From the Chapter President

Hi Everyone,

The Christmas season is upon us. Our amazing Editor has been chasing me to get this article to him so he can get the Varda to you before you take off on holiday. If it missed you because you left early – please accept our apologies.

The Christmas break is a great time to spend time appreciating your family and friends, reviewing the year that was, and making plans for the year that’s coming. This year has been quite a busy one for the NZ Chapter, and for the Society as a whole. We’ve run 18 Technical Events around the country starting in January 2019 until now. We’ve also had 12 entrants in the NZ Chapter lighting awards programme, run a very successful gala dinner in October and had two of last year’s entries win Excellence in our “cross society” international lighting awards. This will be our sixth VARDA for the year, and we’ve also put on some supplier trade shows and had the odd Christmas party as well. And that’s just in NZ!

As a Society, we’ve also put together a successful lighting conference and I’ve been told that 28 of us Kiwi’s made it across the ditch to the conference – thank you very much for your support. I hope you got lots out of that conference and now have a long reading list to work through during the Christmas break. One of the important points to note out of the presentations made is that there is more to the story than you saw there – so now having had your eyes opened, do the research and fill in the gaps! Make use of the new IES-NA resources available to you through our Global Affiliate Membership. This provides you with access to IES-NA’s recorded webinars, technical documents, standards and more. Details are available from the member resources page on our website.
Volunteers are what make the Society turn round and as I look across all of the chapters I’m thankful we are blessed with lots of them here in New Zealand. Thank you first and foremost to those that have volunteered their time on the Chapter Management Committee and the various city tech event support teams. Thank you to our Gala Dinner sponsors – without which we would not be able to run a majority of our tech events through the year and do the things we do. I call this lot our support team and they’re fantastic.

Finally – thank you all for your support. We need it. More members mean that the load for running the society can be shared much more evenly, and it helps with the finances too. I hope you can see just some of the value you get from your membership and I’m sure there are a bunch of friends, family and especially colleagues that are not (yet) members that could both benefit and contribute to the Society. I would love for NZ to have a larger membership base than the Auzzies (yes there’s a bit of competition!) so become our ambassadors and spread the word (no pressure it’s the Christmas Holidays)…

Have a great holiday and look forward to our Tech Events, we have got lots happening in February and are now booking up March too! (see page 9 for more details). Have a think about what entries you can put into the lighting awards programme next year and save the date for our next Gala Dinner – 6th November 2020, in Queenstown!!!

Warm regards,
Greg
A huge thank you to our sponsors of this years
IESANZ  New Zealand Chapter
LIGHTING AWARDS 2019

www.iesanz.org

KKDC  Aesthetics Lighting
Mark Herring Lighting  Energylight
IC Lighting  Energylight  Signify

www.iesanz.org
IESANZ Conference 2019 Reports

Report by Josh Duckett

What a fantastic event put on by the IESANZ! It’s been more than 10 years since a conference has been held by the IESANZ, the last being down in Queenstown.

The aim was to create an event where ANZ members are able to come together and hear from the industries top minds without having to travel at least 10 hours. This was successfully achieved with the outstanding national & international speakers that gave some very thought-provoking talks around the hot topic of human centric lighting. Well done and thank you to those who helped create this conference.

For those who didn’t attend, it was well worth the trip over the ditch and I strongly encourage you all to attend the recently announced 2021 conference (Location TBC). New Zealand showed up strong and made sure those Aussies knew we were there. Our official count was 28 New Zealanders. Including representatives from BECA, NDY Light, LDP, Connetics & Powell Fenwick. Energy Light / OSIN, MHL, Zumtobel & Impressions Lighting also had representative’s attending. The New Zealand CMC also showed up in force with Greg Williams, Martin Granese, Tracy Bronlund & myself all attending.

There were many highlights for myself which are difficult to put into words. To truly grasp the topics requires going into detail that gets rather lengthy, but let’s look at a couple.
Your local lighting experts

PLATINUM SPONSOR OF THE 2019 IESANZ

FIND OUT MORE ABOUT REXEL LIGHTING ON OUR NEW WEBSITE
WWW.REXELLIGHTING.CO.NZ
Mariana G. Figueiro, Ph.D – Director at Lighting Research Centre

Circadian Lighting and the misconception of colour temperature being the be all and end all of achieving a “correct” Circadian lighting system. She showed that with the correct spectral make up you can achieve a Circadian Lighting system that only alters colour temperature by 500K. Her work with the LRC produced a Circadian Stimulus Calculator where by simply entering the SPD and lux level will tell you if your lighting system is performing properly. It is quite inspiring and I would recommend looking up her and Mark Rea’s research. Essentially, it shows that just because it’s “Tuneable White” doesn’t mean it actually helps.

