Chandler**
- Secretary **Yulia Park**
- Treasurer **Karen Chun**

Support Society of Cosmetic Chemists.

When you shop at smile.amazon.com, Amazon donates.

[Go to smile.amazon.com](https://smile.amazon.com)

amazonsmile

It's easy to join our mailing list!

Just send your email address by text message:

Text **CCSCC** to **22828** to get started.



FLSCC
FLORIDA CHAPTER SOCIETY OF COSMETIC CHEMISTS
PRESENTS

SUNSCREEN SYMPOSIUM 21
DATES **SEPT. 23 - SEPT. 25**
DISNEY'S YACHT & BEACH CLUB RESORT

**PREDICTING THE FUTURE:
SUN CARE TRENDS IN AN UNCERTAIN REGULATORY ENVIRONMENT**

**CALL FOR PAPERS AND POSTERS
ABSTRACT & PRESENTER BIO**
SUBMISSION DEADLINE : March 31 st, 2021

Registration is now Open!
<https://events.american-tradeshow.com/sunscreensymposium21>

Hotel reservations are open!
Click here or call (407) 939-4686
<https://book.passkey.com/go/sunscreen21>

Sponsorship Information
Be a part of the 2021 Sunscreen Symposium. Contact Peter Toth - fscchair@gmail.com or Carol Holmes – fscctreasurer@gmail.com for your opportunity to be recognized!



SOCIETY OF COSMETIC CHEMISTS
SERVING GREATER NORTH AMERICA SINCE 1945

Society of Cosmetic Chemists

Carolina Chapter

Society of Cosmetic Chemists Launches Digital Resource Hub



Today, the Society of Cosmetic Chemists (SCC) launched its Media Library and Resource Center (www.sconline.org/library), a digital platform poised to be the industry's go-to resource for the latest scientific research, education and information.

Content on this new hub includes: digital issues of the peer-reviewed research presented in the Journal of Cosmetic Science; an archive of recent SCC Webinars on important advancements, topics and trends in the cosmetic and personal

care industry; videos/slide-syncs of the scientific presentations delivered at recent Annual Scientific Meetings; and other resources.

"After nearly a year in development, we are excited to launch this new industry resource," said Erica O'Grady, CAE, Executive Director/CEO of the Society. "Given current global events, the need for on-demand, remote access to resources is greater than ever, and we're pleased to be able to provide that."

And, new for 2020, the Journal of Cosmetic Science has been redesigned and migrated to a digital-only format. Access to all issues of the Journal is free to SCC members, and issues dated 1947-2017 are now open access for the industry.

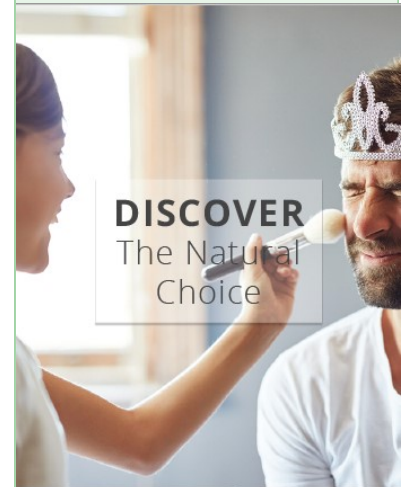
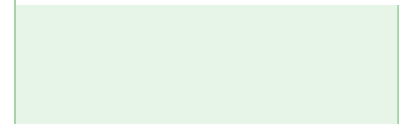
The Media Library & Resource Center includes a sophisticated keyword search of all available content types on the hub – articles, presentations, newsletters, webinars and more. On-demand purchase options for all types of content is available and select content access is included free as a benefit of SCC membership.

"I am delighted that the SCC is leveraging technology investments to develop these types of products and services which are core to our mission," said Mindy Goldstein, SCC President and owner of Mindy S. Goldstein, PhD Consulting. "Our strategic focus as an organization is to continue to create valuable tools for our members to assist in their professional development and knowledge in an ever-changing industry."



Inspiring Innovation

Discover how easy it is to innovate with Chemyunion.



