THE SUNSHINE STATE SIGNAL

The SCC Florida Chapter Newsletter

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Upcoming Events

February Meeting
23rd February 2017
Dave & Busters
Orlando, Fl

March Meeting
23rd March 2017
Dave & Busters
Fort Lauderdale, FL

FLSCC CEP COURSE
20th April 2017
Marriott Fort Lauderdale, FL

FLSCC Sunscreen Symposium
14th - 16th, September 2017
Disney's Yacht and Beach Club
Lake Buena Vista, Fl

FLSCC Membership

If you have not renewed your membership please visit www.scconline.org and register. Renewals are due by 30 December 2015 for 2016. We want you to continue to be an active part of FLSCC.

Contents

Announcements

2017 Sunscreen Symposium

Florida Chapter Society of Cosmetic Chemists

Global Innovation and Sustainability for the Future of Sunscreens

September 14th—16th 2017

Call for Papers

Authors are invited to submit titles and abstracts of no more than 150 words for papers to be presented in podium format.

Submission Deadline: January 31st, 2017

All topics related to Cosmetic Science will be considered for presentation.

Submit abstracts to FLSCCSUN@gmail.com

Please include a photo and biography.

Time Table for Submissions:

- January 31st, 2017—Deadline for abstract submissions. —Include photo and biography
- March 1st, 2017—Presenters/Author notified
- May 1st, 2017 Presentation agenda finalized
- June 1st, 2017—Preprints, Author bios & abstract (min 200 word, max 2 pages including figures)
- August 1st, 2017—Final presentation received by FLSCC Chapter
- September 15th & 16th, 2017—Sunscreen Symposium Podium Presentation

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FLSCC.ORG 2016 Issue #5 December

2017 Sunscreen Symposium

Florida Chapter Society of Cosmetic Chemists

Sponsorship Information

It's time for your company to sponsor and be a part of the 2017 Sunscreen Symposium

Contact Stephen@aigtechnologies.net for your opportunity to be recognized!

Sapphire Level Sponsorship $10,000

- Complimentary tabletop display and 4 full admissions
- Prominent recognition in the Sunscreen Symposium program
- Prominent recognition in the Florida Chapter Newsletter immediately before and after the Sunscreen Symposium
- Complimentary 2"x 4" advertisement in the Florida Chapter 2017 Newsletter
- Verbal recognition and thanks at the close of each day's presentations
- Special recognition and thanks on the Florida Chapter's website

Platinum Level Sponsorship $5000

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- Verbal recognition and thanks at the close of each day's presentations
- Special recognition and thanks on the Florida Chapter's website

Gold Level Sponsorship $3,000

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- General recognition and thanks at the close of each day's presentations
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- Thanks and recognition on the Florida Chapter's website

Hello & Happy Holidays.

I am a little late with this message, thanks for understanding.

It is time for updating or creating an ad for the 2017 FL SCC Newsletter.

Next year is a Sunscreen Symposium year, so there will be at least 6 Newsletters published in 2017.

Additionally, we have Sunscreen Symposium Sponsorships available (see attached). Three of the four Sunscreen Symposium Sponsorships include complementary or reduced cost Newsletter ads.

We would like to get any revised or new ads by the end of December. However, since this notice was late, we will accept new or revised ads until Feb 15.

Please give me a call if there are any questions.

Happy Holidays.
Stephen Dawes
Technical Director

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2/23/17

Christopher H. Johnson - Curriculum Vitae

Chris Johnson began his Personal Care career in 1996 as Microbiologist for Brooks Industries/Arch Personal Care Products. He entered Technical Marketing in 1998 where he later served as Marketing Manager of Europe.

Anticipating the growth of the Natural Personal Care Market, specifically in natural alternatives to traditional preservatives, Chris founded Kinetik Technologies in 2003 - a national distributor of specialty raw materials for Natural Personal Care.

Passionate about the Naturals Market, Chris travels the country educating formulators and marketers on the challenges faced when formulating natural products and the options available to overcome those many obstacles.

Chris earned his BS in Biology from Rowan University (Glassboro, NJ) in 1996, while simultaneously achieving certification to teach the Biological Sciences.

3/23/17

Hani Fares - Curriculum Vitae

Dr. Fares started his career in cosmetics studying the effect of solvents on sunscreen chemicals. His interest in skin drug delivery especially from polymeric matrices grew during his graduate work at Rutgers, where he completed his Ph. D. in Pharmaceutics.

Dr. Fares worked at Block Drug and GlaxoSmithKline where he held positions in research and development in the areas of skincare and oral care. After that, he joined L'Oreal where he held several positions of increasing responsibility leading to AVP of skincare. He is currently the Senior Director of skincare at Ashland Specialty Ingredients. Dr. Fares has several publications, presentations and patents in the areas of suncare, skincare, and oral care.

