



the science of beauty

Vol 7 No 5




April 2018

ASCC 50th Anniversary Issue

A S Harrison & Co

Celebrating 95 Years of Success

Representing World Class Suppliers
Discover our exclusive range of:

-  Surfactants
-  Active Ingredients
-  Alternative Preservation
-  Emulsifiers
-  Solubilisers
-  Emollients
-  Film Formers
-  Clays
-  Gums
-  Scrubs
-  Delivery Systems
-  Petrolatum Replacements
-  Anti-perspirant Actives



**Proud to be Gold Sponsors
and long time supporters
of the ASCC**



**Come and visit us at
Stand 20/21**



Established
1923

fensebiome™

peptide

Reconnect with your
origins for healthier skin



Restores urban and sensitive skin by reinforcing its physical
barrier and achieving a microbiota similar to that of our ancestors
living in closer contact with nature

Increases
**microbia
diversity**

Aids in
**preventing
dehydration**

Offers **healthy
and protected
skin**

Lipotec International, Inc.
28 River Street
Silverwater NSW 2128, Australia
Phone: +61 (02) 9741 5237 | Fax: +61 (02) 9748 4924
E-mail: commercialanz@lipotec.com



www.lipotec.com

All trademarks owned by The Lubrizol Corporation or its affiliates. © 2018 The Lubrizol Corporation.

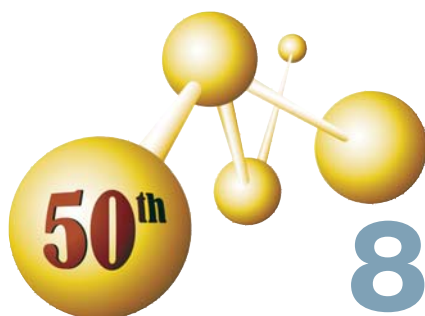
contents

Vol 7 No 5

April 2018

Business

- 5 **Editor's Note**
Joy Harrison
- 8 **50 Years of the ASCC**
Ray Townsend



- 14 **To Market To Market**
Julian Jones
- 17 **Concept Chemicals editorial**
- 20 **A S Harrison's 95 Years**
- 24 **How to Find the Right Contract Manufacturer**
Toni Ovenell
- 26 **Superstar Florals**
Rebecca Akhyani
- 41 **Lipotec editorial**
- 42 **2018 Emerging Trends for Skincare and Packaging**
Steve Welsh
- 45 **Brands Online the Do's and Don'ts**
Gint Sillins
- 52 **Get the Right Insurance Cover for Your Business**
James Gillard



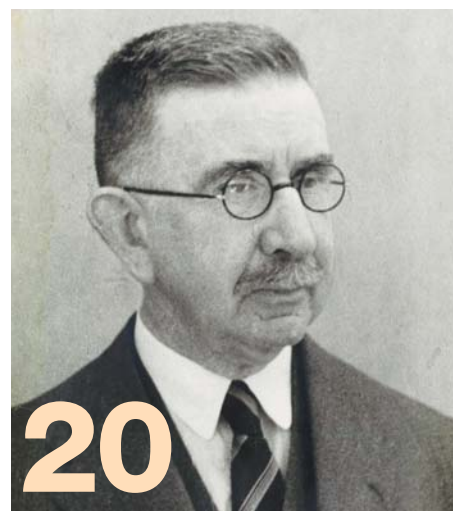
Educational

- 16 **Supporting Skincare Claims**
John Staton
- 33 **Pre - and Post- Chemical Peel Skincare**
Tina Aspres
- 36 **Bad Science or Naughty Marketing**
Emanuela Elia
- 39 **Aromatherapy Update**
Catherine Cervasio
- 48 **How Stable are You?**
Wendy Free
- 55 **Sunscreen Highlights**
John Staton
- 57 **Formulator's Forum**
Ric Williams



ASCC

- 27 **President's Report**
Robert McPherson
- 29-32 **Conference Information and Program**



Advertisers

- 2 **A S Harrison**
- 3 **Lipotec**
- 13 **Merck**
- 15 **Concept Chemicals**
- 19 **Concept Chemicals**
- 23 **Lycon**
- 25 **Dermatest**
- 35 **Brenntag**
- 38 **Ozderm**
- 43 **Avenir**
- 47 **Ingredients Plus**
- 49 **Syndet Works**
- 50 **Personal Care Institute Science**
- 53 **Insurance Made Easy**
- 54 **All Colour Supplies**
- 56 **IMCD**
- 56 **Trulux**
- 60 **Karpati**



editor's note



congratulations

Congratulations to the ASCC for 50 successful years of operation. It is also our anniversary this month, we have been publishing the magazine for 32 of those 50 years. It sounds like a long time but to me it seems like only a few years. I am sure this is because of the wonderful relationship I have had and continue to have with the ASCC and the great friends I have made during this time here in Australia and overseas. Also celebrating anniversaries this month are A S Harrison with 95 years and Lydia Jordane of Lycon Wax celebrating 40 years.

On a more sombre note Pam Stellema will not be writing for us anymore as she has expanded her business which in turn has limited her time. Pam has contributed for the past six years and we will miss her. During her time with us she received accolades from all around Australia and as far away as Germany from readers who enjoyed her articles. We wish Pam luck with her new venture.

I would like to introduce you to two new contributors Toni Ovenell who will write on Contract Manufacturing and Julian Jones who will be writing

on Marketing. Toni has been in the industry for many years and I have known Julian for the 32 years I have been in the industry. I am sure you will find both their articles thought provoking and interesting. Gint Sillins who is a registered patent and trade mark attorney joined us two issues ago so I would also like to officially welcome Gint to the team.

The conference is drawing nearer and as usual I look forward to catching up with everyone there.

So until then, happy reading.

Joy



The Science Of Beauty

ISSN: 1837-8536

Published Bi-monthly
(January March May July
September November)

www.thescienceofbeauty.com.au

Publisher

Manor Enterprises Pty Ltd
ABN 32 002 617 807

Editor

Joy Harrison

All correspondence should be sent to
The Editor

The Science of Beauty
PO Box 487

GULGONG NSW 2852

Mobile: 0418 541 998

Email: joyh@ozemail.com.au

Advertising

Tony Harrison

Advertising Manager

PO Box 487

GULGONG NSW 2852

Mobile: 0429 165 156

Email: tonyhar@ozemail.com.au

Subscriptions

The Subscription Manager

(PO Box 487 Gulgong NSW 2852)

\$66.00 (per year) incl P/H (Aust. only)

\$106.00 (2 year) 20% discount

Disclaimer

The viewpoints and opinions
expressed in the articles appearing
in this magazine are those of the
authors. The Publisher takes no
responsibility for the information
supplied.

meet the team...

REBECCA AKHYANI is a creative perfumer with 15 years experience in the industry. Rebecca has a degree in Industrial Chemistry from UNSW and began her career as a fragrance evaluator before completing perfume school in Grasse, France. Rebecca has worked for a number of fragrance houses in Australia and abroad and is a full member of the British Society of Perfumers. Rebecca also runs perfume classes.



WENDY FREE has degrees in Science (B.Sc) and Technology Management (M.Tech Mngt) and is a member of a number of industry associations including Australian Society of Microbiologists, Royal Australian Chemical Institute, Association of Therapeutic Goods Consultants and is a Fellow of the Australian Organisation for Quality. With more than 25 years industry experience, Wendy's current roles include APVMA GMP auditing, contributing to the Cochrane Collaboration and on a day to day basis, Scientific Director Quality Matters Safety Matters Pty Ltd (QMSM) that has over the last decade Wendy has provided expertise to over 400 Australian and International businesses. She specialises in regulatory compliance, commercialisation, troubleshooting and GMP systems, and considers cosmetics amongst the most challenging and enjoyable part of her work.

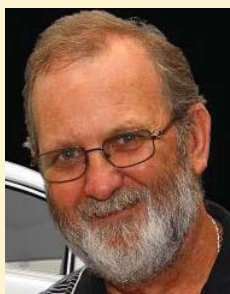
TONI OVENELL is a formulation chemist and consultant for Queensland Cosmetic Formulators. She has worked in the cosmetic industry for many years in a range of roles covering areas of technical sales, quality, supply chain, manufacturing and product development. Most recently Toni has worked for a small contract manufacturer as technical manager, prior to setting up her own business. Toni is passionate about sharing her knowledge, maintaining a viable cosmetic industry in Australia and helping people bring their product ideas to market. She also likes champagne and hockey.



JOHN STATON has a background of over 40 years experience in the pharmaceutical and healthcare industries. John is a life member of the ASCC and serves in a number of industry representative roles with ASMI, ACCORD, TGA and Standards. He is the Australian representative to the ISO Committee on Sunscreen Testing-TC 217. (The committee for development of sunscreen standards). John is also in demand as a speaker on the International Conference Circuit.

JULIAN JONES, the founder and Managing Director of ikonsulting Pty/Ltd, is Passionate about the Personal Care Industry in Australia and Globally. Julian has been an active member of the ASCC for over thirty years. During this time he has served as President and Chairman of the Victorian Chapter of the ASCC. He is widely known and well respected both nationally and internationally for his knowledge and skills in developing and marketing the best Personal Care Products.





RIC WILLIAMS was educated in Sydney obtaining his Bachelor of Science in Pure and Applied Chemistry from the University of New South Wales (1980) and a Diploma of Environmental Studies from Macquarie University in 1983. Ric has had 40 years experience in the industry working for many companies and operating his own consultancy business for many years. He has presented many lectures and workshops at national conferences for the Australian Society of Cosmetic Chemists (ASCC), the Association of

Professional Aestheticians of Australia (APAA), Cosmetic and Pharmaceutical Special Interest Group (CAPSIG) and also beauty colleges nation wide.



MARG SMITH is the owner of Syndet Works – an Australian company established in 1984 to formulate and produce soap free skincare bars. Syndet has developed an enviable reputation for custom formulated and manufactured skincare that now extend well beyond the origins of the business.

CATHERINE CERVASIO is a business woman with experience in natural personal care, baby skincare, international trade, marketing and branding, spanning two decades. Catherine is most well known for developing Aromababy- the world's first skincare brand to combine the use of natural and organic ingredients with neonatal research, creating a new category in retail in 1994. As the only Australian natural baby skincare brand with registered products in China, she is also sought after as a speaker on accomplishing business in this region. Catherine was a recent winner in CIBE China (Most Popular Natural Brand) and TBPA China (Best Brand Experience) Awards along with winning the HKABA, Export category, for Excellence in Bilateral Trade – China/Hong Kong 2016.



EMANUELA ELIA is the Director of Ozderm, which specialises in *in vivo* testing and clinical trials for cosmetic and personal care products. Emanuela Elia has a law degree from Rome and a Master of International Business from the University of Sydney. She had collaborated with Australia's longest serving Contract Research Organisation Datapharm for a few years before setting up a cosmetic and personal care products testing facility in 2009. Emanuela is enthusiastic about improving the quality of cosmetic and personal care products' research in Australia through science.



STEVE WELSH is a cosmetic packaging specialist with over 20 years experience across all mediums of packaging. As the director of Weltrade Packaging, Steve leads a team of designers, technicians, printers and supply chain professionals. To ensure the best exposure of your beauty, skincare or cosmetics brand. Steve's philosophy is to design your packaging correctly, right from the start, so you can elevate your brand and move more product. Steve works closely with leaders in the cosmetic industry to

ensure that your packaging consistently stands out on the shelves within this highly competitive market.



JAMES GILLARD is the Principal of Insurance Made Easy whose services include – business insurance, travel insurance and financial services. Insurance Made Easy has a client list of over 2000 businesses from all industries. The relevant major insurance schemes are – Hair and Beauty, Pharmaceutical Companies and Natural Therapists.

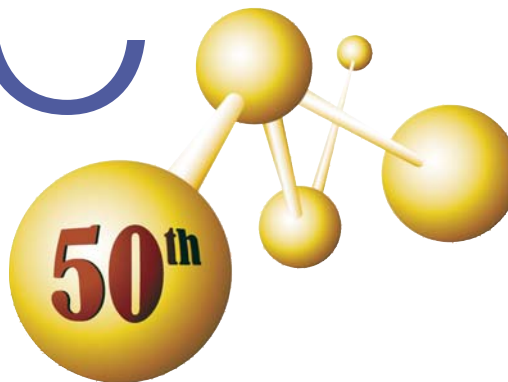
GINT SILINS is a registered patent and trade marks attorney, and a principal of Cullens Patent & Trade Mark Attorneys. He holds a Bachelor of Science degree in chemistry with honours in biochemistry, and a Doctor of Philosophy degree in biochemistry. Gint specialises in protecting branding and innovations largely in the health care, personal care, animal health, food and beverage, biotechnology, industrial chemical, clean energy and agricultural sectors. His practice includes: conducting brand and innovation availability and registrability searches; IP audits; registering patents, trade marks and designs worldwide; enforcing intellectual property rights; resolving IP disputes; and, providing infringement and validity advice.



TINA ASPRES has worked as a Pharmacist for almost 20 years in retail, industry and academia as well as being a Cosmetic Chemist. Currently she works in industry and has vast experience in both the pharmaceutical and healthcare arenas. In addition to this she is a casual academic at UTS, School of Health, (Faculty of Pharmacy in Pharmaceuticals). Tina has a great interest in clinical research in dermatology and the treatment of skin disease and conditions and is Clinical Trial Coordinator at South West Sydney Dermatology. She is a keen researcher in transdermal drug delivery systems. Tina is a Member of the Pharmaceutical Society of Australia and a Member of the Australian Society of Cosmetic Chemists. She regularly consults pharmaceutical companies in the area of acne, eczema and skincare especially in the area of cosmeceuticals and has devised and written numerous support, training and education material for companies aimed at both professionals and consumers. Tina consults for the Eczema Association Australasia and is on their Integrity Assessment Panel and has worked with Choice Magazine on numerous reports. Tina has presented at the Annual Scientific Meeting of the Australasian College of Dermatologists and has published within the pharmacy and medical literature in the area of sun protection, Vitamin D, skin cancer prevention and eczema as well as co-authoring the book 'All About Kids' Skin – The Essential Guide' published by ABC Books



ASCC



the first 50 years

Welcome to this “milestone” (or should we say kilometerstone in this day and age) in the history of the Australian Society of Cosmetic Chemists (ASCC). As you can imagine there have been many key moments, as well as key people who were involved in the evolution of the ASCC into the organisation as it exists today. Some of this information may be factual and some of it may be based on people’s recollections, so at this point I am adding my disclaimer as to authenticity of facts (never let the truth get in the way of a good story).

However, I will present the facts as accurately as possible and will do my best not to make this history lesson too tedious or boring.

I have split this presentation into 4 parts, covering most importantly, the history of the ASCC, then a brief look at the Cosmetic Industry in Australia in general. I will look at the changing face of the industry in Australia, together with the companies and organisations which over many years have helped to build a strong and vibrant Australian Cosmetic Industry.

Research shows that the inaugural meeting of the ASCC was held in Sydney on 11th March 1964 (that actually makes this the 54th year) and was attended by roughly 80 people, including Ed de Navarre, who was President of the IFSCC (International Federation of Societies of Cosmetic Chemists) and was regarded as one of the world authorities on cosmetic chemistry. Both he and Lester Conrad were elected Honorary Members of the ASCC at this meeting.

In its first year, the ASCC grew to 150 members.

First ASCC President was Max Chambers who worked for Coty Cosmetics.

First ASCC Secretary was Winton Proctor (Windy) Burger who was CEO at Kolmar Australia.

First ASCC Treasurer was Roy Sinclair who was Technical Director at Coty Cosmetics.

I had the pleasure and privilege of working with both Roy and Windy at various times.

The first ASCC National Conference was held in May 1965 at Leura in the Blue Mountains west of Sydney and was attended by about 50 registrants. In the 53 years between 1965 and today, we have actually held 50 National Conferences and 3 International IFSCC Congresses in Australia, thus making this our 50th anniversary ASCC National Conference.

Now, we all know that at each ASCC Conference we have a number of awards.

- 1 The Jack Jacobs Award for the best original paper from Australia/New Zealand.
- 2 The Lester Conrad Award for the best overall paper presented.
- 3 The Peter Strasser Award for the best educational workshop at the Conference.

But who were these men, and why do we have awards named after them.

- 1 Jack Jacobs was the founder of Bronson & Jacobs, way back in 1946, and was heavily involved in the formation of the ASCC. So who was “Bronson” and why is it not the Bronson & Jacobs Award you may well ask? Well, way back in 1946 before Google or the Internet, we had the Yellow Pages phone directory for looking up organisations such as “Cosmetic Raw Material Suppliers”. Rumour has it that Jack was worried about being too far back in the alphabetical line-up, so chose a hypothetical partner, Bronson, and once

The tyranny of (more or less) 50 years

Here are some ASCC Members who are still actively involved. Can you recognise them? Answers on page 12.



again, rumour only, because “B” for Bronson came ahead of “C” for Croda in the alphabetical listing.

- 2 Lester Conrad was an American Bio-Chemist who amongst other things, developed a patented process for extracting Lanolin/Cholesterol from sheep’s wool without harming the sheep. He was also IFSCC President around 1968, and as mentioned earlier, was involved in helping to establish the ASCC. Lester’s widow Muriel, presented the first Lester Conrad Award at the 1987 Annual Seminar in Queenscliff in Victoria.
- 3 Peter Strasser was Technical Director at Albright and Wilson during this period. Peter was the first Australian to serve as IFSCC President and was elected during the first Australian

hosting of an IFSCC Congress in Australia in 1978.

The following is a chronology of some of the important events in the history of the ASCC, and the people involved.

- 1959: The International Federation of Societies of Cosmetic Chemists (IFSCC) formed in Brussels.
- 1963: The ASCC becomes affiliated with the IFSCC as it’s 12th member.
- 11th March 1964: First documented meeting of the ASCC in Sydney.
- May 1965: First National Seminar at Leura in the Blue Mountains.