DISCOVER
The Natural Choice

M MAROONGROUP

Personal Care Ingredients and
Specialty Chemical Supplier

MAROON GROUP
50 INDUSTRIAL CIRCLE, LINCOLN RI, 02865 USA
MAROONGROUP.LLC.COM | 800.296.4942



Zano® Zinc Oxide Technologies

Superior UVA/UVB protection and transparency levels.
Natural, non-penetrating UV filters.

www.ultrachem.com | sales@ultrachem.com
phone: 732.224.0200



Society of Cosmetic Chemists

Carolina Chapter

COMMONLY USED UNSAPONIFIABLES

Unsaponifiables from shea butter, avocado oil, sunflower oil have been shown to help repair damaged skin barrier function, repair dry lip skin, and reduce irritation.

Mixed tocopherols are natural isomeric mixtures containing alpha, beta, delta, and gamma tocopherols which are preferred natural antioxidants for stabilizing formulations against oxidation. Typical use levels are .05-.1%.

Phytosterols are used to help form lamellar liquid crystal oil in water emulsions which have excellent skin moisturizing properties. Many phytosterols have been shown to have skin soothing, skin barrier repair properties.

Commonly used plant waxes and butters

Cocoa butter (*Theobroma cacao* seed butter) is obtained from whole cocoa beans which are fermented, roasted, and then separated from their hulls. About 54–58% of the residue is cocoa butter. Cocoa butter has a melting point of ~28-34°

Shea butter (*Butyrospermum parkii* butter) is obtained from the kernels of the shea tree. The unrefined grades are preferred for most applications since they have the highest concentration of unsaponifiables (6-17%) which have been shown to have skin soothing effects. Shea butter has a melting point of ~28-34°

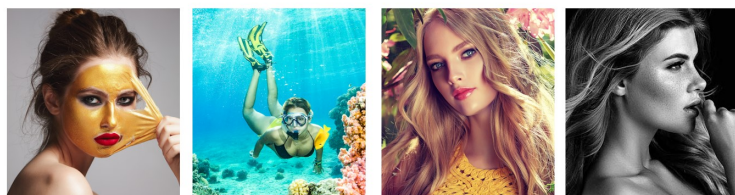
Carnauba (*Copernicia cerifera* (carnauba) wax) is a wax extracted from the leaves of the Brazilian palm tree *Copernicia Cerifera*. It is comprised of ~85% wax esters and is one of the hardest and highest melting natural waxes available with a melting point of 80-86° It is typically blended with candelilla and beeswax when formulating natural based stick products.

Candelilla (*Euphorbia cerifera* (candelilla) wax) is a wax extracted from the shrub *Euphorbia cerifera* by boiling the shrub and skimming off the resultant wax. Candelilla is a hard brittle, pale yellow wax with a melting point of 68-73°C that produces excellent gloss and structure. It is comprised mostly of hydrocarbons and wax esters.

Beeswax (beeswax) is secreted by the glands of the honeybee and is used as a building material for honeycombs. Bees wax is an amber to yellow colored ingredient with a soft pliable structure with a melting point of 62-65° It is comprised of wax esters, hydrocarbons, and fatty acids.

Sunflower wax (*Helianthus annuus* (sunflower) seed wax) is comprised of mostly long chain, saturated esters. It has a melting point of 74-77° C and good oil binding characteristics with a broad range of emollients. Sunflower wax is a good replacement for beeswax for vegan compliant formulations.

Continued on page 8



Evonik. The Expert in Chassis Innovation

Through our broad range of raw material product solutions, we are able to innovate, delivering inspirational formulations grounded in market insights. Learn about all of our concepts through our portal: intoBeauty.evonik.com



Innovative silicones for the personal care industry

✦ Hair care

Cationic, anionic and complexes for conditioning
Sulfate-free surfactants for clear shampoos

✦ Skin care

PEG-free emulsifiers & waxes with unique skin feel

✦ Sun care

Emulsifiers for chemical & mineral sunscreens

✦ Color cosmetics

Resins for extended wear
Gloss additives



Siltech Corporation
Toronto, Canada
+1 416.424.4567
www.siltech.com
sales@siltech.com

Society of Cosmetic Chemists

Carolina Chapter

ESSENTIAL OILS

Tea Tree oil (*Melaleuca alternifolia* (tea tree) leaf oil) has good antimicrobial properties. Studies have shown tea tree oil to be effective in treating mild to moderate acne.