4/20/17

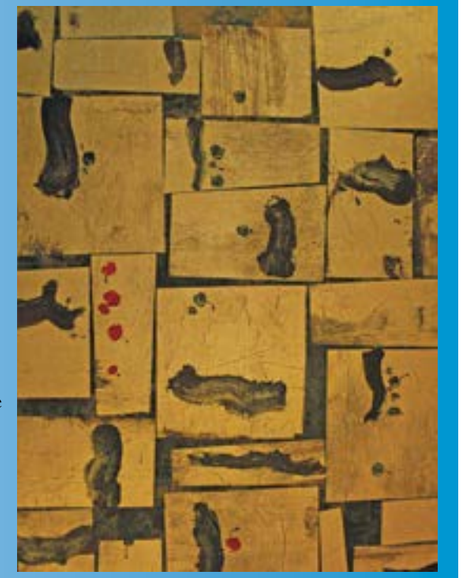
Randall Wickett - Curriculum Vitae

Randall Wickett obtained his Ph.D. in Biophysics from Oregon State University in 1973 and was a Post-Doctoral Fellow at the University of Minnesota from 1972 to 1974. He worked at Procter & Gamble's Miami Valley Laboratories in Cincinnati Ohio from 1974 to 1985, and the SC Johnson Company from 1985 to 1991 performing clinical and biophysical research for skin and hair care products. In 1991 he joined the University of Cincinnati and is now Emeritus Professor of Pharmaceutics and Cosmetic Science in the James L. Winkle College of Pharmacy. Dr. Wickett 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 and President of the SCC in 2011.

Article first published in Cosmetiscope
April 2015 vol.21 no.4 edition

Photosensitization of Melanin and the Effect of Visible Light on Skin and Hair

… by Orlando Chiarelli-Neto and Maurício S. Baptista



In order to understand the phenomena that affect the health of skin and hair under sun exposure, we must pay special attention to the chemical reactions that are induced after specific biological compounds absorb light and are brought to the excited state. Although there is a naïve belief that only ultraviolet (UV) radiation damages the skin, our work indicates that visible light can cause damage in hair and skin. The mechanism involves light absorption by melanin and an energy transfer reaction of the excited state with oxygen by forming singlet oxygen ($^1O2$), which attacks lipids, proteins, and DNA. By using melanocytes that produce different levels of melanin, we were able to demonstrate in cells producing high levels of melanin that visible light causes direct damage to nuclear DNA. This result has an important impact on public health because it suggests that visible light could cause similar deleterious effects in skin as those caused by UVA. Contemporary sunscreens protect against ultraviolet radiation, but allow photons in the visible range to freely penetrate the skin. Therefore, the habit of applying sunscreen and spending long periods in the sun can cause irreparable damage to the skin, including photoaging, and possibly resulting in the formation of tumors (although tumor formation by visible light has yet to be demonstrated experimentally). The ideal routine for an individual that does not have any skin ailments would be the old recipe of sun exposure for short time periods, allowing one to reap the benefits associated with sun exposure (e.g., activation of vitamin D), without suffering the risks associated with prolonged exposure. For individuals with fair skin and/or a history of skin ailments, who are more susceptible to solar radiation-induced skin damage, the best practice is to avoid contact with the sun and to wear protective clothing, such as trousers and a hat. In addition to its deleterious effect in skin, we have also shown that visible light causes color loss in hair, which occurs due to the generation of $^1O2$. It is our hope that the work summarized in this article will help companies develop novel sunscreens, which function in a wide spectral range (including visible light), offering people better protection for their skin and hair.

Spectrum of sunlight and the photosensitization processes

Solar radiation is composed of a continuous spectrum of electromagnetic radiation, which is usually divided into ultraviolet (200 to 400 nm), visible (400 to 700 nm), and infrared radiation (infrared, or IR, radiation extends from the edge of the red-visible spectrum at 700 nm to 1 mm).[1,2] It should be noted that the amount of visible light reaching the Earth's surface is much more abundant than UV radiation, being responsible for ~50% of the total energy while UV only represents 5%.[3] In addition, visible light penetrates much deeper into the skin than UV radiation—reaching the deep layers of the dermis. Therefore, visible radiation has the potential to cause adverse reactions in the skin in both superficial layers and deeper regions, as compared with the UVB and UVA, which reach more limited depths.