- May 1968: Victorian Chapter formed.
- 1978: First IFSCC Congress to be held in Australia under the leadership of Henry King and Malcolm Nearn, at the Sydney Opera House. Peter Strasser was elected Australia's first IFSCC President.
- The ASCC became an Incorporated Entity following the 1978 Congress, as a buffer for members against any financial liability that the Society may encounter.
- 1985: First joint Australian/NZ Conference held in Rotarua New Zealand.
- 1989: South Australian Sub-Chapter hosts first SA Annual Conference in Wirrina.
- 1991: Queensland Chapter inaugurated under the guidance of Brian Price & Grant Binney.
- 1994: First Qld Annual Conference held at Jupiters Casino on the Gold Coast.
- 1996: Second IFSCC Congress held in Australia under the leadership of Barrie Dean, John Staton and Roy Sinclair, and which also had it's opening address in the Concert Hall of the Sydney Opera House (talk about doing things on a grand scale). Alan Oppenheim was elected as Australia's second IFSCC President. Just as an aside, Bronson & Jacobs hosted a dinner in the Opera House during the Congress to celebrate their 50th Anniversary, and treated everyone to a spectacular fire-works display from a barge moored in the harbour, between the Opera House and the Harbour Bridge.
- 2000: Gilda Severino was elected as the first female President of ASCC. Jenny Brown followed as second female President in 2013.
- 2010: Third IFSCC Congress held in Australia. This IFSCC Congress was staged in Melbourne, under the leadership of Nicholas Urquhart, Michelle Fayad and Trevor Lormin. Gavin Greenoak was elected as Australia's third IFSCC President during this Congress.

During this period, the ASCC, amongst other things, sponsored and supplied many voluntary lecturers to the Cosmetic & Pharmaceutical Science Course, held first at Sydney Technical College in Ultimo, then at Meadowbank TAFE in Sydney's Northwest.

Also during this period, the ASCC formed a Technical Committee which contributed to Government Committees, and was instrumental in achieving sane and sensible government legislation in a number of areas, two of the notable ones being the testing procedures for the Australian Sunscreen Standard CS041, and the wording for the Cosmetic Ingredient Listing Legislation. This Technical Committee has had some very passionate and vocal members over the years, not least of whom are John Warby, Ric Williams and Gavin Greenoak, and quite a few others, too numerous to mention. The Technical Committee is heavily involved in developing Position Papers on many topics which are relevant to the Cosmetic Industry in general.

The ASCC needs particular congratulations with regard to Sunscreen SPF Testing. This process was pioneered in the early 1990's by Dr Don Robertson and Prof. Gordon Groves from the University of Queensland and has been ably continued in Australia, first by Gavin Greenoak and Dr Malcolm Nearn, and now for 20 years up to the current day by John Staton. The ASCC was represented on the Australian Sunscreen Standard Committee, firstly by Tony Lewis of Johnson & Johnson and myself, then by Gavin Greenoak and myself. Unfortunately, Gavin passed away recently.

The ASCC has had a number of regular publications over the years, the first being Australian Cosmetic Science, first published in March, 1980. This was superseded by Cosmetic Aerosols and Toiletries in Australia, first published in 1986, then as Australasian Journal of Cosmetic Science, and now, from 2012 up to the present day by The Science of Beauty, ably published by Joy Harrison of Manor Enterprises.

From time to time, the Council of the ASCC nominates members who have contributed to the industry to be made Life Members. This list of 18 Life Members as follows:

Geoffrey Burgess	Alan Oppenheim
Barry Dean	Gilda Severino
Sue Haynes	Roy Sinclair
Barry Hunt	John Staton
Ian McLean	Ray Townsend
Tony Merrington	Henry King
Robin Mouat	Nicholas Urquhart
Malcolm Nearn	Jenny Brown
John O'Donnell	Margaret Smith

The following is also a list of the people who have served as President of the ASCC:

Max Chambers	Paul Castles
R. F. (Bob) Brady	John O'Donnell
Bob Curtis	Graham Aldous
Peter Strasser	Gilda Severino
Geoff Burgess	Nicholas Urquhart
HR (Roy) Hawthorn	Gavin Greenoak
Henry King	Trevor Lorman
Malcolm Nearn (Double Term)	Kim Newham
John Staton	Julian Jones
Barry Hunt	Jenny Brown
Anthony Merrington	Matthew Martens
Alan Barnes	Robert McPherson
Ray Townsend (Double Term)	

Other worthy contributors to the ASCC and the Cosmetic Industry in Australia as follows. People who have contributed in multiple roles and often over many decades.

Bob Brady	John Wright
Roy Hawthorne	Owen Hellyer
Sue Haynes	Barry Dean
Ray Maio	Henry King
Barry Hunt	John Staton

Paul Castles
Gilda Severino
Jenny Brown
Pat Carey

Windy Burger
Malcolm Nearn
Gavin Greenoak
Ric Williams

As per earlier, the ASCC has also fielded three members who have served as Presidents of the International Federation of Societies of Cosmetic Chemists. This involved a period of service as a Praesidium Member of around eight years in each case.

Peter Strasser
Alan Oppenheim
Gavin Greenoak

All three also serve as long term members of ASCC Council, including a term as President.

The Second Part of this presentation takes a brief look at some of the International Cosmetic Companies who for many years operated manufacturing facilities in Australia, some of whom have now moved these facilities off-shore. This list of companies is by no means inclusive, but serves as an indication of the scope of the Australian Cosmetic Industry in the latter part of the 1990's.

Revlon	Yardley
Estee Lauder	Innoxa
Avon	Unilever
Coty	Colgate Palmolive
Helena Rubinstein	Max Factor
Faberge	Kolmar Australia
Schwarzkopf	(now operating as Jalco)
S C Johnson	Johnson & Johnson
Elizabeth Arden	

Some of these companies had manufacturing facilities which were memorable, such as Colgate Palmolive, which occupied a huge site on the waterfront at Balmain. A site that has now been converted into luxury harbour side apartments.

In the case of Kolmar, if you happen to be visiting the current site of Jalco at Hornsby, just glance down to a small plaque to the right of the main entrance, which commemorates the opening of the factory on 17th November, 1956. This was the manufacturing site to which "Windy" Burger came from Kolmar Head Office in USA for a six months stint in 1956, and ended up staying until his death in 2014. His conversion from an American to an Australian was a huge gain for both the ASCC and the Cosmetic Industry in Australia.

It should be noted that these multinationals such as Colgate Palmolive and Unilever still have substantial manufacturing facilities in Australia, and that changes in direction of these multinationals has opened up opportunities for many local companies such as Jalco, Delta Laboratories, Trendpack etc in NSW, and Syndet Works, Beauty Works, etc in Victoria. It is encouraging to see the multitude of Australian Companies who are taking on manufacturing and exporting.

This investment by many local companies has seen the Cosmetic Industry in Australia continue to grow.

The Third Part of the presentation takes a look at some of the Raw Material supply companies which have contributed to the Australian Cosmetic Industry over such a long period of time. Companies such as:

- Robert Bryce which was incorporated in 1913, then merged to Watts Winter and Swift Watt Winter and now operates under the umbrella of IMCD.
- A S Harrison, established in 1923 in Sydney, 95 years old, and arguably the oldest Australian and privately owned raw material supply company. Four generations of Harrisons, with Geoff Harrison as the current Chairman.
- Bronson and Jacobs (now IXOM) who began operations in Australia on 4th October 1946, under the guidance of Jack Jacobs, giving them 71 years of continuous raw material supply to the Cosmetic Industry.
- Henkel, who became Cognis, now owned by BASF.
- Croda.
- Dow Corning, who in the 1990's had manufacturing facilities in Sydney.
- Albright & Wilson, now part of Huntsman.
- Ingredients Plus, began in January 2005, and although not that old, was formed by a number of long term workers, previously employed by Bronson & Jacobs.

This is by no means a comprehensive list, but shows a small cross section of long term suppliers to the industry.

The Fourth Part of this presentation is to make mention of Australian Family companies, both supply and manufacturing, who have successfully operated in this country over a number of generations.

- Ross Cosmetics (currently 4th generation Ross family).
- A S Harrison (currently 4th generation Harrison family, founded in 1923)
- Ensign Laboratories (currently 3rd generation Thornborrow family, founded in 1955)
- Hallas Trading/Ella Bache (3rd generation Hallas family)
- Ego Pharmaceuticals (3rd generation Oppenheim family). The company name was derived from father & son family members Ernest & Gerald Oppenheim, hence EGO. Now led by Alan Oppenheim.

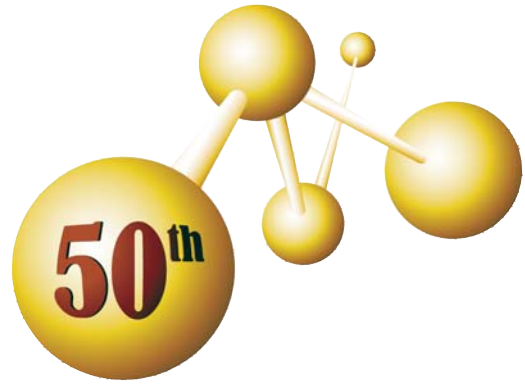
And to close this talk off, because at this early stage of proceedings, I note that there are a number in the audience who are nodding off already, I would just like to congratulate the new generation of Cosmetic Chemists who have bravely raised their hands to join Committees and organise Seminars and Conferences. In this age of gender equality I note that there are an increasing number of females joining and heading these committees, This can only enhance the quality of the

services being provided to members. Continue on with the good work in promoting both the ASCC in particular and the Cosmetic Industry in general, but try not to forget some of the traditions and people of the past.

If I can offer any advice, it's a little bit like juggling. Try to keep all the balls in the air at once, but if you do happen to drop one from time to time, just pick it up and continue on. Hopefully no one will notice.

Ray Townsend

ASCC Life Member



The tyranny of (more or less) 50 years

How did you go? Recognise anyone?



JOHN STATON



MALCOLM NEARN



BARRY DEAN



HENRY KING



RAY TOWNSEND



FRED EXNER



JOY HARRISON



ANGELA LANCE



PAM JONES

The new RonaCare® RenouMer – Extraordinary skin rejuvenation

Discover the new RonaCare® RenouMer ocean secret and make use out of this extraordinary spring of youth:

- Direct impact on collagen
- Skin smoothing
- Skin densifying
- Improved skin moisture and elasticity
- Makes use of holistic and nourishing cytoplasm
- Positive impact on algae diversity in Brittany
- Based on the discovery of new ocean sources

Interested?

Make sure to contact the Merck experts

Joanna George

Merck Pty Ltd | Ground Floor, Building 1 | 885 Mountain Highway | Bayswater | VIC 3153 | Australia

Phone: 03 8727 6335 | Mobile: +61 (0)428 855 122 | E-mail: joanna.george@merckgroup.com

www.merckgroup.com

to market, to market...

by Julian Jones

Hello!

Welcome to a new segment of the magazine dedicated to the crazy, exciting, frustrating world of marketing! Joy Harrison, the Editor of this amazing magazine, has decided to give me the opportunity to share with you my thoughts and experiences gained over 35 years in the Personal Care Industry in Australia and globally.

Strap yourself in because it may be a bumpy ride!

I'd like to say I have it all planned out from the first article right through to wherever it ends, but that would be slightly less than truthful! Let's just go on this journey together and see where we end up. Right from the start, I'd like to remind you that all of the thoughts, opinions, ideas and stories you will read about over the coming months come from my experiences over many years so although they are real, your mileage may vary!

By way of a back-story, I have been involved in the personal care industry in Australia, in various roles, dating back to around 1984. I have seen so many changes in the way brands are marketed over those years, some very successfully, and some not so much!

The one constant throughout this time

has been my fascination with marketing and its many facets. I have been a sucker for marketing books, always looking for the next big thing. Techniques have changed, communication channels have changed, the "do's and don'ts" have constantly changed – but we are still all working to optimise the way we sell our brands.

I guess the measure of marketing success for most of us is the level of sales and the profits derived from those sales, but I'd like to think there is more to it than that.

A well-marketed brand can become part of a country's culture, interwoven with people's lives and the experiences they have – both buying and using the brand, but also marking significant milestones in their lives. As an example, can you remember what your life was like before Apple launched their first iPhone to the world? Sure, we were all making and taking calls on our mobile phones but our world's changed with the release of arguably the first smart phone with all the new possibilities it opened up. The technology was great, but the marketing story that went with it made us want this new device and all that it offered. And that was before Facebook became arguably the "killer app" that



cemented smart phones as essential devices. Facebook ... there's another brand that changed global culture, too!

While we're on the subject of brands as parts of our lives, another key element of brand marketing is its ability to massively grow market share when it's done right, and see a brand disappear into oblivion when it isn't. Coupled with product/service innovation and relevance, effective marketing is the key to brand survival and growth.

And that brings us to the importance of the story behind a brand and why customers buy the story first and the product or service second. So the next chapter in our journey is "The Value of a Brand Story".

See you next time! – Cheers

Julian



Improved Materials for better results

All-in-One Blend

Ritafactant SFE is an all-in-one cold process blend that can be used in a wide range of formulas: shampoos, face and body washes as well as in baby care products and more.

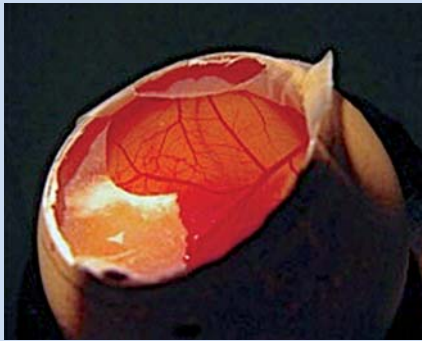
This material is exceptional because of its ability as a Lactylate, providing residual moisturisation, extended fragrance release, and enhanced delivery of actives. Lactylate boosted prototypes are cost competitive to their sulphated counterparts. Ritafactant SFE can easily be added to the water-phase of cold process production for cosmetic, personal care and even household market segments.

Ritafactant SFE + cold process = improved efficiency + reduced energy consumption

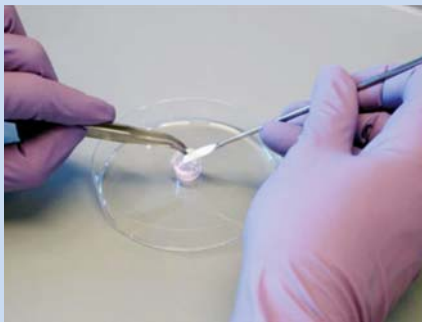
The Concept and Rita partnership aims to meet your supply and new product research needs. Contact us on (02) 9498 7600 or email sales@conceptchemical.com.au to find out more.



STEPS



1. Hen Egg Chorioallantoic membrane



2. EpiOcular® preparation of solid sample



3. Irritation® Plate Reader

Eurofins Dermatest Pty Ltd
20 - 22 King St
Rockdale NSW Australia
ph 61 2 9556 2601
info@dermatest.com.au
www.dermatest.com.au

No. 30 Eye Area Safety In Vitro

All of the test options below can be utilised for supporting of claims related to safety of cosmetic and other products which may come into contact with the eye.

Het Cam

Assessment of the irritant potential of a test element after application to the chorioallantoic membrane of the embryonic hen's egg

Reference

Adapted from Luepke N.P. and Kemper F.H. (The Het-Cam test: "An alternative to the Draize eye test". Food Chem. Toxicol. 1986, 24, n° 6/7, 495-496)
Published in the Official Journal of the French Republic of December 26, 1996

Methodology

Observation of the irritant effects (hyperemia, hemorrhage and coagulation) that can occur after application of the test element to the embryonic hen's egg chorioallantoic membrane (CAM) on 10th day of incubation

.....

EpiOcular®

Reconstructed human Cornea-like Epithelium (RhCE) test method for eye irritation

Reference OECD 492

Objective

Identifying test materials not requiring classification and labelling for eye irritation or serious eye damage

Methodology

Ocular irritation potential is predicted by the relative viability of the tissue after a single exposure to the test substance. Relative viability is determined by measuring the 3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyltetrazolium bromide (MTT) dye conversion by the EpiOcular™ tissue construct after topical exposure to the test substance

Ocular Irritation®

This in-vitro test is based on the principle that chemical compounds will promote measurable changes in target biomolecules and macromolecular structures. The proprietary Irritation assay is a standardized and quantitative in vitro test which utilizes changes of relevant macromolecules to predict the acute ocular irritancy of chemicals and chemical formulations.

This test method is under currently under final review by OECD EG on Eye Irritation committee.

References

1. Ocular Irritation®: In Vitro Method for Testing Ocular Irritancy
Bufo M., Ulmer R. SOFW Journal 5-2008
2. In vitro alternatives for ocular irritation. Curren R. D., Harbell J. W. Environ Health Perspect. Vol 106

John Staton is a founding Director of Eurofins Dermatest Pty Ltd, Sydney and has been conducting SPF testing and skin efficacy and evaluation studies continuously since 1997.



supply chain impact on sustainable manufacturing

Concept Chemical Corporation is a value-added distributor in the Personal Care, Home Care, Cosmetic and Auto Care market segments; with specific technical expertise in surfactants particularly around cold process technology, natural and “free from” raw materials. Concept is an established distributor of materials to Australian manufacturers and presents 37 years of successful tailored service and products.

Concept represents global manufacturers, who support the products with the formulation assistance laboratory capabilities and technical advice to get your product from a marketing idea to the supermarket shelf.

Concept’s CEO, Marten Hauville explains: “Product formulations and processes continue to adjust to consumer demand for products that are free from parabens, sulphates, GMOs, non-PKO/ Palm Oil or materials that are responsibly sourced. Similarly, consumer-demands consistently drive a reduction in

both cost and now more than ever in minimising carbon footprint. Leveraging blends and cold process raw materials and formulations can effectively and swiftly deliver these advantages.”

The latest Manufacturing Skills Australia’s position paper on Sustainable Manufacturing, recommends “Manufacturing firms need to seek out newly available and emerging technologies and develop a stronger innovation culture that ultimately leads to the design and development of energy efficient and low wastage machinery, equipment and processes.” The UK’s Carbon Trust estimates that most businesses can cut energy bills by up to 20% with savings that could equate to as much as a 5% increase in your overall profits. So, it makes perfect sense for both the environment, your reputation and profitability to seek out these efficiency and sustainability driving solutions.

Marten Hauville adds: “Sustainable

manufacturing is driven by efficiency in both supply chain and manufacturing practices; and is now becoming as common a label claim as certified organic ingredients, cruelty-free, vegan or gluten-free. Manufacturing processes and the formulations that drive production are rapidly becoming accepted, with the increased consumer demand for everything green. This scenario is having a massive influence on the entire supply chain of a cosmetic or personal care product.”

Concept is Silver Sponsor of the 50th Australian Society of Cosmetic Chemists conference ASCC 2018 in Canberra

Marten Hauville (CEO, Concept) is looking forward to exhibit at the biggest and best conference for the Australian Personal Care and Cosmetics Industry with US key suppliers Rita Corporation, Troy Corporation and Sandream Impact. Concept is proud to have an exclusive distribution agreement with these leading raw

material manufacturers from the US in cosmetic and personal care. “Concept is proud to be presenting innovative RM products from both Rita Corporation and Troy Corporation at the 50th ASCC Conference in Canberra. These manufacturers are leading the way in both natural and innovative blends that enable the formulator to drive efficient and sustainable manufacturing”, says Marten Hauville.