Cannabidiol (CBD) is currently a popular skin care ingredient. It is a cannabinoid CB2 receptor activator, TRPV-1 agonist, and releases beta endorphins. It has been shown to have anti-inflammatory, sebum reducing, and skin barrier enhancing properties.

Copaiba oil comes from the resin of various species of the copaifera tree which grows in Brazil, Columbia, and other South American countries. It activates CB2 receptors which may help reduce irritation/itch. It has been shown to have skin soothing, wound healing activity, and antioxidant activity

ANIMAL DERIVED EMOLLIENTS

Lanolin is extracted from the sheep wool grease and composed mainly of sterols, sterol esters, and hydroxyl acid esters. It has a long history of use in skin and lip products as a moisturizer and lubricant. Lanolin has been shown to be as effective as petrolatum in dry skin studies.

TRENDY NEW EXOTIC EMOLLIENTS

CBD

Abyssinian oil (*Crambe abyssiniana* oil)-has similar hair conditioning properties as Argan oil

Bulk Chia seed oil (*Salvia Hispanica* Seed Oil)

Tamanu oil (*Calophyllum Tacamahaca* Seed oil)

For complete article visit: <https://knowledge.ulprospector.com/11378/pcc-natural-based-cosmetic-oils-waxes-and-essential-oils/>



McCullough & Associates

1.800.969.1606
www.mccanda.com

Providing Exceptional Sales & Service to the Personal Care Industry in the Southeast **since 1968.**

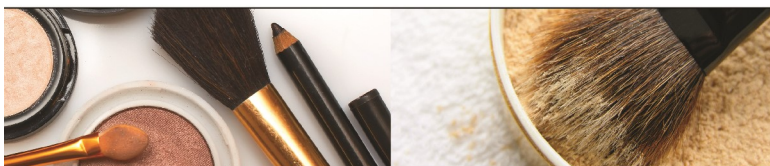
Active Ingredients	Preservatives
Conditioning Agents	Rheology Modifiers
Emollients	Silicones & Emulsion Blends
Emulsifiers	Solvents
Exfoliants	Sunscreen Actives
Film Formers	Surfactants
Functional Additives	Vitamin Derivatives
Micronized Powders	
Polymers	



*Naturally Grown, Ethically Sourced, Sustainably Produced
Cosmetic Ingredients from Around the Globe*



www.caribnaturalproducts.com
16 Passaic Avenue, Unit 1, Fairfield, NJ 07004 USA



Society of Cosmetic Chemists

Carolina Chapter

JOB POSTING

Job Description: Personal Care Formulator

The formulator will be responsible for:

- Develop unique, customized formulations for a variety of applications as needed.
- Prepare samples of a range of formulation types (e.g. emulsions, suspensions, and balms) in a larger scale environment using specialized manufacturing and/or laboratory equipment.
- Perform and record detailed physical property measurements and assessments of storage stability under a range of temperature conditions in accordance with the relevant study plans and guidelines for each formulation.
- Perform and record detailed physical assessments of formulation characteristics to determine the acceptability of the batch.
- Accurately record all data from studies in laboratory notebooks, spreadsheets, etc and check data quality for trends (e.g. shelf life)
- Retain samples from lots produced for finished goods and perform an annual review for the duration of its determined shelf life.
- Maintain all formulations laboratory resources and equipment to an acceptable standard.
- Work to the principles of Good Laboratory Practice (GLP) and Good Manufacturing Practices (GMP).
- Work according to documented procedures, policies, and safety standards.

Position Requirements

Educated to B.S. or M.S. degree level preferred in relevant scientific subject.

At least 2 years' work experience in formulation and product development.

Good organization skills and the ability to work with minimal supervision.

Broad range of experience in formulation preparation and testing in the laboratory.

A sound understanding of the principles of GLP.

Diligent with attention to detail.

Good verbal communication skills and able to keep detailed records.

Computer literacy for the use of Excel and other MS Office software.

Ability to work under pressure and have a flexible attitude.

The Active Concepts family of companies offers a dynamic and innovative environment focused on growth and committed to compensating you competitively. We proudly work towards common goals that delight our customers and employees, allowing us to reward individual contributions and team successes.

Please submit resumes to Bruce Wagoner at bwagoner@activeconceptsllc.com for consideration.