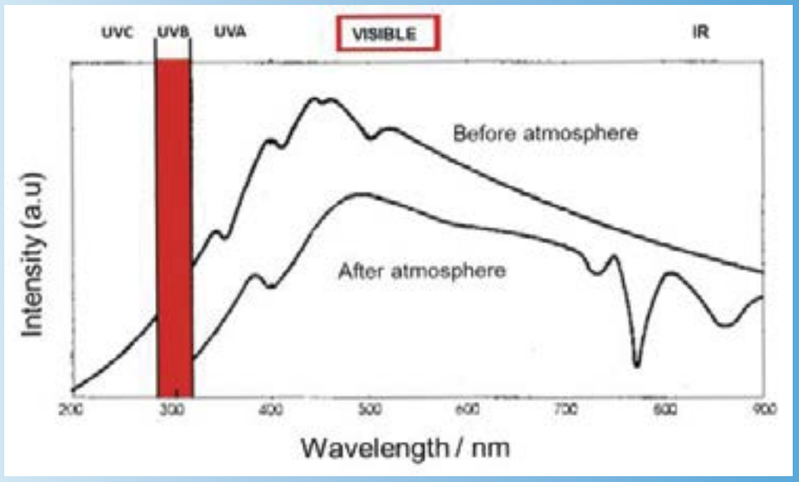


Figure 1
Spectra of solar radiation on Earth. Intensity of solar radiation as a function of wavelength before and after passage through the Earth's atmosphere. Adapted from www.who.int/uv/publications/UVEHeffects.pdf.

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Solar radiation is absorbed by endogenous molecules, which are naturally present in the skin and hair of humans. After light absorption, the molecule undergoes a transformation to an excited state, which is more reactive than the original state. In fact, excited states can undergo electron and energy transfer reactions. Among the processes that the excited state species can engage, the photosensitization reactions are highly correlated with the damage induced by UVA and visible radiation in living organisms. This is because the molecule in its excited state donates to surrounding molecules. As a result the original form of the absorbing molecule is reformed, allowing it undergo another cycle of light absorption and generation of other reactive species. Overall, photosensitization is a process in which molecules transform light energy into chemical reactivity.

As shown in Figure 2, the photosensitizer (PS) absorbs light at a specific wavelength (hν), and transfers this energy to acceptor molecules. Initially, the PS is in the ground state and is raised to an electronically excited singlet state (^{1}PS*), which can return to the ground state by emitting light (fluorescence), heat (Δ), or it can also switch to a triplet excited state (^{3}PS*) through inter-system crossing. Since molecules usually exist in the triplet state for much longer than the singlet state, the triplet state is usually involved in photo-oxidation reactions. The triplet state photosensitizer can react by two main mechanisms: Type I, which occurs via a direct contact with biological targets, producing radicals that can also interact with molecular oxygen, producing oxygenated products such as superoxide anion radicals (O2-•), peroxyl radical (HOO•) and hydroxyl radical (HO•); and/or Type II, where there is a transfer of energy to molecular oxygen (^{3}O2) forming singlet oxygen ^{1}O2, which is a highly reactive electrophilic compound (Figure 2).[4,5] ^{1}O2 reacts efficiently with proteins, membranes, and nucleic acids, and is primarily responsible for photo-induced skin damage by UVA and, as it will become clear in this article, also by visible light.