Concept will hold several dedicated technical briefings and meetings with key customer R&D and Procurement teams at the conference.

Rita Corporation at the ASCC Conference



Rita Corporation is experiencing massive growth across USA, Europe and Asia with their new product Ritafactant SFE, which is an all-in-one blend that can be used in a wide range of formulas. These blends work remarkably well in shampoos, body washes, face washes and baby care products. This material is exceptional because of its ability as a Lactylate, to providing residual moisturisation, extended fragrance release, and enhanced delivery of actives. Lactylate boosted prototypes are cost competitive to their sulphated counterparts. Ritafactant SFE can easily be added to the water-phase of cold process production for cosmetic, personal care and even household market segments.

Introducing the Rita Corporation Research & Development Lab; serving major global personal care and cosmetics market players, efficient & effective formulating with sulphate free surfactant systems, and natural emulsifiers, actives, butter, and oils.

The Rita Corporation Technical Breakfast Briefing on Thursday 17 May will offer a deep-dive into formulating for DEA/MEA free, paraben free, plant-based, PEG free, Sulphate free, GMO-Free

Concept and Rita Corporation capability



Leverage speciality focus in Sulphate Free, PEG free, and Paraben Free R&D lab expertise in conjunction with your internal R&D team: Re/Formulation, Reverse Formulating, Technical Support with Raw Materials

Troy Corporation at the ASCC Conference



Mr David Koehl MSc from Troy Corporation will present a Technical Paper on “Preserving Naturally” at the conference. David has nearly 25 years of industry experience in a variety of roles ranging from Research & Development, product management, strategic marketing and international business development.

The Technical Paper presentation at the ASCC Conference, will be Troy Corporation’s market launch of the newly developed material range TroyCare LSB. This unique natural preservative range leverages the capabilities of a combination of organic acids, which when uniquely combined provide effective antimicrobial protection against both bacteria and fungi. Further enhancing this natural preservative range, Troy Corporation has developed through extensive research and development a unique combination of various solvents selected from a group of aromatic alcohols.

The unique combination of these solvents has the surprising effect of extending the pH range, which enables

effective and natural formulation capabilities at pH 6.5 and below.

Specific use-cases will be presented in both surfactant and emulsion/gel systems, providing a natural preservative system that offers capabilities of extremely low use levels, leveraging the unique performance and broad-spectrum preserving capabilities of this material.

What we can offer at the ASCC 2018 conference in Canberra

Visit Concept’s booth at the ASCC Conference, at Stand 12,13 and receive updates on latest Innovations, Global Market Trends, Regulatory, Free-From/Cold Process Formulations with representatives from both Rita Corporation and Troy Corporation.

Come to see Troy Corporation’s insightful Technical Paper presentation on “Preserving Naturally” by Mr David Koehl MSc at 11:30 AM on Friday 18th May 2018 at the ASCC Conference in Canberra.

Book a private meeting with Concept and Rita Corporation or Troy Corporation at the conference booth to get specific details on the latest Innovations, Global Market Trends, Regulatory, Free-From/Cold Process Formulations that your R&D projects can benefit from and more.

Attend the VIP Technical breakfast presentation with Concept, Rita Corporation and Troy Corporation at the conference from 7:30 AM to 9 AM on Thursday 17 May. Catch insights from both Troy Corporation and Rita Corporation, hear what market and regulatory trends are occurring in Europe and the US and network with our principal manufacturer visitors.

For bookings and or more information please email Concept directly at events@conceptchemical.com.au.



TroyCare™



...a beautiful beginning



*The Natural Choice for
Antimicrobial Protection*

TroyCare™ LSB

Introducing TroyCare™ LSB, an organic acid based preservative solution offering safer broad-spectrum protection. Effective across a wider pH range than other organics, TroyCare™ LSB is a series of low color, odorless preservatives for use in even the mildest end-use products. Combined with the portfolio of TroyCare™ Customized Preservative Solutions, Troy offers formulators a full range of protection options.

TROY
The Gold Standard for Performance



Visit us at troycare.com
info.anz@troycorp.com

CONCEPT

Exclusive Australian Distributor
sales@conceptchemical.com.au

A S Harrison & Co – 95 years young



Arthur S Harrison

A S Harrison & Co was established in 1923 in Australia and has gone from strength to strength becoming a key player across many markets in the Australian landscape.

We speak with A S Harrison & Co Performance Ingredients General Manager, Tony Bianchini, to learn more.

How did the company begin?

A S Harrison & Co began in 1923 when Arthur Stanley Harrison, the founder, received some sample products from Dupont which led to the specialised distribution of raw materials for the rubber industry. An office was established in Clarence Street Sydney and business began to flourish.

Since then this family business has expanded into the distribution, manufacturing and exporting of a wide range of specialised materials and, with the third generation of the Harrison family being active in the business today, they perpetuate the Company's tradition of personal service, which has been the hallmark of The Harrison Group since its inception in 1923.

In the 95 years since A S Harrison & Co was formed, there has been a dramatic change in the ingredients used to formulate personal care products. Gone are the days when dangerous ingredients like lead, arsenic and mercury were commonly used in many

Australian Performance
Ingredient team
(l to r) Jeanette Padilla,
Thari Mudalige,
Aaron Lorch,
Lyn Shields,
Tony Bianchini,
Margaux Bonnafous,
Ravini Abeysekara



day-to-day health and beauty products. Today there is a lot more knowledge and care taken to formulate products that are not only safe to our bodies, but also safe for the environment. This is a common trend in the market and A S Harrison & Co proactively works with all suppliers to provide its customers with the leading-edge technology in all its key markets.

How has the company changed in this time?

The company has maintained its commitment to its customers and to providing quality ingredients across multiple Australian, New Zealand and South East Asian markets. From a single office in Sydney, there are now also offices in Auckland and Perth. For a family owned and controlled company to reach this height of success is no mean feat.

The company is now active across a range of markets including Personal Care, Nutraceuticals, Household and Food as well as Lubricant Additives, Fuel Additives, Water Treatment, Mining and Construction.

A S Harrison & Co recognises that quality management is not just a job for one person, but a culture that runs through an entire organisation. A S Harrison & Co has worked hard to maintain a quality management system accredited to ISO 9001 for well over a

decade.

And we were one of the first distributors in Australia to gain the Environmental Management System (ISO 14001:2015) accreditation and by doing so you can feel confident dealing with us knowing that we are doing our best to identify, manage, monitor and control our environmental risks in a comprehensive fashion. The company also has a rigorous Corporate Social Responsibility (CSR) programme that recognises that our company's existence is not stand alone. It's part of a bigger system of people, values, other organisations and nature. The social responsibility of our business is to give back to the world just as it gives to us.

You have the support of a some of the world's major Personal Care principals

A S Harrison & Co is now one of the leading distributors of personal care ingredients to the Australia and New Zealand market representing principals in a range of major markets. These long-standing relationships have given us access to leading edge technology and allowed us to be at the forefront of market technology. Some examples are:

- The Innospec development of sulphate free surfactants – Iselux® – puts A S Harrison & Co at the front of the growing consumer demand for product

ingredients that were not only safer for them, but for the environment too.

- The Lexgard® Series of alternative preservation ingredients allow for the creation of self-preserving or paraben free formulations to safeguard from microbial contamination.
- The SustOleo™ range of palm-free emulsifiers and texturisers by Inolex is a series of new and innovative alternative ingredients for categories that are historically palm derived.

A S Harrison & Co has had the pleasure of partnering with CAC for over five years, supplying the market with fair trade Aloe Vera. CAC produces ingredients to the highest quality ethics and standards and they give back to the community in a programme designed to support the whole farming community. This aligns well with our corporate social responsibility commitment.

The A S Harrison & Co sales team is made up of technically savvy members

My team comprises highly talented individuals with solid technical qualifications and backed up by experience in a laboratory setting. Here at A S Harrison & Co we believe that we should offer more than just quality ingredients. Our team members should be able to offer technical support and



New Zealand Performance
Ingredients team (l to r)
Oana Blythe, Delina Apiata,
Jaime Wallace, Graham Lee

back up and be able to help you with input to maximise your formulations.

We also believe that once the sale is made, the process doesn't end there – this is why we have dedicated Customer Solutions Support personnel specifically for the Performance Ingredients portfolio – both here and in New Zealand.

A S Harrison & Co has been a committed foundation supporter of the ASCC – why have you supported the ASCC for so long?

A S Harrison & Co has been involved with the ASCC since its formation in 1968. We recognise that the ASCC forms an integral part of the Australian market's landscape. It provides a central point of excellence for all companies and individuals within the industry. The support and back up they provide is invaluable, as well as offering a neutral, non-competitive environment in which we can network and share, to the betterment of all involved.

We endeavour to support the long-term partnership by having representation at both local and national Chapter level as well as supporting Chapter Industry Days and, of course, the annual national Conference.

You're the Gold Sponsor for this year's landmark 50th ASCC Conference?

A S Harrison & Co is extremely proud of its 95 year heritage in serving the Australian market and is pleased to announce our Gold Sponsorship of the upcoming ASCC Conference in May, 2018 in Canberra.

As a company we will be supporting

the Conference again this year via sponsorship and exhibiting, as well as encouraging our principal suppliers to attend and present. We look forward to seeing everyone again at the Conference and be sure to visit us at Stand 20/21.





PIONEERING AUSTRALIAN WAX WORLDWIDE SINCE 1978!

LYCON CELEBRATES A RUBY ANNIVERSARY

LYCON Cosmetics was established in Australia in 1978 by Lydia Jordane, an internationally acclaimed beauty therapist. Cosmetic manufacturing was a family concern since 1935, however not being allowed to remove body hair early in her teens, Lydia secretly researched and ordered ingredients to create her first wax in secret on the family kitchen stove in 1968. She then followed up those formulation accomplishments by developing her own waxing techniques.

Exported and used by the top spas and salons in over 70 countries LYCON has a well-deserved worldwide reputation as the Crème de la Crème of hair removal waxes with many world first releases! LYCON has recently moved to much larger premises in Brisbane's Pinkenba. The site boasts over 7000sqm of laboratory, factory and office space to keep up with the ever growing global demand for unique LYCON waxes and skincare products. As a company focused on quality, innovation and professional integrity, Ms Jordane and the LYCON team look forward to continuing their attention to detail and innovation well into the future.



LYDIA JORDANE
FOUNDER & CEO



Lycon
cosmetics|australia

P 07 3004 6200 E wax@lycon.com.au
lycon.com.au

How to find the right contract manufacturer for you?

by Toni Ovenell

Okay, so you have a formulation or an idea for a new product. How do you go about taking that next step and getting your product made and brought to market? This is where a contract manufacturer comes in. How do you find a manufacturer that is right for you?

Here are some easy ways to take those next steps:

1. Make a list – Search the directories, search the web and ask for recommendations from your raw material suppliers or contacts. Consider if you want to deal with a local manufacturer, or if you are happy to work with a manufacturer interstate or overseas.

2. Contact the manufacturers – either by phone or by email. Keep it brief and let them know what you are after. Do you have a formulation (including method) or do you need them to develop one for you? What amount of product do you want to make or how many units are you looking at manufacturing? Is this a generic formulation or are you after something more bespoke? What costs are involved? How long will it take? Will you be able to own your formulas or intellectual property (IP) at the end of the process? It is important to think about what you want from them.

3. Narrow the field – This can be relatively easy as sometimes the manufacturer does not get back to you or you find they have minimum production runs that don't suit. They may not have suitable equipment or be able to offer the full service you are after. Perhaps you will not be able to own the IP if they develop the formulation. At this stage you could ask for quotes for your formulation if you have one or submit a brief to them.

4. Arrange to meet – if this is suitable it is always good to visit the premises and meet face to face or have a more in depth discussion on the phone. This way you can get a feel for the people you will be dealing with and ask more detailed questions. You can also discuss the outcomes you expect from the process. Do you need them to help you with sourcing of ingredients and packaging, or do they expect you to do this?

5. Finally, go back to the old saying “We offer three kinds of services: good-cheap-fast but you can only pick two: good and cheap won't be fast; fast and good won't be cheap; cheap and fast won't be good” and apply this to your final decision.

Remember, this is your product. You need to feel comfortable with



your choice and be confident that the manufacturer can meet your expectations. If it doesn't feel right then keep looking, the right contract manufacturer is out there.

TONI OVENELL is a formulation chemist and consultant for Queensland Cosmetic Formulators. She has worked in the cosmetic industry for many years in a range of roles covering areas of technical sales, quality, supply chain, manufacturing and product development. Most recently Toni has worked for a small contract manufacturer as technical manager, prior to setting up her own business. Toni is passionate about sharing her knowledge, maintaining a viable cosmetic industry in Australia and helping people bring their product ideas to market. She also likes champagne and hockey.



Cosmetics

Always on the safe side

Dermatest has recently joined the Eurofins testing group. With over 45 years experience in cosmetics and 27 laboratories worldwide, serving the cosmetic industry and in continuous expansion. This dynamic resource allows us to offer an even broader scope of testing and development services.

Eurofins | Dermatest Pty Ltd
20-22 King Street, Rockdale NSW Australia
P. +61 2 9556 2601
F. +61 2 9556 3361

Sunscreen Testing

UVA Testing

Chemistry

Stability Testing

In-Vitro Tests

Clinical Studies

Hair Testing

Consumer Research



Dermatest

www.dermatest.com.au
<https://www.eurofins.com/cosmetics/>



superstar florals

by Rebecca Akhyani



In the previous article we looked at the trend towards intensification of fragrances with deep notes such as Amber, Oud and Leather. This trend can be seen across both women's and men's fragrances. Turning the spotlight to women's fragrances there is one truth that prevails year after year, the category which consistently sees the most launches is the floral family. Of the 550 new female fragrance launches in 2017, 230 were florals. The two stand out flowers of this season are the exquisite peony and tuberose.

Peony are a species of flower native to Asia, Europe and North America and have been valued in Chinese culture since ancient times. Today they are used extensively in the cut flower market although they are generally only available in late spring and early summer. The odour of the peony can be described as delicate, summery and feminine. It has a distinctly rose-like in character but is lighter and fresher than rose due to the abundance of green-leafy constituents. The resemblance to rose comes from the high levels of rose alcohols; citronellol, geraniol, nerol, phenyl ethyl alcohol and their acetate esters. While the oil of the peony flower can be successfully

extracted by supercritical CO² extraction, and to a lesser extent steam distillation, it is not a widely available natural product for use in perfumery. The notes of peony found in today's perfumes are for the most part artistic reconstructions of this gorgeous flower.

Launches of note in the peony theme include Yves Saint Laurent's 2018 fragrance Mon Paris Couture which pairs peony with rosebud and sparkling grapefruit in a citrus-floral accord, as well as Acqua di Parma's Peonia Nobile Edizione Speciale, with the more unusual combination of black pepper and raspberry top notes, peony at its heart and a base of amber and patchouli. The 2017 Narciso Rodriguez fragrance Fleur Musc plays on that close relationship between rose and peony, balancing it with the signature Narciso Rodriguez musky-amber base.

Tuberose is the other blockbuster flower of the season. This flower has been prized in French perfumery ever since it was brought back by explorers from the New World and is synonymous with the traditional French extraction technique of Enfleurage. Today India is the main producer of tuberose absolute using extraction with volatile solvents.

There is a common misconception that tuberose is a type of rose, however it is neither botanically related nor similar in odour. The scent of tuberose is a heady jasmine-like floral with a spicy facet and a creamy character similar to coconut.

The tuberose note makes its mark on perfumery with recent launches such as Gucci Bloom, a super floral built around tuberose, jasmine, iris and Rangoon creeper. Chanel's Gabrielle follows the white flower theme in which tuberose, orange blossom, jasmine & ylang are enlivened with citrus and blackcurrant top notes. With tuberose at its core the new Hermès fragrance Twilly d'Hermès enhances the spicy and creamy facets of the flower by blending with ginger and sandalwood respectively.

President's Report

by Robert McPherson



It's a little cliché to say, "It's hard to believe it's been a full 12 months since we last held our annual conference and yet here we are again". I feel like every president before me has started their conference report with this statement, but this year has gone in what feels like a flash. 2017/18 has been a momentous year for the ASCC as the society has gone from strength to strength, our conference attendees still steadily increasing and financially, the ASCC is in a very comfortable position with this year recording a good surplus, which the council plans to reinvest in the society in the way of education and publicity activities. I plan to keep this report short and high level as more details will be provided in the chapter and functional group report.

As we move towards this year's golden anniversary conference, it is important to take the opportunity to look at the history of the ASCC: how did the ASCC begin? where did we have come from? and who some of the key figures in past were? but most importantly the conference will provide a platform for education,

inspiration and networking to enhance our members professional development and sow the seeds for our future generations of cosmetic chemists. All this and more will be on offer at this year's conference. I'd also like to take this opportunity to thank every single member of the 2018 conference organising committee and the companies who support them. These volunteers give up their own time and resources to organise these events, and this being the 50th anniversary conference, it took a lot more time and resources than usual. Please make sure you show your appreciation and buy these guys a drink, you owe them at least one. I would also like to thank all our speakers, international guests and sponsors. Without whom, this conference would be very difficult to put on.

At the Chapter level we are seeing a steady interest in our lecture dinners, supplier's days and Christmas events in the east coast and the rapid expansion of activities in the west coast. In this last year we held the inaugural Western Australia supplier's

day – this was a remarkable success with over 100 attendees participating and learning, this was followed by a lab and lecture series which also had a good turnout and some fantastic feedback, congratulations to all involved from all chapters. The calendar for 2018/19 has started to fill up, please continue to support these events and provide any feedback on how we can improve these further.

Lastly, we have a number of outgoing Council members this year, with Henry King, Julia Hudson, Stephen Morris and Belinda Carli all resigning from council – I would like to extend a personal thank you to all these members for their years of hard work and dedication to the society and for leaving the ASCC in the great shape it finds its self in now.

See you all in Canberra.

Best regards,

Robert McPherson

ASCC President

Welcome to

our 50th Annual Conference

– *the Golden Touch of Beauty!*

Welcome to the 50th Australian Society of Cosmetic Chemists annual conference, where we mark a real mile-stone for our Society and Industry as a whole. Our theme this year is focused on what it takes to make a stand-out product and formulation, with a multitude of formulation solutions being presented throughout the technical and marketing program.