Kit Cuttle

Pretty much everyone knows who Kit is, a man who has given so much of his life to promoting better lighting & has played a huge part in IESANZ, especially the NZ Chapter. Kit’s talk around vertical illumination and how to light a space based on how you want it to feel was very challenging, especially when you consider the way lighting designs for the majority of projects today are completed. His presentation essentially threw that process out the window. He has plenty of information that can be downloaded online if you are wanting to have a look at this further.

There was an over whelming consensus from all speakers that the V Lambda curve alone isn’t enough and that spaces need to be lit considerably brighter than current standards. The question is… What will we do about it?

Come along to 2021! You won’t be disappointed…

Josh Duckett TechIES
Impressions Lighting & CMC member
IESANZ Conference 2019 Report

Light in Focus

Report by Kate Conway

A strong contingent from the New Zealand Chapter, joined our Illumination colleagues from Australia and international guests speakers at IESANZ Light in Focus 2019 Human-Centred Design in Melbourne. Guest speakers from around the world and a little closer to home presented an jam packed program over the 2 day conference, covering a diverse range of topics.

A particular highlight were the presentations from Lighting Research Centre, with Dr Mark Rea presented ‘Human Centric Lighting Will Not Happen Until We Understand’ kicking off the keynote presentations, Dr Mariana G. Figuerio featured on day two presented ‘Human Centric Lighting : Does it Really Have to be Blue-Enriched and Tunable?’

If you ever wondered how circadian rhythm is regulated on the International Space Station? Well, Robert Soler is definitely the right person to ask presenting ‘Biologically Focused Lighting – The Truth About Circadian Lighting’ the session was informative and a trip back to basics which made it relevant for everyone. Discussing that sleep is a two step process model of both wake an sleep and how this model is different for every person an example below is given for early birds.
Further looking at what factors influence circadian disruption

**CONSEQUENCES OF CIRCADIAN DISRUPTION**

![Diagram of circadian disruption and diseases across lifespan](image)

87% of non-shift workers have some form of social jet lag
(Ronneberg and Marrow, 2016)

Our very own Dr Christopher ‘Kit’ Cuttle with ‘The Lighting Design Objectives (LiDOs) Procedure “The aim is to generate an illumination hierarchy, in which a balance of direct and indirect (ambient) illumination creates a structured distribution of illumination brightness’ discussing projects which have now been completed using the design tool.

The conference concluded with a panel discussion featuring the keynote presenters moderated by Trevor Stork (VIC/TAS chapter), a big thank you to the sponsors who made it possible to collate such high calibre international speakers.
If you missed this conference be sure to catch the next one, as it was a fantastic event.

**Top 5 points to take away:**

5. Where, Light = x, what light is not = ∞ - x, Dr Emrah Baki Ulas, Steensen Varming
4. When ipRGC is removed circadian rythum fails, Dr. Mariana G. Figuerio, Rensselaer Polytechnic Institute, USA.
3. “Humen-Centric lighting is an outcome not a system” Dr Douglas Steel, NeuroSense, USA
2. What is value?, Dr Mark Rea, Rensselaer Polytechnic Institute, USA.
   Value per watt?
   Value per $?
   Value of U(λ)
1. “Think beyond the ceiling” Dr. Mariana G. Figuerio, Rensselaer Polytechnic Institute, USA.
Technical Events

SAVE THE DATES 2020!

Measuring the Effect of the Light Distribution on Spatial Brightness
29 January 2020 – Wellington
James Sullivan - PhD Candidate, VUW
Sponsored by IESANZ

TM-30 (Colour) Presentation
11 February 2020 – Christchurch
12 February 2020 – Wellington
13 February 2020 – Auckland
David Ho, the Engineering Manager of Unios, will be presenting on the limitations on CRI and the TM-30 standard in a digestible way.
Sponsored by MHL

IES New Zealand Maintenance Factor Presentation
25 February 2020 - Auckland
26 February 2020 - Wellington
27 February 2020 - Christchurch

Summary:
Q: "What did you use for a Maintenance Factor?"
A: "I used .8 Your Honour"
Q: "How did you calculate that?"
A: "It's what I've always used Your Honour"
(Advice – Best check your PI Insurance is up to date)
Ian Johnson MIES, RMIT University
Sponsored by Fagerhult

Venues to be advised
Please RSVP to nzevents@iesanz.org to stay in the loop.
**ZUMTOBEL Group**

*Passion for Light.*

Thorn Lighting has been manufacturing and distributing lighting products in New Zealand for over 80 years.

Thorn Lighting purchased Electric Products (NZ) Ltd in the mid-1960s and continued to operate successfully as Thorn Lighting (NZ) Ltd until 2000 when the company was purchased by Austrian based lighting company, Zumtobel Group. To this day, the THORN Lighting brand continues to be the most successful lighting brand in New Zealand.