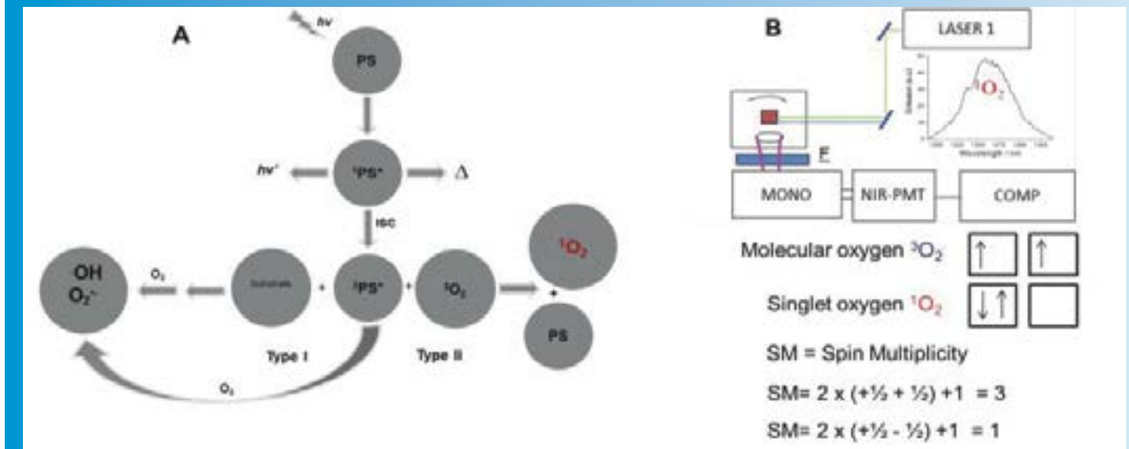

Figure 2

(A) Schematic representation of type I and type II photosensitization mechanisms: photosensitizers (PS) are brought to the singlet excited state (^{1}PS) and return to the ground state by emitting light (fluorescence, hν) or go to an excited triplet state (^{3}PS*). Triplet states can react by transfer of electrons with biomolecules or molecular oxygen generating radicals such as superoxide (O2-•) (Type I reaction). Triplet states can also transfer energy to molecular oxygen (^{3}O2) forming singlet oxygen (^{1}O2) (type II reaction). (B) Layout of the ^{1}O2 detection equipment, which consists of a laser (365nm and 532nm), monochromator, and NIR photomultiplier that has sensitivity in the spectral region that ^{1}O2 emits (1270 nm). The emission spectrum in the figure is a typical fingerprint of the presence of singlet oxygen. The calculation of the spin multiplicity of molecular oxygen (^{3}O2) and of singlet oxygen (^{1}O2) is shown.*

Photosensitization of melanin and the effects of visible light on skin and hair.

Part of the visible spectrum induces pigmentation in individuals with skin type IV and V (darker skin), but not in individuals with skin type I and II (lighter skin). Visible light has also been shown to stimulate the release of the cytokine, IL-1α, in keratinocytes.[6,7] The fact that pigmentation induced by visible light depends on the presence melanin suggests a possible role for this pigment in the damage of the skin by visible light. Melanins are polymers synthesized by the enzyme tyrosinase, and can be classified in two main types: eumelanin and pheomelanin.[6,8] Eumelanin has a dark brown/black color and provides skin and hair with a dark color. Pheomelanin has a reddish color, which is evident in the skin and hair of individuals with little eumelanin content (red and blond). Both melanins are rich in conjugated double bonds and therefore absorb light in the UV and visible regions, serving as the main filter of solar radiation for the skin. The role of melanin is especially important to protect against the effects of UVB.[9]

The primary biological function of melanin is to protect the nuclear DNA of skin cells against direct absorption of UVB.[10,11] It also

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prevents redox imbalances induced by UVA radiation.[12] However, as with any other molecule that absorbs light, melanin also generates reactive species in the presence of solar radiation.[13,14] In fact, there is plenty of evidence demonstrating the damaging role of melanin, especially of pheomelanin. For example, there is evidence that redhead people have a higher prevalence of skin cancer.[15] Regardless of the damage; melanin still plays a very important role in the protection of the DNA in skin cells. Consequently, individuals with higher melanin content can withstand much greater quantities of direct sunlight.

Seeking to prove the role of photosensitizing reactions of melanin induced by visible light, we began studies aimed at characterizing the excited state reactions of melanin. One possible explanation for the damage induced by light excitation of melanin was the formation of ^{1}O2. In fact, we demonstrated in several experimental models that melanin generates ^{1}O2 after light radiation absorption.[16,17] The definitive way to prove the presence of ^{1}O2 is through its emission spectrum with its characteristic wavelength of maximum emission at 1270 nm. Emission spectra of ^{1}O2 from irradiated eumelanin and pheomelanin samples, excited in the visible region, confirmed ^{1}O2 generation by the pigments (Figure 3). Irradiation of pheomelanin resulted in greater quantities of ^{1}O2 generation than eumelanin (Figure 3). In addition to evaluating the efficiency of ^{1}O2 generation, it is important to characterize the efficiency with which the ^{1}O2 reacts with the melanin. Therefore, absorption of eumelanin and pheomelanin were measured as a function of irradiation time (Figure 3C). After one hour of visible light irradiation, the absorption of eumelanin decreased by 30% compared to that of pheomelanin, which decreased by only 7% (Figure 3C). This finding demonstrates that eumelanin reacts more efficiently with ^{1}O2 than pheomelanin. Also, it is important to note that the generation of ^{1}O2 is suppressed by irradiation of eumelanin, which does not occur with pheomelanin (Figure 3B). These data indicate that the pheomelanin is a more efficient photosensitizer for ^{1}O2 generation. It generates more and survives better from its damage.