We'll hear about innovative approaches to sustainability from our Key Note speaker, *Paul Frasca*, Founder and Managing Director of award winning Sustainable Salons Australia. His innovative approaches to reducing salon waste and recycling used materials will inspire you to rethink your current practices and how you can make it a key philosophy of your company. With sustainability so prevalent to consumers, his approaches have set an industry standard to be followed.

We're also pleased to welcome IFSCC Guest Speaker, and United States Society of Cosmetic Chemists President, *Perry Romanowski*, presenting on Cosmetic Chemistry in the Internet Age, A Scientists Guide to Effective Use of the Internet.

This program features a further 34 technical and marketing focused presentations and seven laboratory workshops from internationally renowned speakers and experts in their field; it's a solution oriented and innovation focussed program not to be missed!

Even more to discover ...
make sure you visit our:

- Innovation displays – see the latest launches from around the world brought together in one area
- Perfume pantry – an interactive aroma-based area featuring the latest scents to inspire

- Formulation displays – lab demonstrations to solve formulation issues
- Panel discussion – where a hot topic of the industry will be debated from various industry expert perspectives!

Make sure you get social!

Our social program this year provides even more exciting networking opportunities! Enjoy our culturally rich welcoming function, trivia challenge night and Masquerade Closing Gala. Mingle with like-minded colleagues or meet others with key material, branding and manufacturing solutions.

So, come find your Golden Touch of Beauty this year in Canberra, May 16th – 18th, and celebrate our 50th Annual Conference with the colleagues that hold your formulation, manufacturing and innovation solutions!

Belinda Carli and the 2018 Conference Organising Committee.

Visit the ASCC website for more information or to register:

<https://ascc.com.au/annual-conference/>



Golden Touch of Beauty
50th ASCC Conference 16th-18th May 2018, Canberra



Golden Touch of Beauty
50th ASCC Conference 16th-18th May 2018, Canberra

50TH ASCC CONFERENCE PRELIMINARY SCIENTIFIC PROGRAM

16TH - 18TH MAY 2018

WEDNESDAY, MAY 16th

10.00 - 10.30 WELCOME

Opening Ceremony

Robert McPherson - Australian Society of Cosmetic Chemists President 2018

ASCC - The First 50 Years

Ray Townsend - Cosmetic Technical Services

10.30 - 11.30 KEYNOTE ADDRESS

Making Salon Waste History

Paul Frasca - Sustainable Salons Australia

11.30 - 12.00 IFSCC GUEST SPEAKER

Cosmetic Chemistry in the Internet Age - A Scientists Guide to Effective use of the Internet

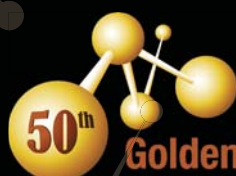
Perry Romanowski - Society of Cosmetic Chemists President 2018

	PRESENTATION Room 1	PRESENTATION Room 2	FORMULATION WORKSHOP
12.15 - 12.45	A natural extract from plant stem cells to redensify the skin and reduce wrinkles <i>Antonio Ciaval - Akott Evolution</i>	Athleis'ure Beauty <i>Malie Zauber - Carst & Walker</i>	-
LUNCH & INNOVATION ZONE			
14.00 - 14.30	Moment of Care <i>Michele Dalli & Helen Costanza - BASF</i>	-	The Golden Age of Color: Make up made easy <i>Armelle Sebbag - Avenir Ingredients</i>
14.30 - 15.00	Functional Bioactive Delivery Systems for Cosmeceuticals <i>Rahau Shirazi - Callaghan Innovation</i>		
15.00 - 15.30	The Evolving Science of Nutrigenomics.... a new paradigm in formulating cosmeceutical <i>Christine Houghton - Cell-Logic</i>	The Present & Future of Customisation <i>Belinda Carli - Institute of Personal Care Science</i>	-
AFTERNOON TEA			
16.00 - 16.30	Skin microbiota and stem cells: a delicate balance for healthier skin <i>Emile Venera - Givaudan Active Beauty</i>	-	Novel solutions to make unique personal care formulations <i>Gary Yao - Lubrizol Advanced Materials</i>
16.30 - 17.00	Backhousia citriodora leaf extract: a new active solution to control hyper-seborrhea for multi-ethnic skin <i>Martin Shortt - Southern Cross Botanicals</i>		
<div>18.30 – 21.00 Welcome Cocktail Party - Official Welcome Function</div> <div>National Portrait Gallery</div> <div>Meet and mingle with your fellow conference attendees in true Iconic Canberra style!</div> <div>An art and cultural evening with drinks, canapés and entertainment to set the scene for our 50th Annual conference!</div> <div>Dress code: Smart Casual</div>			

THURSDAY, MAY 17th

	PRESENTATION Room 2	PRESENTATION Room 1	FORMULATION WORKSHOP
8.30 - 9.00	Skin adaptive response to photoaging <i>Robert McPherson - Lubrizol Australia</i>	-	Smart Effects, Concepts That Shape the Future <i>Sitanun Rattanavattanathorn - Merck</i>
9.00 - 9.30	Clinically Visible Improvements of Photodamaged Skin with Topical Micro-Encapsulated Retinol <i>Shiva Farabi - Ultraceuticals</i>		
9.30 - 10.00	Stabilizing Skin Endogenous Photosensitizers: The Ultimate Solution for Total Photoaging Prevention <i>Robert S. Hu - The Hallstar Company</i>	Cosmetics Preservation: market trends and challenges <i>Mark Zhang - Schülke & Mayr</i>	-
MORNING TEA			
10.30 - 11.00	The alternative preservation solution for sun care products <i>Timm Zabel - Evonik Dr. Straetmans</i>	-	HIPE gel Turning emulsions inside out <i>Francesca Craddock - Carst & Walker</i>
11.00 - 11.30	Changes to the SPF test ISO 24444 - Why and When? <i>John Staton - Eurofins Dermatest</i>		
11.30 - 12.00	Laser Spectroscopy for Suncare Applications: Tracking the Photostability of Avobenzone with Sunscreen Filters and Emollients in Real Time <i>Emily L. Holt - University of Warwick</i>	Nude Cosmetic compositions stimulate consumer emotions, perspectives or illusion <i>Frederick Santos - Seppic</i>	-
LUNCH & INNOVATION ZONE			
14.00 - 14.30	PANEL DISCUSSION	-	-
14.30 - 15.00	Grifolin derivatives from <i>Albatrellus ovinus</i> as TRPV1 receptor blockers for cosmetic applications <i>Francesca Craddock - Carst & Walker</i>		Soap, Interrupted: Formulating personal care cleansers with “sweet” surfactants that hit the spot <i>Iman Irhimeh - CeeChem Australia</i>
15.00 - 15.30	Agarwood Oil: Towards a Gold Standard <i>Hettiarachchi, D.S. - Phytocognosy</i>		
AFTERNOON TEA			
16.00 - 16.30	Improved Solution Properties and Enhanced Performance in Gel and Emulsion systems using Heat Treated Xanthan Gum <i>Brian Patten - AkzoNobel</i>	Speed up formula development and ensure market requirement, using performance solutions designed for cosmetic R&D laboratory <i>Jonathan Coeur - Coptis</i>	-
16:30 - 17:30	AGM MEETING	-	-
<div>OPTIONAL: Fun Trivia/Games Night, ASCC Style!</div> <div>Burberry Terrace</div> <div>Make sure you book into this optional extra night of fun. With games and fun themed to suit our amazing personal care industry, this is a wild night of madness and mayhem not to be missed! Dinner includes a gourmet BBQ, soft drinks and plenty of laughter. There will also be a cash bar available.</div> <div>Dress code: Neat casual.</div>			

Please be advised that this is a Preliminary Program only.
Presentations and Speakers are correct at time of publication and is subject to change.
A Final Program will be available closer to the conference date.



Golden Touch of Beauty
50th ASCC Conference 16th-18th May 2018, Canberra

FRIDAY, MAY 18th

	PRESENTATION Room 1	PRESENTATION Room 2	FORMULATION WORKSHOP
8.30 - 9.00	A Natural Extract from Sprouts to Stimulate Hair Cycling and Vitality <i>Antonio Ciavol - Akott Evolution</i>		Minimalism: The New Black. Creating more with less the Japanese way <i>James Sequerra - Nikkol group</i>
9.00 - 9.30	New Double-derivatized Guar Action on Split-Ends Mending in Heavily Damaged Hair <i>Herman Tang - Solvay Specialty Chemicals</i>		
9.30 - 10.00	Twist your skin care to a leave-on rich aerosol free foam <i>Frederick Santos - Seppic</i>	Re-invigorating old Concepts and technology with new, Green Botanically Based Functional Actives to meet current and future market trends <i>Quinn Ryder - Active Concepts</i>	
MORNING TEA			
10.30 - 11.00	Multi-functional benefits from emulsifiers: achieve high viscosity formulations with naturally-derived polyglyceryl ester emulsifiers <i>Victor Low - Lonza</i>		Transformative Texture Showcase: Open your Mind to Endless Possibilities and Innovations <i>Matthew Martens - Croda Australia</i>
11.00 - 11.30	Evidence of sustainable cosmetic ingredients <i>Stefano Salini - Roelmi HPC</i>		
11.30 - 12.00	Preserving Naturally <i>David Koehl - Troy Corporation</i>	Authentically you on Textured-Hair with Organics and Silicone Solutions <i>Pornsak Raopattananon - Dow Chemical</i>	
LUNCH & INNOVATION ZONE			
14.00 - 14.30	Utilization of Yeast-Derived Enzymes to Enhance the Compatibility of Botanical Extract <i>Chris Ridgewell - IMCD</i>	The use of Patent Literature to benefit your company <i>Albert Abram - Professional, Scientific and Technical Services</i>	
14.30 - 15.00	High Efficacy Antiperspirant Aerosol Active: Comparative Clinical Studies of Sweat Reduction by Activated Aluminium Chlorohydrate and Innovative Activated Aluminium Sesquichlorohydrate <i>Dr. Zijun Li- Gulbrandsen Technologies</i>	Get your way through the hair styling jungle <i>Natalie Koester - KahlWax</i>	
15.00 - 15.30	Natural stress-relief from Stevia Extract <i>Daniela Lima - Connell Bros</i>		
15.30 - 16.00		A change in the meaning of aging <i>Robert McPherson -Lubrizol Australia</i>	
<p>19.00 – 12.00 Masquerade Gala Dinner – Gala Event presentation room</p> <p>What better way to end this Grand Event than a Grand Masquerade Dinner and dancing? Join us as we close our very special 50th Conference with a glittery, glamour evening of gourmet food, wine and dancing till the early hours!</p> <p>Dress code: Gala Dinner Dress PLUS Masquerade Mask presentation rooms (one and two)</p>			



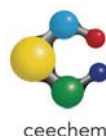
GOLD SPONSOR

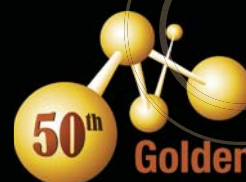
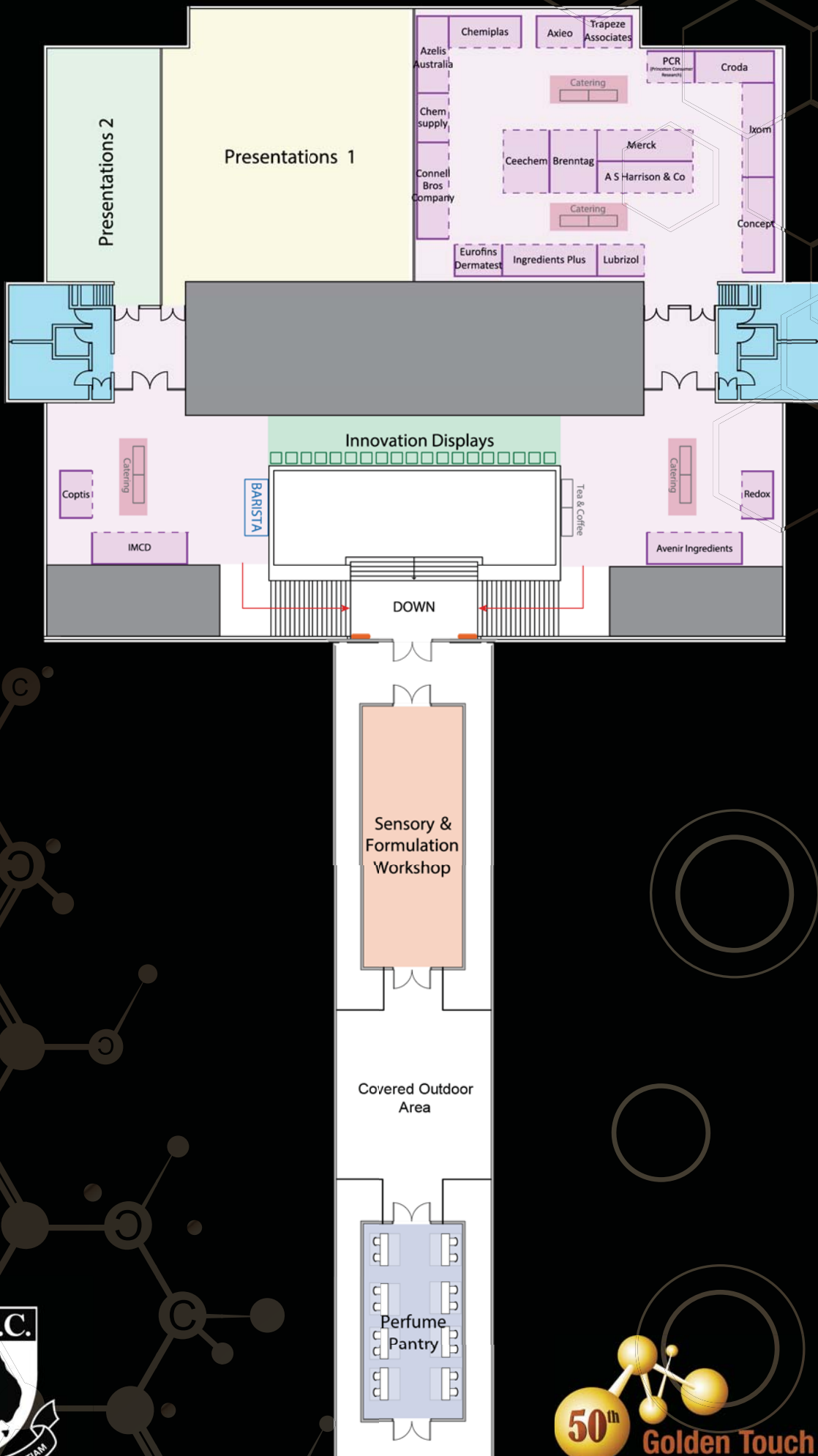


SILVER SPONSOR



BRONZE SPONSOR





Golden Touch of Beauty
50th ASCC Conference 16th-18th May 2018, Canberra

pre- and post- chemical peel skin care – why is it important?

by Tina Aspres

In the United States the number of chemical peels performed by members of the American Society of Dermatologic Surgeons has increased steadily over the past five years to be equivalent in 2016 to the number of “laser” treatments for facial redness and photo-ageing. Improved peel formulations, relatively low patient/client costs when compared to injectables and energy based devices, a broad range of indications, and efficacy are factors responsible for the resurgence of chemical peels in aesthetic medicine.

Chemical peels are traditionally described as superficial, medium and deep referring to the level of penetration of the peeling agent.

Superficial strength peels act solely on the epidermis without penetrating the basement membrane into the dermis. They stimulate keratinocyte renewal from the basal layer, release of growth factors (cytokines) from keratinocytes and produce reactive inflammation in the upper dermis that stimulates neo-collagenesis by activating fibroblasts that

synthesize new collagen and elastic fibres.

Medium strength peels penetrate to the papillary dermis and upper reticular dermis. Regeneration of the epidermis occurs from the cells of the follicular epidermis which courtesy of its deeper and more sun protected location provides superior regeneration of the epidermis. The papillary dermis inflammation is more intense and leads to greater collagen and elastic tissue renewal.

Deep chemical peels penetrate down to the mid reticular dermis to produce protein coagulation. New epidermis regenerates from the depths of the follicular epithelium and there is intense synthesis of new collagen and elastic tissue that can persist for years after a single treatment. Deep chemical peels should only be performed by a medical doctor who is specifically trained in their use. Sedation is often required and cardiac complications may arise. There is a lot of hand hold during the recovery phase for deep peels but the results can be remarkable and long lasting (often



three to five years post peel).

Whether the chemical peel chosen to be superficial, medium or deep, the following three areas must be addressed to ensure an ideal outcome for the patient/client and treatment provider.

- 1 Is this patient/client suitable for a chemical peel?
- 2 What am I trying to achieve and prevent when performing a chemical peel?
- 3 What are the essentials of pre- and post-peel care?

Contraindications to superficial and medium strength chemical peels	
Absolute contraindications	Relative contraindications
Allergy to any peel ingredient Non-compliant patient/client Unrealistic expectations History of connective tissue disease Active history of anxiety and/or depression Pregnant or breast feeding Isotretinoin therapy (within 6 months) Active herpes simplex Non-compliant with sun protection	History of hypertrophic or keloid scarring on skin History of frequent herpes simplex infection Rosacea Atopic eczema “Sensitive” skin Warts

Table 1: Contraindications to superficial and medium strength chemical peels

Is this patient/client suitable for a chemical peel?

Saying “no” can be one of the most difficulty words to articulate to patients/clients. The reasons are many: we may avoid saying “no” when we are afraid that it will put us into conflict with our patient/client, when we are concerned it may suggest we lack the necessary skills to ensure a good outcome, or when we have subconscious business pressures that drive us to convert every consultation into a treatment? A happy outcome and the guarantee of a long-lasting trusting relationship with our patients/clients starts however by saying “no” when any absolute contraindications to chemical peels is detected on history taking and/or examination or when one feels uncomfortable with the patient/client relationship. Table 1 outlines the authors suggested contraindications to superficial and medium strength chemical peels.

What am I trying to achieve when performing a chemical peel?

In performing any chemical peel treatment, the goal is the same. Having discussed the procedure and having assessed the patient (and with their consent) the treatment will achieve the expected outcome for the indication it has been recommended whether it be for the treatment of acne, hyperpigmentation, photo-ageing or simple rejuvenation. Such an ideal and happy outcome however cannot be achieved without proper and complete pre-and post-peel care

The aims of pre-and post-peel care are to enhance agent penetration, to maximise skin health and to facilitate rapid healing to deliver an efficacious

outcome and to reduce post-peel complications (Table 2).

Post chemical peel complications
Milia Delayed healing Prolonged erythema Post inflammatory hyperpigmentation Infection Scarring

Table 2: Post-peel complications

What are the essentials of pre- and post-peel care?