Zumtobel Group’s lighting technology brand, TRIDONIC, plays a leading role worldwide in the manufacture of hardware and software for lighting systems (LED light sources, LED drivers, sensors and lighting management).

The Zumtobel Group service offering is one of the most comprehensive in the entire lighting industry.

Zumtobel Group is an international lighting group and a leading supplier of innovative lighting solutions and related services through its core brands: ZUMTOBEL, THORN and TRIDONIC.

Zumtobel Group’s global production network spans four continents with sales offices in 90 countries employing over 5000 personnel worldwide.

**PASSION**

**PERFORMANCE**

**PARTNERSHIP**

acdc  THORN  TRIDONIC  ZUMTOBEL
Education

It was great to see Ross Farrell on stage at the lighting awards to receive this year’s student design prize. Ross is our fourth recipient of the award, which was first presented in Christchurch’s Cardboard Cathedral in 2016. I thought I’d give a little background on how Ross got to that point.

The student award is based on coursework that is completed by second-year students of the IESANZ-accredited lighting course at Massey University. Every year their final design assignment is a technically-challenging architectural project; maybe there’s a tricky sloping roof, or exposed concrete surfaces that prohibit recessed lights or cables. This year students were tasked with providing light for “St Lucy’s Church”, a fictitious chapel in a fictitious town.

Given the plans and a brief, each student was required to illuminate the church’s structure and surrounds in a way that was sympathetic to its architecture and functional needs. They wrote this up in a concept report and then presented their ideas to the class in a five-minute presentation. Our two finalists, Ross Farrell and Vanessa Cooper, were then selected to produce posters for display at the awards evening. Given that this occurs at a busy end-of-year period, it’s always a scramble to get the posters done in time. The final step is to award the prize. It’s a nervous wait, as the students find out at the same time as the rest of the audience at the awards dinner.

Congratulations again to Ross for receiving the award and to Vanessa for making it to the finals. I hope that you can use the skills that you learnt as you move on with your professional lives.

Kind regards,
Susan
Standards & Qualifications Report

As the new S&Q coordinator for the NZ Chapter, I’m here to help you with your applications for membership. As well as NZ having a new coordinator, we also have an updated set of guidelines in our recently revised Guide to Membership. Emphasis has been placed on Continuing Professional Development, with MIES applicants expected to show a minimum of 15 CPD points per annum. It’s a good reminder for us all to keep our CPD records up to date, as we continue to upskill in our rapidly-changing world of lighting.

I encourage those eligible to consider upgrading to MIES (or even FIES) in the new year. As noted by the membership guide:

“Obtaining a membership status of TechIES is only the start of a journey, and members are encouraged to strive for the higher memberships where they can.”

If that sounds like you, then please contact me for a “starter” guide to help you along the journey.

Wishing you a very happy Christmas.

Kind regards,

Susan Mander
s.mander@massey.ac.nz
Congratulations to all our Winners of our Lighting Awards for 2019!

Waterview Southern
- Laurie Cook of BECA

Lighting Design Award (LiDA)
- EXCELLENCE

Lyttleton Timeball Station
- Kevin Cawley of Total Lighting Ltd

Lighting Design Award (LiDA)
- EXCELLENCE

RASNZ Dark Sky Award
- EXCELLENCE

Tauranga Crossing Stage 2, Visitor Experience
- Kate Conway & Nic Burnham of NDYLIGHT

Lighting Design Award (LiDA)
- Commended

Peoples Choice Award 2019
Auckland Harbour Bridge
- Andy Collins, Tony Raper of WSP Opus

Fowlds Park
- Glen Wright, Sean McCrum, Barthelemy Rives of S & T

Rawhiti Estate
- Team Cabling

RASNZ Dark Sky Award
- HIGH Commendation

Lighting Design Award (LiDA)
- Commendation

Lighting Design Award (LiDA)
- Commendation

Lighting Design Award (LiDA)
- Commendation

Auckland Harbour Bridge Road Lighting Renewal
The Auckland Harbour Bridge, an iconic landmark of the Waitemata Harbour, and key element of NZ Transport Agency's Northern Motorway, underwent a significant upgrade to the Road Lighting infrastructure. The 8-year project bridged the change from HPS to the application of LED lighting technology, simultaneously integrating challenging structural design elements, resulting in a high-performance installation, embracing the environmental impacts of reducing both energy use and the visual impact upon the night sky.