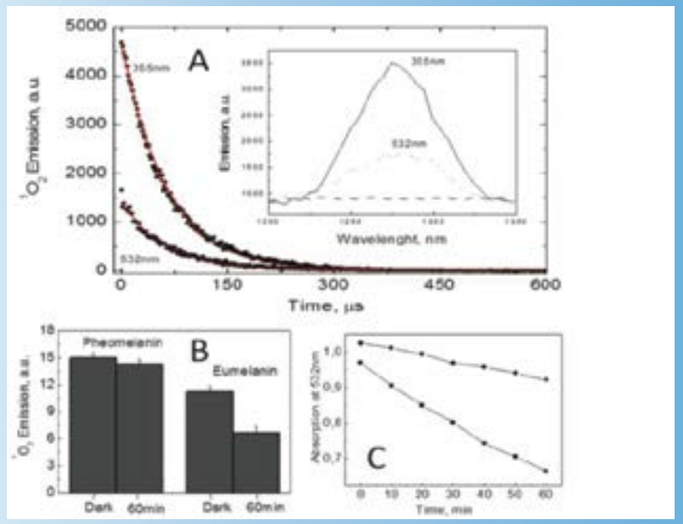

Figure 3

Singlet oxygen generation after melanin excitation. (A) Transient emission after exciting a sample of eumelanin with UVA (355 nm) and visible (532 nm) light. In the insert there are emission spectra obtained upon excitation in the UV-A and visible in the presence of sodium azide, a compound that suppresses singlet oxygen. (B) Pheomelanin and eumelanin before and after irradiation with visible light. (C) Photodegradation of melanin as a function of irradiation time in the visible region. Data originally published in: O. Chiarelli-Neto, et al., "Melanin photosensitization and the effect of visible light on epithelial cells." PLoS ONE, 9(11) (2014): e113266. doi:10.1371/journal.pone.0113266.16

The chemical reaction responsible for photodegradation of eumelanin is the addition of ^{1}O2 at points of conjugation (double bond) and formation of a hydroperoxide moiety in the C3 position of the indol group. This type of photoproduct was not detected from the photolysis of pheomelanin. Therefore, visible light is able to induce the degradation of melanin due to photosensitizing type II reactions and the formation of ^{1}O2. We have shown that this reaction is the main cause of photobleaching (discoloration) of hair.[14]

Recently, we demonstrated that cells, which produce high levels of melanin, suffer greater damage by visible light.[16] In order to correlate phototoxicity in the visible region, the generation of ^{1}O2 by melanin from melanocytes was measured. Control cells and pigmented melanocytes (M+) were excited with visible light (532 nm) and ^{1}O2 emission spectra were recorded. There was no emission in the case of the control cells, while the M+ cells had a clear emission spectrum due to ^{1}O2 generation in the intracellular environment. Therefore, melanocytes with greater quantities of melanin produce more singlet oxygen (Figure 4A).

In order to confirm that the DNA break in melanocytes (M+) irradiated with visible light was caused by the generation of ^{1}O2, we carried out an experiment with B16-F10 cells (control and M+) in which irradiation was carried out at 6 J/cm2, a sub-dose that does not induce breaks in DNA by itself. After lysis, these cells were treated with endonuclease FPG and Endo III, which recognized oxidative lesions in DNA, then cleaved the double strand resulting in the appearance of a comet tail in the presence of oxidative damage (Figure 4B). The tail of the comet was 5 times higher in the M+ cells compared to the control.[16] These lesions are considered pre-mutagenic. Additional experiments are needed to confirm the possible involvement of visible light in tumorigenesis induction. However, these experiments show that visible light causes the same premutagenic lesions that are observed after UV light exposure, which can eventually develop into carcinomas.

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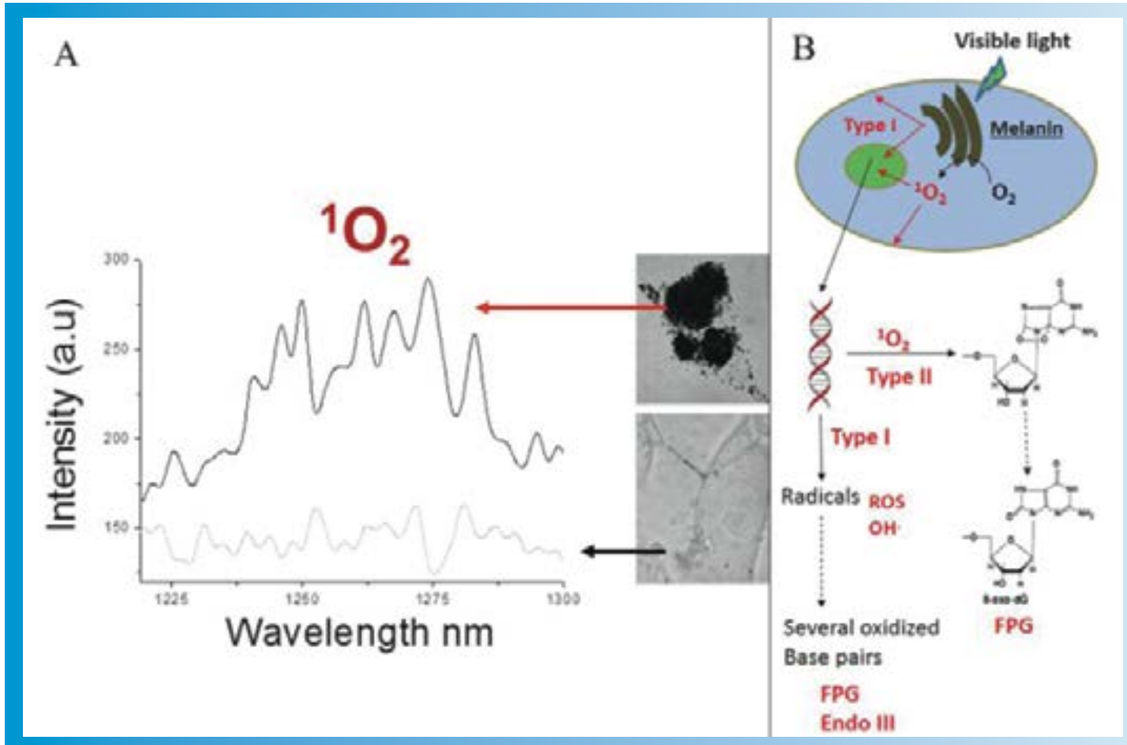