Pre-peel skin care can be divided into two stages:

- Skin preparation
- Skin pretreatment

Skin preparation

Skin preparation commences well before the chemical peel treatment is administered. In fair skin patients (Fitzpatrick type I – III) this stage may last a few weeks but in darker skin types (Fitzpatrick skin types IV–VI) the pre-peel phase is recommended for 4–8 weeks.

The skin preparation phase not only improves peel penetration and optimises skin health, but it also allows the treating person to gauge the patient’s/client’s compliance with the skin care and advice prescribed. Any lack of compliance or blasé approach from the client or patient should terminate the planned chemical peel.

To achieve the essential goals of this phase the client/patient must adhere to the following:

- Strict and complete sun protection on a daily basis (this doesn’t not mean merely application of an SPF): broad spectrum SPF 50+, wide brimmed hat, sunglasses and seek shade

- The use at all times of a gentle liquid soap free cleanser
- Application of a fragrance-free emollient
- No hair removal of any kind
- No colouring or bleaching of scalp or facial hair

In addition, treatment must be introduced to thin and smooth the epidermis (in the form of a suitable alpha- or beta-hydroxy acid preparation) and to reduce the pigment load and potential within melanocytes and keratinocytes (various agents can be considered such as L-ascorbic acid, niacinamide, hydroquinone, retinol, azelaic acid and others)

Prophylactic antivirals may also be introduced at the end of the skin preparation phase to anyone who is predisposed or has a history of herpes simplex to prevent an outbreak post peel.

Skin pretreatment

The skin pretreatment phase occurs on the day of the peel immediately before application.

The aims of this phase are to improve the uniformity of depth of the peel and to improve the ease of application of the peel. Combined with the longer lasting skin preparation phase, the skin pretreatment phase also enhances the speed of healing and prevents complications.

To achieve the goals of the skin treatment stage, the client/patient must adhere to the following:

- Continue any prescribed antiviral (or antibacterial) prophylaxis
- Abstain from applying makeup or perfume agents in the 48 hours prior to peel application
- Adhere to any pain-relieving measures prescribed

In addition, prior to application of the peel, the treatment provider must ensure adequate degreasing of the skin using either alcohol, acetone or chlorhexidine gluconate (depending on the type of peel and protocol), and maintain adequate pain control measures at all times.

Following the chemical peel the treatment provider and client/patient must remain acutely aware that failure to comply with post peel care will almost certainly result in reduced efficacy and/or treatment complications.

To achieve the goals of the post-peel skin care stage, the client/patient must adhere to the following:

- Continue to adhere to strict and complete sun protection measures
 - Use only gentle liquid soap free cleanser
 - Ensure proper hydration of the healing skin using recommended skin care
 - Continuance of any antimicrobial treatment
 - Avoiding at all times of picking or scratching the skin, and application of irritants such as perfumes or fragranced skin care
 - The full recommended course of treatment
- The treatment provider must select

for the client/patient an appropriate emollient for this phase rich in occlusive, humectant and anti-inflammatory ingredients specifically tailored for the peel performed and patient skin type. Petrolatum is always a good, non-irritating, bland and very effective emollient to use.

In summary, an optimal outcome for patients and clients undergoing chemical peels starts with rejecting unsuitable candidates followed by proper and complete pre-and post-peel care. Clients/patients need to be counselled at length to understand that the outcome of a chemical peel hinges not on the few minutes which it is in contact with the skin, but in the preparation and care that last weeks before and after application.



ConnectingChemistry

ENJOY SUCCESSFUL PARTNERSHIPS

Brenntag Australia Pty. Ltd.
262 Highett Road, Highett
Victoria, Australia
Phone: +61 3 9559 8333
info-aus@brenntag-asia.com

Brenntag New Zealand Limited
75 France Street, Eden Terrace
Auckland 1010, New Zealand
Phone: +64 9 275 0745
info-nz@brenntag-asia.com

www.brenntag-asia.com

Dedicated Team, Innovative Solutions
Brenntag has built its reputation on partnering with the best ingredients manufacturers and delivering the highest quality products to its customers.

Working with Brenntag means not only accessing our wide-ranging product expertise, but also our extensive market and formulations know-how.

Discover our Cosmetics portfolio:

- Advanced ingredients
- Inspiring concepts
- Innovative textures
- Modern applications

Benefit from our comprehensive natural ingredients product range:

- Bio-functional Actives
- Botanical Extracts
- Conditioning Agents
- Emollients
- Emulsifiers
- Rheology Modifiers
- Scrubs
- Sunscreen Actives
- Surfactants
- Vitamins



bad science or naughty marketing?

by Emanuela Elia



When making claims about a cosmetic product, it is the responsibility of the marketer to ensure that rigorous scientific evidence supports the claims being made¹. The marketer must have sufficient information for each claim being made. The data must be clear, accurate, and relevant to the product, ingredient, or combination of ingredients being marketed. Evidence to substantiate claims can be obtained in different ways. It can be a reference to well-established knowledge or previous research, or be the result of a new study designed for such a purpose. The type of claim to be validated will influence the study design on a case-by-case basis. As such, the quality of the study design, data, and results are crucial.

Below, we will touch on three examples involving evidence in support of cosmetic claims where some improvements need to be made.

Quality of the evidence

Clinical trial reports are where the evidence accumulated over a trial is presented in order to support

cosmetic claims. It is expected that reports are prepared and checked by clinical research professionals with the appropriate qualifications, experience and skills. While mistakes can happen, these are generally picked up quickly and promptly corrected. However, a common error that has occurred in some of the cosmetic trials reports we have reviewed over the years is the way that average change scores are calculated from the raw data.

The erroneous way to calculate the average change is to average raw values across visits, and then subtract one mean from the other. Instead, what must be done is to calculate the change on a subject-by-subject basis FIRST, and then get the mean of the individual change scores. This is demonstrated in the table below. The two rows at the bottom compare the ways that change is calculated. As you can see, the two methods of calculation can yield very different results. Remember: you are calculating the average change and NOT the change between averages.

Interpretation and communication of data

One source of debate in the cosmetic industry has been how to use science to support product claims. Discussions between both R&D and marketing teams are usually the basis for developing a cosmetic claim. The biggest challenge is how one can present information that maintains scientific integrity in a way that consumers can easily understand and relate to.

You might have noticed cosmetic claims referring to a product effect of “up to” X%, which, from the point of

Subject No	Baseline	V1	V2	V1 % change	V2 % change
1	0.87	1.64	0.65	88.44	-25.20
2	0.95	0.50	0.45	-47.92	-52.55
3	0.66	1.35	0.40	106.33	-38.79
4	0.62	0.16	0.92	-74.12	49.36
5	0.87	0.36	0.76	-58.22	-12.02
6	1.03	1.95	1.00	88.57	-3.11
7	0.71	1.61	0.61	125.99	-14.74
8	0.50	0.35	0.90	-29.98	80.00
9	0.40	0.16	0.94	-60.78	136.54
10	0.52	1.00	1.10	90.73	109.83
Average of each subject's % change	0.71304	0.908	0.774	22.904	22.933
% change calculated using means	0.713	0.908	0.774	27.292	8.505
This row is how % change should be calculated: first, each subject's % change is worked out, and in this row, the values are averaged together					
This row is how % change is usually calculated, first by getting the means of the raw data and then calculating the % from those two values.					

view of clinical research professionals seems a rather questionable approach. Commonly, when referring to a product's efficacy, researchers refer to the 'average' effect, which is the average effect one would expect to experience based on the results from the study participants.

On the other hand, it seems that cosmetic marketers making cosmetic claims tend to put more emphasis on the 'maximum' effect experienced by a single study participant. Naturally, this is because the 'maximum' effect of one person looks better than the 'average' effect involving all study participants. For a similar reason, the 'minimum' (perhaps even 'negative') effect which might be experienced by other test participants (perhaps even the majority of them), is most likely omitted.

One can argue that referring to product efficacy 'up to' is a misrepresentation of the actual product benefits and that a more genuine interpretation of the results should be encouraged. It is used because it gives the impression of better product efficacy,

but instead should be treated as the maximum potential of a product. Much like the lottery which advertises the maximum prize pool, it says nothing of what you are most likely to receive if you participate which ignores the majority of the data collected in the study. See the example below where the average effect is highlighted in green while maximum effect is highlighted in red.

Subject No	Baseline	V1	V2	V1 % change	V2 % change
1	0.87	1.64	0.65	88.44	-25.20
2	0.95	0.50	0.45	-47.92	-52.55
3	0.66	1.35	0.40	106.33	-38.79
4	0.62	0.16	0.92	-74.12	49.36
5	0.87	0.36	0.76	-58.22	-12.02
6	1.03	1.95	1.00	88.57	-3.11
7	0.71	1.61	0.61	125.99	-14.74
8	0.50	0.35	0.90	-29.98	80.00
9	0.40	0.16	0.94	-60.78	136.54
10	0.52	1.00	1.10	90.73	109.83
MEAN	0.713	0.908	0.774	22.904	22.933
MAXIMUM	1.03	1.95	1.10	125.99	136.54
MINIMUM	0.40	0.16	0.40	-74.12	-52.55

Claims about individual ingredients

Many companies developing and selling raw material invest a lot of time and resources into product research, including consumer studies and clinical trials. Most ingredients already on the market will have a product information sheet including all available data on the products' sensory properties, efficacy and safety. New ingredients naturally require new studies to investigate any benefits they might confer to the user.

The data collected on a specific ingredient enables raw material suppliers to sell their product and can also be used by cosmetics distributors to make claims based on one or more elements included in the product's formula. An example of an ingredient claim is "contains glycerine to improve skin hydration". However, a common mistake in cosmetics marketing is to attribute the efficacy of a single ingredient to the finished product. A finished cosmetic product is usually made of several ingredients which may not have ever been tested together in that particular formulation.

Data related to a certain raw material are likely to be quite different from the data related to several ingredients – when used in combination, the properties of various compounds (active or not) are very rarely additive. Therefore, the effects of a single ingredient are not necessarily going to be a representation

of the properties of a product containing it along with several other raw materials. It is important that this is made clear to the consumer, as portraying the effect of an ingredient as the effect of the finished product is incorrect. Ideally, clinical tests should be run on the product as a whole.

Conclusions

Responsible product developers and marketers of cosmetic products should place special consideration in the collection, analysis, and presentation of the evidence needed to support their claims. Both industry professionals and regulators need to identify the valid and significant evidence from which claims are derived. Furthermore, these claims must clearly and accurately convey this information to consumers. Having robust scientific evidence in support of cosmetic

claims, and the ability to present them correctly will help protect the brand integrity, properly espouse the benefits of cosmetic products, and avoid costly remedies or lengthy legal actions when evidence is flawed, misconstrued or simply not available.

References

Joachim W. Fluhr, Practical Aspects of Cosmetic Testing, 1st Edition. 2010

EMANUELA ELIA is the Director of Ozderm, which specialises in *in vivo* testing and clinical trials for cosmetic and personal care products. Emanuela Elia has a law degree from Rome and a Master of International Business from the University of Sydney. She had collaborated with Australia's longest serving Contract Research Organisation Datapharm for a few years before setting up a cosmetic and personal care products testing facility in 2009. Emanuela is enthusiastic about improving the quality of cosmetic and personal care products' research in Australia through science.



**CLINICAL TRIALS FOR COSMETICS
AND PERSONAL CARE PRODUCTS**

Specialised in claims support studies:

EFFICACY

Expert grading & Clinical photography
Bio-instrumental measurements
Consumer self-assessment

SAFETY

Short term irritation testing
Cumulative irritation testing
Sensitisation testing (R.I.P.T)

All Tests Conducted in Australia

Clients may be eligible for the **43.5% R&D Tax Incentive**

trials@ozderm.com.au
www.ozderm.com.au

Ph: +61 (0)2 9719 3852
Fax: +61 (0)2 9719 2811

Suite 1, 56-56A Thompson St. Drummoyne NSW 2047



Aromatherapy update



by Catherine Cervasio

Aromatherapy dates back thousands of years and has been used throughout many cultures as a way to improve health and vitality.

Early history dates the use of essential oils back as far as 4000 BC. The term 'aromatherapy' was actually coined by French chemist Rene Maurice Gattefosse following an accident in his lab where he plunged his burnt hand into lavender oil – the nearest liquid, following a chemical injury. De Jean Valnet, a French doctor, used essential oils during the Second World War to treat wounded soldiers.

The word 'aromatherapy' comes from the Greek word 'aroma' (fragrance or perfume) and 'therapy' (to heal). In addition to the Greek, Roman and Egyptian cultures are thought to also have embraced the use of essential oils. Resins and aromatic substances were used to embalm, applied to skin

for healing effects and inhaled during ceremonies. Evidence does exist to show some form of aromatherapy was also used in China. The oldest known medical book in China is from 2700 BC. Written by Shen Nung, it contains information and recipes for hundreds of remedies using herbs which came in as handy information during one of my presentations in China.

For novices, aromatherapy is used to describe the use of pure essential oils – the volatile substances from plant stems, leaves, twigs, flowers, seeds, resins, bark and more, for health and wellbeing. Personally, aromatherapy has been a part of my life since I was a child. I would take fresh herbs and make tea to add to bath water, or inhale the scent of freshly picked rose petals regularly. As a teenager I would mix face masks and body scrubs using herb water and oatmeal or avocado.



Copyright © Catherine Cervasio 2018

It's no wonder I went on to study this wonderful subject as an adult.

Pure essential oils are 100% natural. They are most commonly extracted through the steam distillation method as well as by extraction (cold pressing, for example using the rind of an orange) and using solvent extraction – the least desired method for modern aromatherapy due to the residues of solvents present in the resulting essential oil. More recently

CO² extraction (using carbon dioxide) has been available however the chemical profile slightly differs using this method so practising therapists and formulators working on therapeutic properties should seek advice on composition, prior to incorporating the essential oil into a formulation.

Many parts of one plant may be used to extract different essential oils for example, take the orange (*Citrus aurantium dulcis*). The rind produces sweet orange oil, the leaf/twig produces petitgrain and the flowers or blossoms produce neroli. Because more blossoms are required to obtain the same amount of oil compared to using the rind of the fruit, the essential oils from the flowers are extremely expensive. This applies to oils of jasmine and rose for example, which also come from the flower petals or blossoms. These essential oils are therefore sometimes substituted with a 'nature identical' or synthetic raw material to provide a similar aroma in the end product. Sighting certificates of analysis and supporting documentation during the formulation stage is therefore critical to ensure any 'free from' claims can later be upheld for clients.

In Australia the use of natural therapies including aromatherapy is widely accepted. I studied for a Diploma in Aromatherapy close to twenty years ago. At that time there was little in the way of formal education in this field. Now there are numerous institutions which recognise and teach full complimentary health and naturopathy courses to degree level.

We have an abundance of land in Australia and ample space to cultivate crops specifically for yielding essential oils including *Melaleuca alternifolia* (tea tree), *Santalum album* (sandalwood – whilst our Western Australian region is the world's largest distiller of sandalwood spicatum oil, this oil is different in chemical composition which means it is not usually the oil of choice for aromatherapists) and *Lavandula angustifolia* (lavender). Our Australian-grown oils are amongst some of the most well known in the world.

Whilst natural therapies are embraced



and essential oils are used widely, like elsewhere in the world, still little research has been done in the area of aromatherapy for example during childbirth and post partum or for wound healing.

I recently presented on the topic of aromatherapy to over 500 health professionals in Asia. Using aromatherapy to manage pain related to childbirth is one area that has been researched more than any other in relation to the application of essential oils for pain. Despite the availability of some data, results however are inconclusive. A review of two randomised controlled trials involving more than 500 women found no difference in pain intensity, rate of caesarean section, or frequency of requests for pharmacological intervention for women being treated with clary sage, chamomile, lavender, ginger oil, or lemongrass compared to women receiving standard care. A separate, semi-experimental clinical trial found that women who were treated with lavender aromatherapy during labour reported a lower intensity of pain than women in a control group. A similar study using orange oil for pain management during labour and delivery reported comparable results. Although conflicting reports exist, the low cost, ease of use, and non-invasive approach makes aromatherapy a viable option for complementary care during pain management including for during labour.

Essential oils can be incorporated in

a wide variety of products. We recently developed a natural candle to celebrate our Aromababy anniversary of 21 years. Through the process we discovered almost all fragrant candles use artificial fragrance to some degree and often brand owners are unaware. Whilst formulating without artificial fragrance is possible, it is an expensive exercise so retail costs need to be determined from the outset and worked back to reach the desired wholesale price and ultimately, cost of goods.

For brand owners and formulators alike wanting to incorporate essential oils into personal care and home products, it is vital to take into consideration any therapeutic requirements, aesthetic appeal, aroma, potential marketing advantages and above all, safety.

References

- * M. Kaviani, S. Azima, N. Alavi, and M. H. Tobei, "The effect of lavender aromatherapy on pain perception and intrapartum outcome in primiparous women," *British Journal of Midwifery*, vol. 22, no. 2, pp. 125–128, 2014.
- ** M. Namazi, S. A. A. Akbari, F. Mojab, A. Talebi, H. A. Majd, and S. Jannesari, "Effects of citrus aurantium (bitter orange) on the severity of first-stage labor pain," *Iranian Journal of Pharmaceutical Research*, vol. 13, no. 3, pp. 1011–1018, 2014.
- *** Shaheen E. Lakhan, Heather Sheaffer, and Deborah Tepper, "The Effectiveness of Aromatherapy in Reducing Pain: A Systematic Review and Meta-Analysis," *Pain Research and Treatment*, vol. 2016, Article ID 8158693, 13 pages, 2016. doi:10.1155/2016/8158693
- **** Other information has been researched and compiled using information found electronically including PubMed, Science Direct and personal reference books.



reconnect with your origins for healthier skin

Since the Industrial Revolution in the 18th century, and increasing urbanisation, the relationship of humans with their environment has changed dramatically with a large part of the population moving to the cities, away from their ancestral constant interaction with nature. This important moment also represented a relevant trigger in the prevalence of inflammatory disorders, such as allergies and eczemas, which leads us to deduce that the reduced exposure to nature contributes to increasing the risk of inflammatory skin conditions.

Research shows that people living in close contact with nature, similar to our ancestors, present a high bacterial diversity and have a high concentration of anti-inflammatory bacteria, associated with a healthier and more protected skin. This finding led to the conclusion that the more exposed one is to modern lifestyles, the higher the reduction in the microbiome's richness is, making the skin more prone to sensitivity and discomfort.