Photography – Ewen Cafe
Auckland Harbour Bridge Alliance / NZ Transport Agency - Client
Total Bridge Services - Installer
WSP Opus – Designers
Techlight – Luminaire Supplier, AEC Italo
Rivet - Lighting Column manufacturer

Mid installation - old versus new
Notice the difference in sky glow reduction

Final installation

RASNZ Dark Sky Award
- HIGH Commendation
SO Hotel Restaurant
- Ewen Thomas, Debbie Quy of ECC

Bowen House
- Tim Edmonds & Barthelemey Rives of S & T

St Lucy’s Catholic Church
- Ross Farrell of Ektor Emergency Lighting

Lighting Design Award (LiDA)
- Commendation

Lighting Design Award (LiDA)
- Commendation for ENERGY EFFICIENCY

Student Lighting Design Award

Access all the photos from the evening via the link below!
https://www.flickr.com/photos/167793444@N04/albums/72157711475766206
Fagerhult develops, manufactures and markets innovative and energy-efficient lighting solutions for professional indoor and outdoor environments.
# New Zealand Chapter Management Committee

<table>
<thead>
<tr>
<th>Title / Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter President &amp; Board Member</td>
<td>Ph: 09 300 9308 Mb: 021 309 088</td>
</tr>
<tr>
<td>Greg Williams</td>
<td><a href="mailto:greg.williams@iesanz.org">greg.williams@iesanz.org</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Mb: 021 447 284 <a href="mailto:tracyb@bpl.co.nz">tracyb@bpl.co.nz</a></td>
</tr>
<tr>
<td>Tracy Bronlund</td>
<td></td>
</tr>
<tr>
<td>Vice President and Treasurer</td>
<td>Mb: 027 214 3272 <a href="mailto:nztreasurer@iesanz.org">nztreasurer@iesanz.org</a></td>
</tr>
<tr>
<td>Stephen Collard</td>
<td></td>
</tr>
<tr>
<td>Awards Convenor</td>
<td>Mb: 021 516 820 <a href="mailto:kat.mulder@ideal.co.nz">kat.mulder@ideal.co.nz</a></td>
</tr>
<tr>
<td>Kat Mulder</td>
<td></td>
</tr>
<tr>
<td>Wellington Liaison</td>
<td>Ph: 04 3850229 Mb: 027 472 6715</td>
</tr>
<tr>
<td>Cedric Williams</td>
<td><a href="mailto:cedric.williams@ideal.co.nz">cedric.williams@ideal.co.nz</a></td>
</tr>
<tr>
<td>Hamilton Liaison</td>
<td>Mb: 021 639 957 <a href="mailto:josh@impressionslighting.co.nz">josh@impressionslighting.co.nz</a></td>
</tr>
<tr>
<td>Josh Duckett</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Ph: 09 213 6328 Mb: 021 108 4345</td>
</tr>
<tr>
<td>Membership / Status &amp; Qualifications</td>
<td><a href="mailto:s.mander@massey.ac.nz">s.mander@massey.ac.nz</a></td>
</tr>
<tr>
<td>Susan Mander</td>
<td></td>
</tr>
<tr>
<td>Technical Events</td>
<td>Mb: 021 802 850 <a href="mailto:michael@maw.nz">michael@maw.nz</a></td>
</tr>
<tr>
<td>Michael Warwick</td>
<td></td>
</tr>
<tr>
<td>Committee Member</td>
<td>Ph: 09 336 9432 Mb: 027 532 5251</td>
</tr>
<tr>
<td>Martin Granese</td>
<td><a href="mailto:martin.granese@beca.com">martin.granese@beca.com</a></td>
</tr>
<tr>
<td>Auckland Liaison</td>
<td>Ph: 09 887 1067 Mb: 021 672 237</td>
</tr>
<tr>
<td>Mike Bernard</td>
<td><a href="mailto:mbernard@xerolighting.com">mbernard@xerolighting.com</a></td>
</tr>
<tr>
<td>Standards &amp; Tauranga Liaison</td>
<td>Ph: 07 834 4615 Mb: 027 542 9311</td>
</tr>
<tr>
<td>Clark Houltram</td>
<td><a href="mailto:clark.houltram@xtra.co.nz">clark.houltram@xtra.co.nz</a></td>
</tr>
<tr>
<td>Christchurch Liaison</td>
<td>Ph: 03 365 6020 Mb: 027 575 7400</td>
</tr>
<tr>
<td>Trevor Simpson</td>
<td><a href="mailto:trevor.simpson@lights.co.nz">trevor.simpson@lights.co.nz</a></td>
</tr>
<tr>
<td>Awards Dinner Chair &amp; Varda Editor</td>
<td>Mb: 021 101 8623 <a href="mailto:chris@kkdc.co.nz">chris@kkdc.co.nz</a></td>
</tr>
<tr>
<td>Chris Watson</td>
<td></td>
</tr>
<tr>
<td>Website &amp; Communications</td>
<td>Ph: 09 415 5012 Mb: 0274 301 111</td>
</tr>
<tr>
<td>Nathan Gilchrist</td>
<td><a href="mailto:nathang@adlt.co.nz">nathang@adlt.co.nz</a></td>
</tr>
</tbody>
</table>