Figure 4

Intracellular production of singlet oxygen by photosensitization of melanin and oxidative damage induced in DNA: (A) melanin production and its relation to singlet oxygen generation. Increased production of melanin (M+) in the cell, indicated by the red arrow, is correlated with the spectrum of higher singlet oxygen generation (black spectrum). The basal production of melanin (CT) in the cell is indicated by the black arrow and is correlated with the spectrum of singlet oxygen generation (gray spectrum). B16-F10 control cells (CT) and B16-F10 pigment cells (M+) are represented beside the graph. (B) Simplified schematic of the damage that photosensitization of melanin can cause in cells. Two main sources of damage were identified: membranes and nucleic acids. Pre-mutagenic lesions were identified by the recognition of FPG and Endo III enzymes. Data were originally published in the article: O. Chiarelli-Neto, et al., "Melanin photosensitization and the effect of visible light on epithelial cells." PLoS ONE, 9(11) (2014): e113266. doi:10.1371/journal.pone.0113266.[16]

Considerations of the effect of visible light on the skin

Thirty years ago, photobiologists knew that UVA radiation was capable of damaging cells. However, for decades sunscreens did not protect effectively against UVA rays and the only photoprotection was based on the use of UVB filters. Consequentially, most skin carcinomas that are found in the deeper layers of the skin are due to injuries caused by UVA exposure.17–19 In the studies cited here, it was shown that visible light excites melanin and generates 1O2. This finding indicates that protection against visible light should not be ignored. Instead, health professionals should seriously consider the implications of visible light exposure for the general population. Continuous exposure to visible light without proper protection can promote molecular damage that accumulates in the skin. Also, exposure to visible light changes the color and the structure of hair, which many individuals experience during summer holidays. In closing, we hope this work stimulates the scientific community to continue in the development of more efficient ways to protect individuals from the deleterious effects of the sun.

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About the Authors:

Maurício da Silva Baptista, Ph.D. Dr. Maurício da Silva Baptista is currently Full Professor of Biochemistry and Associate Director of International Cooperation of the Universidade de São Paulo. He completed his undergraduate studies in Pharmacy and Biochemistry at Universidade de São Paulo in 1990 and continued his studies at Universidade de São Paulo, and in 1992 was awarded an M.S. in Biochemistry. Maurício then ventured to the United States to study Analytical Chemistry at Marquette University in Milwaukee, WI where he graduated in 1996 with a Ph.D. Maurício also completed a post-doctoral fellowship in Photobiology in 1997 at the School of Pharmacy, University of Wisconsin-Madison.

He may be contacted at baptista@iq.usp.br.

Orlando Chiarelli-Neto, Ph.D.

Dr. Orlando Chiarelli-Neto completed a Ph.D. in Biochemistry at São Paulo University (USP) – Brazil. He is currently a Professor of Medical Science (Biochemistry) at the University Center (UNESC) – Brazil. His research interests lie in the investigationof photosensitization of melanin by visible light in skin cells.

Employment Opportunity

Research & Development Manager

Job Details
- Job Location: Jupiter, FL
- Job Type: Full Time

Job Description

Tropichem Research Labs, LLC is currently recruiting an experienced R&D Manager to lead product development from benchtop through commercialization. Located in Jupiter, FL, Tropichem Research Labs, LLC is a leading manufacturer of dermatology products for companion animal and personal care markets sold though both retail and medical channels. The product categories include Shampoos, Conditioners, Gels, Sprays, Mousse and Lotions. Experience is required in related sciences such as surfactant and emulsion technologies, as well formulating with Active Pharmaceutical Ingredients. This position will have hands-on responsibility for the execution of a product development pipeline, and manage technical to technical customer interaction.