The new heptapeptide developed by Lipotec, **FENSEBIOME™ peptide**, assists in strengthening the skin of people exposed to urban environment by promoting microbiota balance and diversity as well as an increase in beneficial bacteria, all being characteristics of a healthier skin staying in higher contact with nature. It also helps reinforce the double cutaneous barrier function and prevent dehydration, one of the main problems of sensitive skin.

The ability of **FENSEBIOME™ peptide** to modulate the skin microbiome was assessed on volunteers by means of a metagenomics study. Urban female volunteers applied a cream containing 1% peptide solution on the cubital fossa of one arm and a placebo cream on the other, twice a day for seven days. Samples of the skin microbiota were obtained before and after the treatment and changes in the microbiome were assessed. An increase in the bacterial diversity was observed on the treated skin, as well as a better

balance of the microbiota leading to a healthier and protected skin.

FENSEBIOME™ peptide also helped reduce the TEWL levels, when applied before inducing irritation and evaluated 48 hours after damage, with a decrease of 27.8%.

The peptide assisted in boosting the skin's own defense system by favouring the presence of beneficial bacteria and by improving the skin immune response and the physical barrier integrity as showed in vitro.

FENSEBIOME™ peptide can be incorporated into formulations aiming to strengthen the double cutaneous barrier function and to prevent dehydration as well as in prebiotic and probiotic-inspired skin care products intended to reinforce urban and sensitive skin.

The latest Lipotec peptide helps the skin regain its original strength to face urban life.

For more information, please contact Robert McPherson, Account Manager for Australia and New Zealand, at RMcPherson@Lipotec.com or Tel: +61 (02) 9741 5237.

2018

emerging trends for skin care and packaging

PART 2

by Steve Welsh

Following on from the previous issue of Science of Beauty, we look forward to covering the next five emerging skin care product trends for 2018 and options you could use to package your product and take advantage of, while these products are hot.

Recently published in the UK, Bazaar magazine, were the six to 10 top beauty trends of 2018.

6 Gender Neutral Products – in the past it was all about a men's range and a women's range and packaging being tailored to the specific sex. This was done by looking at the demographic and selecting colours, functions, fragrances and benefits that appeal. In 2018 expect to see many more brands moving back to having gender neutral products or products that either men or women feel comfortable to use. As packaging professionals we start looking at colours and designs that can work for both markets. This especially appeals to many

brands as they can consolidate their number of lines and get **benefits of scale and appeal**.

7 2018 is the time to get active or at least launch products that work for active and healthy consumers. Seen as a big trend this year, it involves coming up with products that work in this space that still fit within the beauty space. The products can be anything from a pre-workout beauty product such as make-up to use while working out, or a product to form part of the post-workout beauty regime. From the packaging side **we address transportability, functionality, and as always the overall look**. The product has to look great not only on shelf but also when the target consumer pulls the product out of their gym bag!

8 Tech gadgets for women are going to be seen more and more in the beauty space. As technology is increasing the convenience of gadgets to help



consumers with their daily beauty needs will be released at a quicker speed than what we have seen in the past. When appealing to the male market a gadget can really sell, but for a gadget aimed at a female demographic, it will really have to be packaged well in a nice box with great artwork and functionality to help with the desire for the product. In the last 12 months **at Weltrade Packaging, our custom designed boxes** suit specific needs, whether that be a beauty

treatment process, or for packaging high end tech beauty items as it has **grown by over 300%**. Always think the iPhone box and the thought that goes into it prior to a new launch.

9 Watch for the return of the ingredients that have been done in the past and come back bigger and better and in many new and exciting forms. In 2018, Cannabis based skin care is tipped to be back. With recent legalisation in LA, and the health benefits of the oils gaining mainstream media share we expect to see more brands looking to reformulate using the oils in their products. For us we work with a few brands already, and it works in well, when **we can help brand's lower their carbon footprint** through the use of recycled post-consumer resin in their packaging for products or if we can use one of our bioplastic packaging items

created from sugarcane. Not only does this help the brand communicate a green message but also ensures their packaging is still durable, safe and 100% recyclable.

10 The last major topic that was tipped for 2018 is drive for weightless foundations or water based foundations that don't look to hide complexions but rather show off the natural skin tones even if the formula highlights the best parts. A recent stat that stood out was that Pinterest are reporting a **378% increase in searches for "complexion matching"**. Expect easy to apply and the requirements for large ranges of colour options.

We would really like your feedback on trends that you see playing out with your products and your target demographics. Our team understands the amount of time that goes into making your

products and we really like working on making you have access to options that really give you a point of difference.

We are always looking at the next new trend, we visit tradeshow around the world and monitor and discuss new releases with our clients. Reach out to us today and see our point of difference, and how we will help you with a stress-free approach to beauty packaging.

STEVE WELSH is a cosmetic packaging specialist with over 20 years experience across all mediums of packaging. As the director of Weltrade Packaging, Steve leads a team of designers, technicians, printers and supply chain professionals. To ensure the best exposure of your beauty, skincare or cosmetics brand. Steve's philosophy is to design your packaging correctly, right from the start, so you can elevate your brand and move more product. Steve works closely with leaders in the cosmetic industry to ensure that your packaging consistently stands out on the shelves within this highly competitive market.



AVENIR
INGREDIENTS
FOCUS | PARTNERSHIPS | INNOVATION

JOIN OUR SOIRÉE



BOOTH 27 & 28

ASCC CONFERENCE 2018
UP GUESTS
AKOTT | COBIOSA
KATH WAX | DR STRAETMANS
SOUTHERN CROSS BOTANICALS
www.aveniringredients.com.au

Brands Online – the do's and don'ts

In today's highly competitive online business environment, business owners need to be aware of what trade mark rights they have, how those rights can be enforced, and what they can and can't do in respect of trade marks owned by others, especially those of competitors. Although Australian courts provide some guidance on these issues, the law is evolving rapidly, and what may be law today may not be good law in the near future.

General guidance on trade mark issues online follows. However, please note that each situation must be considered individually on its merits, so the guidance given below won't be pertinent to each and every situation.

Protecting your trade mark online

Of course we need to start here. All potentially registrable trade marks of importance to your business should be registered under the Australian Trade Marks Act 1995 ('the TM Act'). Registration will give you ownership of that trade mark. If not registered, your rights will in most instances be weaker

or possibly non-existent.

Apart from the TM Act, some types of trade marks (eg. logos, but not mere word trade marks) may enjoy automatic protection under the Australian Copyright Act 1968.

It may or may not be possible to stop a competitor from using your unregistered trade mark for misleading and deceptive conduct under the Competition and Consumer Amendment (Competition Policy Review) Act 2017 (ie. Australian Consumer Law) or the tort of passing off under common law.

Generally speaking, the more distinctive (non-descriptive) and well known your trade mark is, the greater the likelihood that rights in the trade mark can be enforced, whether registered or not.

Australian Trade Marks Act 1995:

<https://www.legislation.gov.au/Series/C2004A04969>

Copyright Act 1968:

<https://www.legislation.gov.au/Series/C1968A00063>



by Gint Silins

Competition and Consumer Amendment (Competition Policy Review) Act 2017:

<https://www.legislation.gov.au/Details/C2017A00114>

Use of a competitor's registered trade mark

Using your competitor's registered trade mark, or something substantially identical or deceptively similar to it for the purpose of identifying your goods, is likely to constitute trade mark infringement under the TM Act. The TM Act grants the trade mark owner remedies to deter such activity, including: an injunction to stop the

infringer from selling any goods under the infringing trade mark; financial penalties (damages or an account of profits); and, additional damages, which are, inter alia, awarded based on the flagrancy of the infringement and the need to deter similar infringement.

There are, however, defences to trade mark infringement. Merely comparing your goods offered under your trade mark with goods offered under your competitor's registered trade mark should not amount to trade mark infringement, but of course any claims made in the comparison must be accurate. Also, using a trade mark that is entirely descriptive of the goods is a defence to trade mark infringement.

Using your competitor's trade mark (whether registered or not) may also fall foul of other Australian laws, including misleading and deceptive conduct, the tort of passing off and copyright infringement, as mentioned above.

Domain names

Domain names typically contain a trade mark of importance to a business. Provided that eligibility requirements are met, domain names can be registered by anyone on a first-come, first-served basis. For this reason, you should register a domain name or perhaps a suite of domain names containing your important trade mark as soon as possible.

Merely registering a domain name that includes a third party's registered trade mark does not necessarily constitute trade mark infringement under the TM Act. Something more is needed. If a website linked (either directly or through redirection) to the domain name is offering goods or similar goods for which the trade mark is registered, then there is likely to be trade mark infringement.

Registering and using a domain name that includes a third party's trade mark (whether registered or not) may constitute misleading and deceptive conduct or passing off as mentioned above, particularly in cases where the trade mark is well known.

You should not use a competitor's

registered trade mark in your domain name, even for website redirection, as this may constitute trade mark infringement. Likewise, you should not use a competitor's unregistered trade mark in your domain name in the event that the competitor commences legal action (eg. under common law) or ultimately obtains registration of that trade mark.

If a competitor has registered a domain name that contains a trade mark of importance to your business, domain name ownership can be contested outside of the courts, under a domain name dispute resolution policy such as the UDRP or auDRP. This can be a cost-effective way of gaining ownership of a domain name containing your trade mark.

DRH Holdings (Australia) Limited v David Reid Homes Australia Pty Ltd [2012] FCA 1336

Edgetec International Pty Ltd v Zippykerb (NSW) Pty Ltd [2012] FCA 281

Information on auDRP:

<https://www.auda.org.au/blog/audrp/>

Information on UDRP:

<https://www.icann.org/resources/pages/help/dndr/udrp-en>

Metatags

Businesses are using competitors' registered trade marks as metatags to attract internet traffic to their websites. Metatags appear only in the source code, not on the actual screen viewed by the website visitor.

In an earlier court decision it was reported that since metatags are not visible to the website visitor, there could be no trade mark infringement. However, in a more recent court decision, use of a competitor's trade mark as a metatag was deemed to constitute trade mark infringement. Hence, if you are using a competitor's registered trade mark as a metatag to attract traffic to your website, then you need to be aware that that act is likely to constitute

trade mark infringement, unless you can establish that the word/s was not used as a trade mark but merely in a descriptive sense.

Accor Australia & New Zealand Hospitality Pty Ltd v Liv Pty Ltd [2017] FCAFC 56

Complete Technology Integrations Pty Ltd v Green Energy Management Solutions Pty Ltd [2011] FCA 1319

Google Adwords

It is common practice for a business to use a competitor's registered trade mark in a Google Adword campaign (as a keyword) in order to be found by search engines and to attract traffic to their website.

The state of the law on adwords/keywords seems to be that if you use a competitor's trade mark as a keyword/adword and it is not visible to the consumer, then that activity is unlikely to amount to trade mark infringement under the TM Act. Conversely, if a competitor is using your trade mark as a keyword/adword and it is not visible to the consumer, then you may not be able to stop that activity under the TM Act. In both instances, it is because the keyword cannot be seen (or heard) by the consumer.

However, if the adword/keyword appears in a sponsored link or advertisement and is visible to the consumer, then that may amount to trade mark infringement. It could also be deemed misleading and deceptive conduct, as found when the Australian Competition and Consumer Commission (ACCC) took legal action against a number of traders for using third-party trade marks as their keywords.

No doubt you have noticed the apparent discrepancy in the law, that use of non-viewable metatags may constitute trade mark infringement whereas non-viewable adwords/keywords may not constitute trade mark infringement. It is also noteworthy that in some of Australia's more significant trading partners, use of a non-viewable adword/keyword can in fact amount

to trade mark infringement. For these reasons, you should tread carefully and keep abreast of legal decisions because the state of the law could change. It is possible that a court, after considering all of the factors in the case in hand, could in fact arrive at a different decision, that the use of a competitor's adword/keyword does constitute trade mark infringement.

Veda Advantage Limited v Malouf Group Enterprises Pty Limited (No 2) [2016] FCA 470

Misuse of trade marks on social media sites

Some social media providers, such as Facebook, LinkedIn and Pinterest, provide trade mark owners with a mechanism for removing infringing use of a business' trade mark from their social media site. This typically entails the trade mark owner or its agent informing the social media provider of the registered trade mark right and clearly identifying the infringing activity. The social media provider will then consider the matter and remove the infringing activity if it believes it is proper to do so. For this reason, it is important to have a registered trade mark prior to filing a complaint with a social media provider.

Some social media providers have a similar mechanism for removing trade



mark logos and other images if there is likely to be copyright infringement. Again, the copyright owner or its agent is required to inform the social media provider of the offending image or trade mark logo.

Facebook trade mark complaints:

<https://www.facebook.com/help/440684869305015/>

Facebook copyright complaints:

<https://www.facebook.com/help/400287850027717/>

LinkedIn trade mark complaints:

<https://www.linkedin.com/help/linkedin/answer/30365/linkedin-s-trademark-policy?lang=en>

Pinterest trade mark complaints:

<https://policy.pinterest.com/en/trademark>

Twitter trade mark complaints:

<https://help.twitter.com/forms/trademark>

Trade mark enforcement on online marketplaces

In addition to having the ability to enforce registered trade mark rights against an online retailer under the TM Act, online marketplaces such as eBay and Gumtree provide intellectual property owners with an additional mechanism for removing infringing use of a business' trade mark from their online marketplace.

Gumtree, for example, states that

“the owners of copyright, trademark rights or other intellectual property rights can request the removal of any advertisements which may infringe on their intellectual property rights. If a legal representative of a rights owner reports this to us in the correct manner, products infringing intellectual property rights will be removed by Gumtree.”

As with social media providers, these online marketplace providers will be seeking proof of registered trade mark rights, so all trade marks of importance to your business should be registered.

eBay intellectual property complaints:

<https://www.ebay.com.au/help/policies/listing-policies/selling-policies/intellectual-property-vero-program?id=4349>

Gumtree intellectual property complaints:

https://help.gumtree.com.au/AU/articles/en_US/KB_Article/Copyright-and-IP-Policies-AU?vgroup1=PKB&c=PKB%3APolicies&vcategory2=General_Policies&s=

Preventing online retailers located overseas from selling into the Australian marketplace

Trade mark rights are jurisdictional in nature, which means that if your trade mark is registered in Australia then (in most instances) it will not be enforceable in any other country. You would either need to identify the receiver of the infringing goods in Australia so as to

pursue them for trade mark infringement – which in most cases is impossible and not cost-effective, or you could lodge a notice of objection that enables the Australian Department of Home Affairs to seize incoming infringing goods. Your third option is to register your trade mark in each country of interest, which is of course the recommended option.

If your trade mark is in the form of a logo, then you may be able to pursue the offshore offender for copyright infringement, provided that you have automatic copyright protection in that country under the Berne Convention.

Australian Department of Home Affairs:

<https://www.homeaffairs.gov.au/business/cargo-support-trade-and-goods/dibp-notices/intellectual-property-notices-of-objection>

Berne Convention:

http://www.wipo.int/treaties/en/ip/berne/summary_berne.html

Blocking websites

In a recent UK trade mark case the UK court compelled internet service providers to block websites that provided access to infringing or counterfeit goods.

It will be interesting to see whether Australian courts follow suit and compel internet service providers to block unauthorised online content, which would be a win for Australian trade mark owners.

Cartier International AG & Ors v British Sky Broadcasting Ltd & Ors [2016] EWCA Civ 658

Recommendations

Register each trade mark of importance to your business both in Australia and in any other country in which you are conducting business or plan to conduct business. A registered trade mark right gives superior rights and more cost-effective options for dealing with infringers.

Tread carefully if using registered or unregistered trade marks of competitors, because there are various laws for countering such activity and those laws continue to evolve.

[This article is intended to provide general information only and the contents should not be relied upon as legal advice for any specific case.]

GINT SILINS is a registered patent and trade marks attorney, and a principal of Cullens Patent & Trade Mark Attorneys. He holds a Bachelor of Science degree in chemistry with honours in biochemistry, and a Doctor of Philosophy degree in biochemistry. Gint specialises in protecting branding and innovations largely in the health care, personal care, animal health, food and beverage, biotechnology, industrial chemical, clean energy and agricultural sectors. His practice includes: conducting brand and innovation availability and registrability searches; IP audits; registering patents, trade marks and designs worldwide; enforcing intellectual property rights; resolving IP disputes; and, providing infringement and validity advice.



**COME AND SEE US
FOR GOLD CLASS
CONCEPTS AND
INNOVATION**

BOOTH 14-15

How stable are you?

Warning! Boring, thinking and hard work content.

by Wendy Free

Lately, several people have asked me about stability; while one may have thought it was my mental stability in question, surprisingly it was their cosmetic stability being questioned.

Essentially there are no hard and fast rules other than, for some countries you MUST have data to support the stability of your products, and for others, you really, really should have it.

But lets start at the beginning.

Part A – Boring, but very necessary background

In most countries including Australia; if it says ‘**expiry**’ it means ‘**expiry**’ (so it cannot be distributed or used after that date); including Australia. Many companies use ‘**best before**’ rather than ‘expiry’ for this reason. If you have product marked with an expiry date you should not supply it after that date, if it’s marked best before, its possibly OK to use.

However it won’t be news to most to disclose that commercially most distribution companies will not accept incoming stock with less than 12 months shelf life (be it ‘expiry’ or ‘best before’).

You’ll notice on some products that they have an open jar with a number of months or years stated beside it; this is called the “Period After Opening” or POA. Its use originates in EU regulations and unfortunately you can’t just choose to have either an expiry or a POA. In order to be eligible for a POA clause 48 of *REGULATION (EC) No 1223/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 on cosmetic products* tells us...

*In order to inform consumers, cosmetic products should bear precise and easily understandable indications concerning their durability for use. Given that consumers should be informed of the date until which the cosmetic product will continue to fulfil its initial function and remain safe, it is important to know the date of minimum durability, i.e. the date by which it is best to use the product. **Where the minimum durability is more than 30 months, the consumer should be informed of the period of time after opening that the cosmetic product may be used without any harm to the consumer.** However, this requirement should not apply where the concept of the durability after opening*



is not relevant, that is to say for single-use products, products not at risk of deterioration or products which do not open.

So in order to use a POA, you need to have established 30 months (2.5 years) stability (More on how to do this soon).

For cosmetics:

- In Australia and USA none of ‘best before’ or ‘expiry’ nor ‘POA’ are required. (BUT they still need to be fit for purpose, so it’s often a really, really good idea to have some indication on the label)
- For EU you must have either minimum durability (best before?)

and/or a POA with suitable qualifying information.

- In ASEAN countries the date on manufacture OR **expiry date** needs to be on the label.

So when you choose how you will express your product durability/shelf life you need to consider not only the prescribed regulations but also what options you have in terms of 'expiry', 'best before' and 'POA'.

This depends on the reason behind the allocation of the shelf life; if it's modelled on the build up of toxic products then **it's hard and fast**, you need an expiry date and you need to abide by it. DO NOT USE after that date, but if its been allocated as 'just arbitrary' then we just don't know if its safe to use before or after that date or not.

Part B – What are we actually trying to do?

Establishing stability assumes that your processes, and indeed starting

materials are well controlled, and each time you make a batch it turns out, about the same. If a product gives you hassles in manufacture or consistency/performance; that needs to be fixed before you can think about stability.

Once you have a base line 'capture' that, ie write it down, photograph it, what ever it takes to firmly establish exactly how it should be; you don't necessarily need fancy machines, you just need a defined qualitative and quantitative 'specification' that will still make sense in 12, 24 and 36 months' time....(LOL just thinking about a specification I once read that described the fragrance as "unisex"; what does unisex smell like?); Please don't be afraid to use terms that are 'unofficial' if it smells like banana lollies, please write 'banana lollies'; far better than something that is meaningless.

OK? – so we have some sort of specification (even if its just a reference product set aside).

Once cosmetic formulations go into

their packaging and leave our facilities, they take on a whole new life, like our children leaving home, we no longer have control over them, so we can only hope that we have adequately prepared them for the challenges ahead. (Consider the EU's requirement "will continue to fulfil its initial function and remain safe".)

Each cosmetic product will be different. (NOOOOO I hear you yell), but let's break this down to just three different types of considerations applied (OK?);

- **Product** (chemistry and performance);
- **Packaging** (integrity, air tightness, chemical reactivity/protection of the product) and
- **Spoilage** (typically breakdown of the preservative) or robustness to incidental contamination.

In determining our shelf life, we are looking out for our products' vulnerabilities (as opposed to its attributes so a fundamental change is required for the marketing department...) for example



The unlisted ingredient in everything we produce.

With over **30 years experience** in the development and manufacture of **premium to mass skincare product** ranges, in **quantity** and **ON TIME**. Syndet produces to the highest standards using quality ingredients and processes. We formulate products from **soap-free bars to natural, organic and conventional skincare in metal or plastic tubes, flow wrapping and cellophane wrapping**, short and long run **sachets** and all under clean room **ISO GMP** standards.

We can talk to you (in Chinese, Hindi or English) for adventurous solutions that stand out in a crowded marketplace for all the right reasons

ISO 22716 Certificate FR13/018254

30-32 Gatwick Road, Bayswater North VIC 3153 CALL 03 9761 6726 •
Get inspired EMAIL marg@syndet.com.au or laurel@syndet.com.au
www.syndet.com.au



- if the product is light sensitive and its in a transparent container, the effect of light will be the primary consideration
- if its preservatives with a ‘natural preservative’ and in an open top jar that people put the fingers your ‘baby’ will it be quite susceptible to microbial spoilage,
- if it contains reactive and unstable ingredients like peptides, the formulation and package integrity will be the most critical aspects of design.

Please consider your product's formulation and its future home (ie packaging and use); and then determine what needs to be / should assessed as part of your stability trials.

But what are the rules?

Europe has the most stringent, and thus the most easily decipherable requirements despite this there is really only ONE well established “RULE” and there after everything is basically do your very best, because your product and your brand depends on this.

The rule is preservative efficacy test or PET; this is where known numbers of various bacteria, yeast and mould are added to your product and then its sampled immediately, after 2, 4, 7, 14 and 28 days to make sure that the bugs are dying quickly enough, if they don't, your product is unlikely to be adequately preserved. This test is NOT a guarantee however, just an indication. PET take ~8 weeks if your product doesn't pass this test it needs to be fixed first.

In terms of “doing you best” on the other attributes, again you don't always need fancy machines; you know your product so think about how you can look out for changes for example:

- Change in mass, reduced mass means its loosing water or volatiles, increase means its absorbing them, both can be detrimental. (so weigh the sample accurately at the beginning and through out the stability trial)
- Colour change can indicate oxidation or just ‘aging’ (or both)
- Change in texture can be a whole heap

of things, so think about how you will assess texture, viscosity, precipitation etc, for example squishing it along a bench top and comparing it to the standard might be just fine.

- Change in pH will effect your preservative, performance and perhaps safety. Easily measured using a probe or even paper test strips.
- Emulsion stability, looking for cracks, running it through a micro-fuge – trying to make it separate or just filling a glass measuring cylinder and watching it settle also all might be just fine.
- Lids backing off is common to... so check this and their ‘air-tightness’ throughout

Please think about what you want to do and see and then add these ‘test methods’ to your specification. NB: It's a really good idea to add a preservative efficacy test in their at the end too.

So we now have a specification, and we think we know where our product might be vulnerable and how to measure

COSMETIC SCIENCE, BRAND MANAGEMENT & REGULATORY AFFAIRS



ON-LINE TRAINING

Study at a time and place that suits you, anywhere in the world!

Cosmetic Science

- Diploma Of Personal Care Formulation
- Certificate in Advanced Cosmetic Science
- Certificate in Beginners Cosmetic Science
- Certificate in Organic Formulations
- Certificate in Colour Cosmetics Formulation

Regulatory Affairs

- Certificate in Cosmetic Regulatory Essentials
- Certificate in Cosmetic Marketing Compliance
- EU Compliance Workshops

Brand Management

- Diploma of Personal Care Development and Promotion
- Certificate in Cosmetic Brand Management

Short Courses

- Certificate I in Pharmaceutical Manufacturing
- Quality Program



**Institute of
Personal Care Science**

www.personalcarescience.com.au

info@personalcarescience.com.au

facebook.com/InstituteOfPersonalCareScience



INTERNATIONALLY
RECOGNISED
TRAINING

Contact us for a full course prospectus
and pricing - start straight away!



Description	Type	Replicates
(a) Freeze / Thaw at 40°C for five cycles	Accelerated	International Transport & Storage over 1 week
(b) Hold at 54°C for 6 weeks, examine weekly	Accelerated	Non flammable, very rapid assessments for projected 30 month shelf life
(c) Hold at 40°C and ~75% RH for 6+months	Accelerated	Non flammable, 2 months data for every 1 month in storage
(d) Hold at 'ROOM TEMPERATURE'	Real time	Non flammable 'Normal' storage / comparative
(e) Examine naturally aged samples and compare with new batch	Retrospective	'Normal' storage

this, we decide 'what constitutes an expiry' it could be

- SHOCK / HORROR formaldehyde release or formation of nitrosamines
- Change of more than 1 or 2? pH units
- Change in mass of more than 5% over 12 months or
- Failure of PET or
- Emulsion separation
- No longer lifts wrinkles...(etc)

Or any or all of these; which ever happens first.

If you don't know search for "risk assessment for cosmetic products" and work with that, so long as its from an authoritative source

OK now we know the rules, the product what it should look like, where it might fail and how to detect it = WELL DONE

Part C – OK, I'm telling you about performing the stress tests now!

There are no *rules* for cosmetics I've ever come across, but I can tell you what I've learned after 25 years in and around the traps.

Typically I use up to 5 different stressors applied to the **actual packaged product**, each designed to replicate a certain type of circumstance, as illustrated below. (NB: Don't heat flammable products!)

(a) Freeze / Thaw at 40°C for five cycles

Last century (in 1994) I learnt the hard way about sending products to the northern hemisphere, when its 40oC here (or on the back of the ship) it can be minus 20oC there. So since then usually I replicate this circumstance using 5 sequential freeze/thaw cycles, just a domestic chest freezer and a towel

warmer set to 40°C. In the freezer at the start of the working day, and then in the "incubator" at 40oC overnight, to thaw completely. Five cycles in total, and then see what you get; if its unaffected by this, your product as packaged is likely to be OK for international transport and storage.

Conditioners have problems with this test, as do hair sprays (Thus store between 5 and 25°C)

This is a great way to check your emulsion stability and the sealing integrity of your packaging too.

(b) Hold at 54°C for 6 weeks, examine weekly

I've not seen this one often in "cosmetic wonderland" but its well established for (whisper it) agricultural chemicals. Six weeks stability at 54°C is said to give you 30 months shelf life at 'ambient temperature' – so if you pass this, you are likely ready for POA!

- Perfumes in products don't like this test
- Styling waxes usually melt/separate
- Not suitable for flammables

(c) Hold at 40°C and ~75% RH for 6+months

This one comes from medicines manufacturing paradigms. For every month that you product is stable under these conditions, you can allocate 2 months in 'real time' shelf life. So 15 months success here and you have you 'established' 30 months for your POA.

Application	Oral	Eye	Leave on	Rinse off
3 – 6 months		water based mascara, eyeliner		
12 months	Toothpaste		Creams, lotions, roll-ons	Shampoos, Hair Dye
24 months	Mouthwash			
36 months	Lipstick	Powders	Oils, powders, nail varnish	Solid products

(d) Hold at 'ROOM TEMPERATURE'

This is the sit and wait approach. I'd always recommend that at least 2 samples of every batch are retained to go back and look at. It's slow, but quite accurate.

(e) Examine naturally aged samples and compare with new batch

Ooooh; if you have 'naturally aged samples', and you haven't changed your formulation, ingredients supply, packaging etc, you can look at these and compare them to your current batch. This IS a good way to get a firm idea of how your products will age; the disadvantage is that you'll probably get quite dusty going through all of your retained samples and there might be some unpleasant surprises. Also once you've assessed that sample, you've 'lost' it.

Part D – So are you stable?

If you've applied a number of documented considerations, test procedures and stressors successfully to your product, and the product and packaging are still great and its not likely to be spoiled (because you've conducted the PET at the end as well); **congratulations you are (likely) stable.**

You can now certify yourself, or at least that product.

But what about POA? I hear you ask...(or had you forgotten) ..again there are no "rules" (or for the most part even guidance); if you are lucky you might be able to find "Practical implementation of Article 6(1)(c) of the Cosmetics Directive (76/768/EEC) : LABELLING OF PRODUCT DURABILITY: "PERIOD OF TIME AFTER OPENING"; which despite its name, just gives you more to think about *including the consideration that one*

Continued on page 53

get the right insurance cover for your business

by James Gillard

Imagine if your customer's hair was cut and styled without a conversation with them about what they wanted. Imagine if your customer's manicure was completed by you without asking them what colour nail polish they preferred. Your customer in both instances could be left disappointed, even upset, as you did not try to meet their expectations before the treatment commenced.

The same could be said about insurance for your own Business. Your Insurance Broker should take the necessary time with you to understand upfront how your business operates, including all the intricacies of what you do, as every business can be quite unique. The right insurance program should be then shaped to your needs providing you with a tailored insurance solution, delivering peace of mind, and allowing you to get on with the running your business. You should be left with the feeling that someone has genuinely taken the time to listen to you and understand the A to Z of your business.

Let's now step through some important insurance policies that you should consider in your Industry.

The need for Public Liability Insurance

Whether you are a Beauty Therapist, Hairdresser, Nail Technician or Make-up Artist your industry exposes you to potential liabilities because of failed treatments or client reactions to treatments resulting in a claim being made against you. It is therefore important that you have the right Public Liability insurance which extends to cover these circumstances. This insurance covers you against all amounts the insured person becomes liable to pay to a third party (subject to the sum insured) for personal injury, loss or damage to property because of an occurrence happening in connection with the business.

Taking stock of your Commercial Buildings, Contents

You need to ensure that your Buildings & Contents are protected against such risks as Fire, Water Damage, Storm and even Theft following a burglary. Not only do these assets need to be insured



they need to be insured for the correct value.

General Property Insurance

This type of cover provides full protection for your portable equipment for events such as Fire, Theft and Accidental Damage. Items that are commonly insured are laptops, mobiles and we can even cover Portable IPL Machines anywhere in Australia.

Can you afford to be without Business Interruption Insurance?

Business interruption insurance is a type of insurance that covers the loss of income that a business suffers after a disaster.

Management Liability Insurance's key features

Most businesses insure the tangible exposures of property damage or bodily injury but neglect to insure against economic loss that stems from unwelcome surprises that could threaten their financial position. This is where Management Liability insurance comes into play including cover for

- Insured person's liability (claims made against the Directors, Officers, Management, Supervisors)
- Company liability (claims made against the business)
- Employment Practices (discrimination, sexual harassment, failure to promote)
- Statutory liability (costs associated with the breach of local, State, Federal laws)
- Internet liability (loss arising from websites, emails and other electronic communications actual or alleged)
- Tax Audit expenses (Additional costs incurred in providing information by specialists such as Accountants, Bookkeepers etc. To assist with a Tax Department Audit)

This insurance also often extends to;

- Crisis Management (Product recall due to illness or death of a person)
- Crime (theft of company funds also known as Fidelity)

Why Cyber Insurance?

Businesses depend on their data recording keeping systems to be kept safe from any form of external breach. In fact, it is your client's expectation that their personal information is stored safely. However, in Australia there is an alarming increase in data breaches occurring causing operational disruption and loss of sensitive information. Cyber insurance is a product available to assist your business should the unthinkable happen, e.g. your system is hacked, or it could even be the loss of a USB Stick containing personal information. A Cyber event may involve, Breach of Privacy, Network Security, Cyber Extortion, and Data Asset Loss.

And most of all, if you have Cyber Insurance, there is a 24/7 Cyber Emergency Assistance Line to guide you through that traumatic time.

Continued from page 51

should ensure that products with a POA are tamer evident, so the POA doesn't start too soon.

Late last century, when the concept of POA was first raised I did find an 'official' guidance document, but it seems to have since been withdrawn (or disappeared); I did however note their suggestions for "Some indicative POA for properly formulated, stable cosmetics"; on next page.

NOTE: I'm just replicating what I've read earlier, and you NEED 2.5 years stability BEFORE applying this.

So....

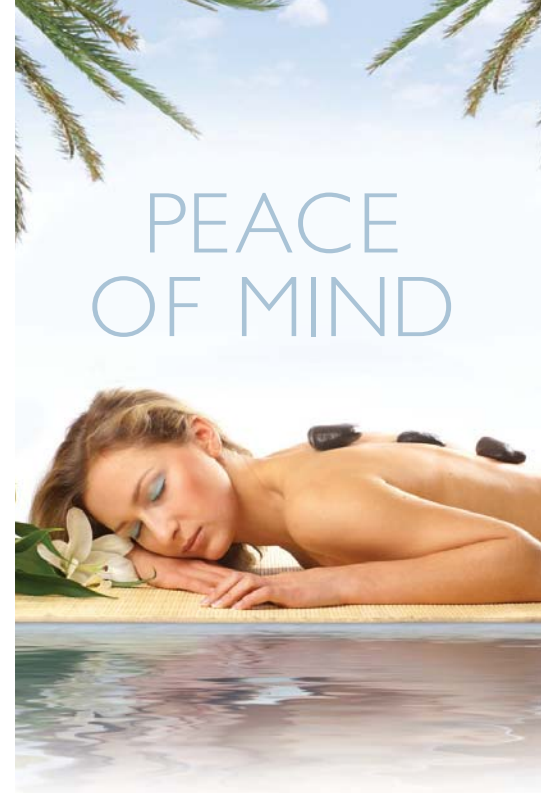
All in all, being stable is not quite so attractive anymore, is it?

Please always feel free to contact me by phone or email, to chat, argue, debate or suggest things you'd like to read about, Best,

Wendy Free B,Sc M.Tech Mngt MASM MRACI FAOQ
Quality Matters Safety Matters Pty Ltd

☎ 0439782 869

✉ talktous@qualitymatterssafetymatters.com.au



PUBLIC LIABILITY & TREATMENT RISK INSURANCE

Protect your business from the devastating effects of an ineffective insurance program.

Talk to us about securing your best solution with a leading Australian insurer - and rest easy.

SPECIAL RATES FOR

- BEAUTY THERAPISTS
- BEAUTY STUDIOS
- SPAS
- MAKE-UP ARTISTS
- NAIL TECHNICIANS



INSURANCE MADE EASY

BROKERS SINCE 1992

OBLIGATION-FREE QUOTE

☎ **1800 641 260**

www.imeinsurance.com.au

Suite 1, 62-64 Main St, Upwey, Victoria 3158

PO Box 1350, Upwey, Victoria 3158

Made Easy Financial Group Pty Ltd

ABN 63095 849 497 AFS Licence No.285920

Registered Insurance Brokers

All Colour Supplies

All Colour Supplies is a proudly, Australian owned and operated company serving the colour industry for over 25 years. Our core business is Food, Cosmetic and Pharmaceutical, we carry a large range of Dyes, Pigments, Lakes and Pearlescents for most industries in stock. We represent Neelikon, who manufacture all organic Lakes and inorganic pigments for Food, Cosmetic and Pharmaceutical markets and distribute to over 100 countries worldwide. They have ISO 9001: 2008, FSSC 22000 (ISO22000 + PAS220) and GMP, all colours are Halal, Kosher ISI and Non-GMO Certified, as well as REACH compliant. Our focus is on delivering superior customer service, at a competitive price. Recently receiving Full Certification by HACCP Australia.

I would be glad to supply samples and technical information for your evaluation, we would welcome the opportunity to be part of your supply chain. While we are, Sydney based, we

supply more colour interstate than NSW, and regularly visit all customers.

We have recently released our new range of DispersAqua® and DispersOil® colours, these are a pre-dispersed range of Food and Cosmetic grades lakes and pigments dispersed (using a bead mill) in a water based (Glycerine) or oil based (CCTG) carrier with approx. 50% pigment loading, ensuring you attain maximum colour strength, with none of the production hassles of high-shear mixing or spotting to achieve an optimum result. By using FD & C lakes approved by the FDA we ensure

you are compliant for most markets including Australia, USA and EU. We also produce a Natural Colour Range in both mediums using Turmeric (Yellow) Indigo (Blue) and Carmine (Red), as well as a range of Iron Oxides with one of the lowest heavy metals content in the world. Both DispersAqua® and DispersOil® colours can be used across a wide range of products from Ice Cream, and yogurts through to lipsticks, lotions, soap, and wax products.

Our modern laboratory can assist with R&D, formulating, and testing, please contact our staff for assistance.



All Colour Supplies Pty Ltd

P: 1300 138 203

E: info@allcoloursupplies.com.au

W: www.allcoloursupplies.com.au

Unit 18

244-254 Horsley Road

Milperra NSW 2214

DispersOil® and DispersAqua®



The new face of Colour

Our new range of highly concentrated dispersions (lakes & pigments) makes colouring your formulation easy. No more spotting or milling colours at high speed. Simply add and stir to achieve the desired colour every time with absolute consistency and superior light fastness compared to dyes.