Job Requirements
- 5-10 years' laboratory experience with a focus on personal care and/or companion animal dermatological care formulation, including stabilization of Active Pharmaceutical Ingredients
- Technical expertise in related science such as surfactant and emulsion chemistry, rheology and active ingredient stability
- Manage on time delivery against an active project pipeline with regular updates to the commercial team
- Operate laboratory equipment, follow facility procedures, and document formulation development and experimental results
- Understand the basic principles of good experimental design, data analysis and interpretation
- Develop in conjunction with supervisor and adhere to cost objectives and timelines
- Test and communicate formulation performance and stability results and implement formula improvements as needed
- Work cross functionally to implement new product development benchtop to commercialization, and assist in root cause and corrective action investigations
- Interact with raw material vendors and other industry representatives to further expand on the understanding of the ingredients, technologies and product applications
- Investigate properties of raw materials used in formulations and demonstrate a firm understanding in choosing ingredients and detailing manufacturing processes during product development
- Lead the development of new and innovative products or technologies
- Must have strong organizational capabilities and have demonstrated leadership skills
- Must be able to speak and write clearly and persuasively, and present ideas and results concisely
- Must be able to work independently with minimal supervision
- Proficiency in Microsoft Office is required; additional laboratory software experience a plus

Education
- Bachelor of Science Degree in Chemistry or related field with 5+ years of personal care and/or companion animal dermatological care formulation or Master's Degree in Chemistry or related field with 3-5 years of relevant formulation experience

Sr. Research & Development Scientist

Position Summary: The Sr Scientist will be responsible for formula development and R&D project executions and completions for brand products. He/She ensures to meet product efficacy, aesthetic and cost requirements defined by Portfolio Management team. Performs stability and troubleshoots formula and manufacturing issues. He/She directs and oversees external partners in the development and manufacturing of new and product upgrades.

Core Functions of the Position:
- Drive skin care innovation by creating viable and reproducible prototypes derived from market insights and consumer needs.
- Interface with Marketing, Regulatory, Quality, Supply Chain and external Formulation/CMO partners to develop and evaluate premium skin care formulations.
- Formulate rinse-off, leave-on, OTC, Rx, Medical Device products in various product forms.
- Core knowledge of manufacturing processes and scalability.
- Core knowledge of stability of formulations to ensure robust product quality and aesthetics.
- Manage timeline executions with limited supervisions.
- Apply understanding of skin physiology, technologies and ingredients for maximum efficacy and product delights.
- Understands global regulatory requirements, follows and meets brand values and ingredient policies.
- Identify and review required product safety studies on different product uses and types.

Education/Job Qualifications:
- Minimum 5 years of skincare formulations experience with Cosmetics, OTC and/or Rx products
- BS in Chemistry, Chemical Engineering, or Sciences preferred

Required Skill Sets:
- Experience in dealing with multiple external partnership in Contract R&D and/or Contract Manufacturers to facilitate formula development collaboration and manufacturing technology transfer/scale-up processes.
- Experience and knowledge to anticipate and manage technical and regulatory hurdles in developing formulas for global registration and commercialization.
- In-depth understanding of issues and controls for the scale-up at both the pilot and commercial scales.
- Proven capacity in the principles of scientific experimental designs, complex data analysis/interpretation and deductive, analytical problem solving.
- Successful record of working across various, cross-functional internal and external teams to deliver meaningful results on time and on budget with limited direction
- Strong interpersonal and teamwork skills
- Results-driven, innovative thinker
- Excellent attention to detail and organizational skills
- Good time management skills and the ability to work under pressure
- Outstanding written and verbal English communication skills
- Self-starter, motivated in an environment that requires creativity
- Organized and with strong attention to detail
- Ability to anticipate technical needs and risks
- Innovative multi-tasker that can thrive in a fast paced environment
- Adaptable to changing tasks, assigned responsibilities
- Proven acumen using Microsoft Word, Excel and PowerPoint
- Proven people development and leadership skills preferred.

Reporting Relationship:
- This position will report directly to the Director of Research and Development

Location
- This position is located in Irvine, CA with potential for some domestic and international travel required.

Research & Development Laboratory Technician

Position Summary: The Laboratory Technician will be responsible in assisting the R&D lab personnel in formulation, equipment/instrument cleaning, maintenance and validation, stability testing and data reporting, test and product submissions, filling products and maintenance of the lab.

Core Functions of the Position:

- Perform batching of new product prototypes and reformulations.
- Perform stability studies and create stability reports.
- Maintain lab instruments and equipment, raw materials and lab supply inventories.
- Clean laboratory instruments, supplies and benches on a daily basis.
- Ability to interpret experimental results and stability data.
- Core knowledge of scalability and stability of formulations to ensure robust product quality and aesthetics.
- Manage timeline executions with limited supervisions.
- Maintain safety assurance, regulation and requirements in the R&D laboratory.Education/Job Qualifications:
- Minimum 2-3 years of bench experience in the cosmetics and personal care field.
- Minimum AA degree in Science field.

Required Skill Sets:

- Innovative multi-tasker that can thrive in a fast-paced environment.
- Adaptable to changing tasks, assigned responsibilities.
- Foster exchange of knowledge between internal and external team to help drive productivity and teamwork.
- Strong interpersonal and teamwork skills.
- Self-starter, motivated in an environment that requires creativity.
- Outstanding written and verbal English communication skills
- Organized and with strong attention to detail.
- Able to lift up to 5-gallon pail of products or raw materials.
- Proven acumen using Microsoft Word, Excel, and PowerPoint

Reporting Relationship:

This position will report directly to the Director of Research and Development
Location: Irvine, CA

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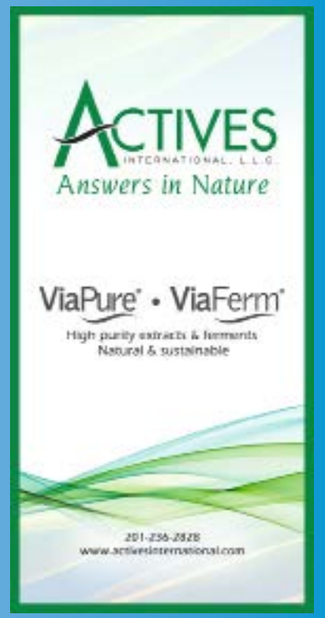

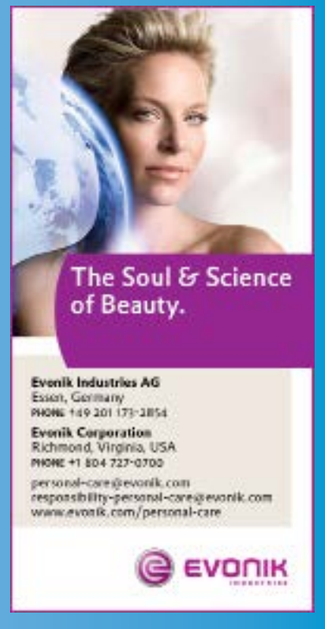

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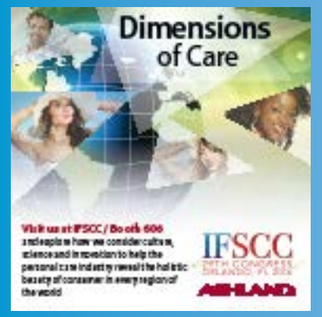

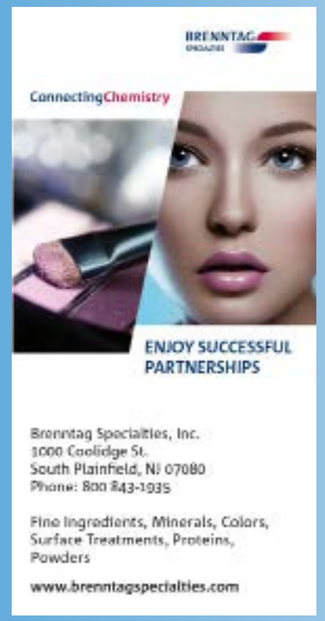

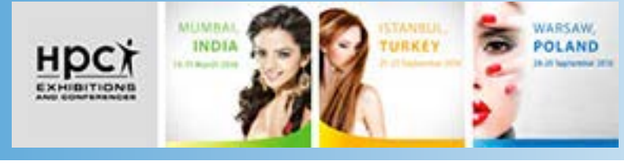

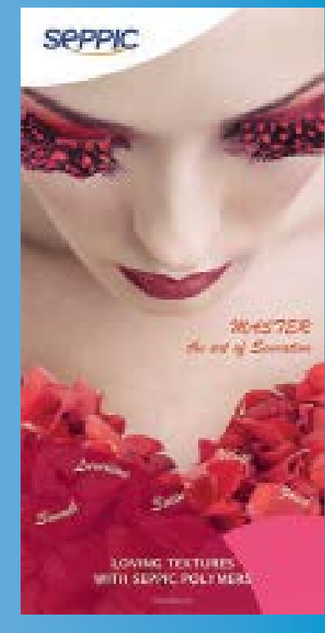

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