DispersOil® is your ideal choice for Lipstick, Waxes, and any oil based products. **DispersAqua®** is perfect for lotions and creams, Make-up, tattooing inks, and all water based cosmetic products.



Call us on: 1300 138 203

Email: sales@allcoloursupplies.com.au

Web: allcoloursupplies.com.au

Proudly,

Australian owned & operated since 1989

sunscreen highlights

by John Staton

Getting to the end point

A recent snapshot survey (1) at Sydney's famous Bondi beach conducted by the ABC science team once again highlighted the lack of understanding of "SPF" as a measure of sunscreen comparative performance. Most of those interviewed could not provide the words "Sun Protection Factor" for these so widely used initials SPF, even though they appear prominently on their purchased sunscreen products.

Whilst we, as cosmetic scientists, mostly would appreciate that this number is effectively based on a titration to a biological reactive end point, few still seem to understand the importance of the calculation at the foundation of this value.

The skin produces a Minimal Erythmal Response "MED" which is effectively one SPF unit and where visible change is evident. Thus, this value for unprotected skin, in Joules/sq m of applied energy, or in seconds of exposure, is simply divided into the equivalent value for the skin when protected by the test product.

The mathematics become a little more complex during SPF testing. When the product is subjected to SPF testing and we are looking at a series of 5 or 6 exposures in sequence. Here, the end point of reading of unprotected, reference and samples should ALL theoretically be PROTECTION + 1

Measured in Seconds	Protected Erythema	
Unprotected Erythema	600	690
20	SPF 30.0	SPF 34.5
23	SPF 26.1	SPF 30.0

Fig 2. Likely variation in reading the Individual End Point for first test subject.

MED. Because we run this series of incremental exposures (see Fig 1) during the test, this end point measurement becomes much greater as SPF protection increases. That is, the end point for reading of an unprotected MED is likely to be 1 or 1.15 MEDu so the visual difference between these two is only a fractional 0.15 MED dose.

However, when we test an SPF 30 sunscreen, the end point is likely to be read at either 30 or the next increment, which might be $30 \times 1.15 =$ the visual difference of 4.5 SPF units (or FOUR AND A HALF MEDS). Then $4.5/0.15$ difference = 30 times the intensity change, compared with the unprotected MED.

This explains why it is much easier to observe the erythema for a test product than for the unprotected skin.

When running the test, even though the dose settings may be in energetic units such as Joules, the dose control systems actually operate in whole second increments. Fig 2 shows the possible outcomes for reading the pairs of results. This is one good reason why the results of the individual SPF reported for each test subject sometimes appear to widely vary.

We do obtain some experimental guidance by use of an internal control by the inclusion of a "known" SPF reference sunscreen.

In many respects, the experiment

Exposure Series for SPF Experiment			Midpoint Exposure		
Test Area	Site 1	Site 2	Site 3	Site 4	Site 5
Unprotected MED	0.8	0.9	1.0	1.2	1.3
Test Product	22.7	26.1	30.0	34.5	39.7
Reference Sunscreen	11.3	13.0	15.0	17.3	19.8

Fig 1. Exposure Series for SPF Test



TRULUX

TRUST | QUALITY | VALUE

Trulux will work with you all the way to provide you exactly the product or service you require for your brand.

Trulux is a leading Australian OEM cosmetic manufacturer of innovative skincare, hair care, healthy food and beauty products.

We create premium products at cost effective prices for small and medium companies in Australia and overseas.

- COSMETIC INGREDIENTS DISTRIBUTOR
- CONTRACT MANUFACTURING / PRIVATE LABEL
- LIQUIDS & POWDERS SACHET FILLING
- CONTRACT FILLING, PACKAGING & LABELLING

- BRAND DEVELOPMENT CONSULTING
- IN-HOUSE R&D LABORATORY
- LUMSON PACKAGING EXCLUSIVE DISTRIBUTOR

Trulux can cover the whole process, beginning from concept, product development and formulation, through to the sourcing of raw material, graphic design, printing and finally product filling and packing.

Tel: 02 9975 2655 E: info@trulux.com.au
Unit C3/ 1-3 Rodborough Road, Frenchs Forest, NSW 2086

is similar to running a titration, with a blank, a known “control” and an unknown all involved. Over-shooting of the end point of the titration will obviously result in reading a higher result, whilst the known control will validate that our technique is correct. Once we have run the first titration, we will have feedback information on our target range – and so it is for SPF testing.

Ability to reliably read and interpret the experimental end point is still subjective and visual and takes long period of practice to perfect. It also indicates the importance of feedback so that the exposure range for the subsequent test subject can be more finely tuned, in order to provide an accurate reporting of SPF. At least three consistent test subject results are needed before a prediction of SPF can be made. Usually, it is not valid to request the lab to “Just test one subject”.

Reference

1. iview.abc.net.au/programs/sciencey/SC1605H012S00



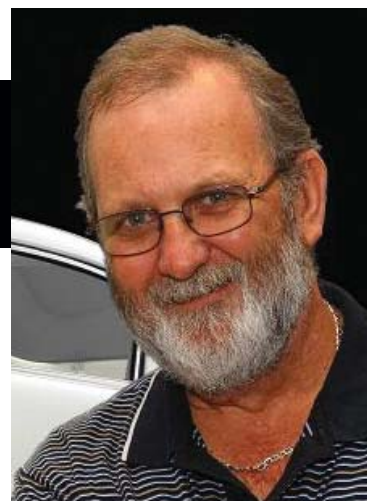
FRIDAY, MAY 18TH,
PRESENTATION RM 2

<p>Lonza</p>	<p>10.30AM-11.00AM</p> <p>Multi-functional benefits from emulsifiers: customisable viscosity with naturally-derived polyglyceryl esters</p>	<p>2.00PM-2.30PM</p> <p>The Golden difference with Biotransformed botanical extracts. Biotransformation does the work so your skin cells don't have to.</p>	<p>BCR</p>
---------------------	--	--	-------------------

IMCD IS PROUD TO PROVIDE THE HIGHEST LEVEL OF TECHNICAL EXPERTISE, GENERATING INNOVATIVE AND LUXURIOUS PERSONAL CARE PROTOTYPE KITS TO EXCITE AND INSPIRE YOUR BUSINESS. COME AND HAVE A BEAUTY ELIXIR ON STAND 29 & 30 WHILE WE TAKE YOU ON A JOURNEY OF VINTAGE OPULENCE AT THE HOTEL REALM, CANBERRA, 16-18 MAY, 2018.

IMCD

9/7 MERIDIAN PLACE QLD/SA: WCHIN@IMCD.COM.AU NSW: ORDERS@IMCD.COM.AU
P: +61288144999 BELLA VISTA NSW 2153 VIC: ECHISHOLM@IMCD.COM.AU NZ: GDELACRUZ@IMCD.CO.NZ



by Ric Williams

Part 40 –

Transport of “Drugs” across the skin membrane

Modes of transfer are

Diffusion

The passage or movement of an active ingredient (or drug) across a membrane (usually skin or cell membrane in this field). It usually involves diffusion against a concentration gradient where the active ingredient (or drug) diffuses across the membrane from an area of high concentration to one of low concentration, ie. passive diffusion along a concentration gradient. The result is an equal concentration on both sides of the membrane, unless there are other factors which may affect the result. Water transfer into and out of skin cells or in the kidneys to excrete excess water are classic cases of diffusion.

Adsorption

Where an active ingredient (or drug) is adsorbed or attached to the surface of a carrier which is then transported across the skin membrane where the active ingredient (or drug) can work. It is a means of protecting the active ingredient (or drug) from chemical change during transport. It can also mean the technique of attaching the active ingredient (or drug) onto the surface of the skin cell where it will slowly diffuse into the cell.

Absorption

Where an active ingredient (or drug) directly passes unaided across the skin or cell membrane where it begins to work.

This is the basic technology for Percutaneous Absorption, and probably the major pathway that is used by Cosmetic Chemists, although it should be said that a combination of all three modes of transport is probably the correct view.

The rate of dermal absorption of a substance is proportional to both the concentration of the substance and the surface area over which it is applied. The wider the contact area and the more concentrated the substance, the greater will be the absorption. However, the chances of materials passing through the skin are slim and many do not pass through the skin at all.

Other factors affecting the rate and extent of absorption are;

Structure of skin – The thickness of the skin, especially the stratum corneum, also determines the degree to which substances are absorbed. Thicker skin is a greater barrier to passage of foreign substances. Depending on skin thickness, there can also be variability in absorption of a given substance by different regions of the body. For example, hydrocortisone is absorbed over 50-times greater by genital skin versus the skin of the palms.

Hair density, and physical health of skin have an effect. Damage to skin, both through disease or direct environmental influence, can also alter the barrier properties of skin and enhance absorption of substances. Even something as

Ric Williams B.Sc. Dip.Env St.

Cosmepeutics International

This column is intended not only as an education tool for non-technical people or beginners in our industry, but as a forum for those wishing to enlighten all about recent technology advances and new ideas. I hope experienced scientists will also contribute to this ideal and if you wish to do so please email me at: ric@cosmepeutics.net.au and I will publish your comments.

innocuous as the removal of outer layers of skin with an AHA peel or microdermabrasion or even tape-stripping with cellophane tape can dramatically increase dermal absorption, by removing a few layers of the Stratum corneum.

Biochemistry of skin – lipid composition (from diet), moisture content (from external humidity) and the general energy levels (fitness) of the subject have an effect,

Sex – male skin tends to be a greater barrier than female skin,

Age – the older you get the less penetration occurs due to the loss of general structure of skin

Heredity – some may have enhanced ability because of heredity factors such as thin skin.

Disease – dermatological (eg exposure of lower layers of skin increasing absorption) and systemic (hardening of the blood vessels slowing down transfer to the circulatory system).

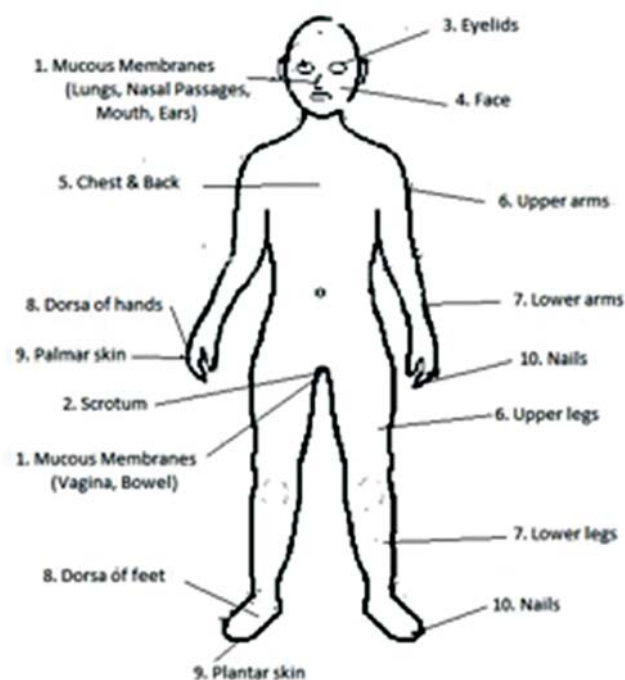
Physical damage to the skin – scarring will prevent absorption while abrasion or cuts will increase absorption. I must mention here the use of skin rollers with micro-needles are being used to increase diffusion of active creams. This technique, based on a devise, that appears to have been invented during the Spanish Inquisition, cannot have anything but long term damage, resulting in subcutaneous scarring, hence reducing penetration.

Environment – increasing temperature and increasing humidity will increase absorption,

Diet – Nutrition will affect absorption, as healthy skin will behave normally,

Drugs – drugs will affect absorption, as some drugs will alter skin physiology and either aid or decrease skin absorption. Both diet and drugs can affect blood flow and glandular function which in turn affect absorption.

Regional Differences in Penetration – Most penetration with number 1 and less penetration with increasing numbers.



Still another factor is the *Flux* through the Epidermis into the Dermis.

“Formulation for Efficacy”

At this point I would refer you to the late Dr Johann Wiechers paper titled “Formulating for Efficacy” where he explained how the thermodynamic activity of an active ingredient could be optimized in a formulation by the choice of a primary and secondary emollient. The essence of this theory is the fundamental difference between dermal and transdermal delivery and is dependent on the parameter that you need to change to get the desired effect. In transdermal drug delivery, pharmaceutical formulators use skin penetration enhancers that enhance the diffusivity of a chemical through the skin. The result is more drug going in faster. Therefore there is less drug in the skin but more drug through the skin. This is, in fact, exactly the opposite of what one would like to achieve in dermal delivery. There, you would like more active ingredient to go into the skin but then to stay there. The way to do this is by increasing the Formulation / Stratum Corneum partition coefficient and not the diffusion coefficient.

How does one enhance the Formulation / Stratum Corneum partition coefficient of an active ingredient? How does one change the ratio of its concentrations in the stratum corneum and the formulation? A partition coefficient is the ratio of the solubilities of an active ingredient between the stratum corneum and the formulation. Therefore, the partition coefficient can be increased by increasing the solubility of the active ingredient in the stratum corneum (while keeping the concentration in the formulation the same) or by reducing its concentration in the formulation (while keeping the concentration in the stratum corneum the same).

Therefore, one needs to know the solubility of the active ingredient in both formulation and the stratum corneum. Measuring these values is not as easy as it sounds. But the solubilities can be estimated via the Hansen Solubility Parameters.

A few cautions with this theory is that;

1. It applies only to oil soluble drugs in oil-in-water emulsions.

Water soluble drugs, in a oil-in-water emulsion, are readily absorbed from the external phase of the emulsion and no or little assistance is generally required.

2. The solubility parameters are not available for a majority of drugs used in cosmetics.

Work by the late Dr Johann Wiechers has been in the area of Clinical efficacy

ie. **Clinical efficacy = Intrinsic activity x Delivery**

Possible reasons for non-efficacious formulations:

1. No intrinsic activity
2. No delivery
3. Insufficient delivery

Therefore there is a need for enhanced skin delivery of active ingredients.

But what to enhance?

Using Flick's First Law of Diffusion

$$J = k_p \times \Delta C = K \times D \times \Delta C \div I$$

Where

J = Flux through the Stratum Corneum

K = Formulation / Stratum Corneum Partition Coefficient

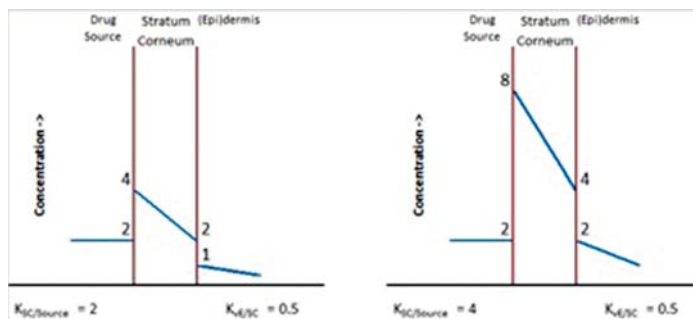
D = Diffusivity within the Stratum Corneum

ΔC = Concentration gradient over the Stratum Corneum

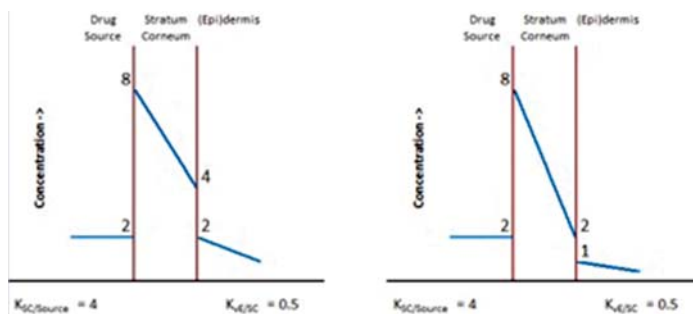
I = length of pathway of diffusion through the Stratum Corneum

Therefore, in order to increase the Flux (J), over the Stratum Corneum (ie to get higher levels of penetrant through the stratum corneum and into the viable Epidermis) one can increase the values K, D as well as ΔC .

If the Formulation / Stratum Corneum Partition Coefficient, K, is enhanced, then more penetration into the stratum corneum means more into the dermis.



If Diffusivity, D, is enhanced, more through the stratum corneum means less accumulation in the dermis.



However, you may only want to penetrate as far as the viable Epidermis (ie. have some active "drug" remaining in the Epidermis and not passing through the Dermis where it can be taken away by blood vessels) when skin penetration enhancers enhance D (Diffusivity within the Stratum Corneum) and therefore transdermal delivery; while partition modifiers enhance K (Formulation / Stratum Corneum Partition Coefficient) and therefore both dermal and transdermal delivery.

Flux into stratum corneum determined by the:

Total amount of active ingredient dissolved in the formulation
 a high absolute solubility of active ingredient in formulation is needed

Polarity of formulation in order to force material from formulation into the stratum corneum

a low relative solubility of active ingredient in formulation is needed.

This seems to be impossible....

High absolute solubility of active ingredient in formulation determined by:

polarity of active ingredient

polarity of formulation (ai and f should be similar)

Low relative solubility of active ingredient in formulation determined by:

polarity of active ingredient

polarity of formulation

polarity of stratum corneum (ai and f different; ai and sc similar)

Formulating for Efficacy uses solubilities to optimize K (Formulation / Stratum Corneum Partition Coefficient), the entry of AIs into skin. That is;

Active should 'like' stratum corneum better than formulation to go into the skin

Optimize the solubility of active in formulation

Solubility depends (among others) on the polarities of solvent and solute

A very important conclusion...

Enhance the K (Formulation / Stratum Corneum Partition Coefficient) and NOT the D (Diffusivity within the Stratum Corneum)!

That is;

If you want maximum concentration of active "drug" in the viable epidermis do not use penetration enhancers but

optimize the formulation by ensuring the active "drug" is preferentially soluble in the Stratum corneum more so than in the formulation.

Remember that other means to increase the concentration in the viable Epidermis are, always, to;

1 decrease the skin thickness by selecting an area of thinner Epidermis

or creating an area of thinner Epidermis, however this may not always be appropriate as the site of application is set or other treatment may not be desirable, respectively, or

2 increase the concentration in the formulation, ie increase °C, however this also increases cost and formulation complexity.

Next issue is Part 3 of Drug Delivery from Cosmetic Emulsions - Formulation

Defy the signs of ageing



ikonique®
Intelligent Skincare™

www.ikonique.com.au

1300 IKONIQUE
456647

Interested in becoming an accredited ikonique® stockist?
Contact us via our website for details
or email sales@ikonique.com.au

