From the President…..
(Non linear thought patterns of a chemist in transit.)

Welcome to Western Australia travellers

I hope to finish this article in Perth airport prior to flying out overseas, so here’s to typing quickly. If you think this is an indication of the glamorous life of a queen-chemist-at-large I’ll have to give you a solid yeahnah on that one. It is more of an indication of being woefully disorganised combined with as hectic a life as all humans have.

Incidentally yeahnah in my opinion is the finest word in this or any language, despite what spellcheck has to say about the matter; but having a three year old nephew who is an excellent mimic has made me aware of precisely how fond I am of the phrase.

Anyhow, whilst filling in the little green card at the airport I wrote my profession as “chemist” because I’m a lazy form filler-in-er. I almost always prefix my profession as la Analytical Chemist, Industrial Chemist, but not for this one. Next time I might try Queen Chemist, I do like the sound of that. I wonder how the president Elect would feel if I changed the title from President to Queen. No matter what your flavour of politics “Presidential behaviour” has lost some of its gravitas.

Back to the prefix situation (try saying that three times quickly in between drinks) is due to our nemeses - the pharmacists. No other profession hijacks the name of another in such a manner that you forever find yourself explaining to people that it’s chemist as in laboratory, not pharmacy. It irritates me to such an extent I’ve programmed friends and family against saying they are going to the chemist. That said, this probably isn't the pharmacists fault. The population seem loathe to change terms. This is why raising the profiles of science such as the March for Science on 22 April has such importance. I know you’ll be reading this after the event, but I do hope some of you made it into Forrest Place. I’m sad to be missing it, just as I’m sad to be missing the lab tour (see page 9) - they are among my very favourite events. I love looking around labs.

(continued next page)
From the President (Continued)

Not so keen on pharmacies, but that's a personal preference. I will bear no grudges to the pharmacists, they probably have to forever explain that they aren't chemists and can't do any of that Breaking Bad stuff.

Still, work is work and I must away. It's said all roads lead to Rome, but early in my career I had a strong suspicion that all roads lead to Darwin airport, because I always seemed to wind up there. I once woke up to a cohort of UN blue beret soldiers in Darwin airport who were themselves transiting out of East Timor during a particularly harsh time prior to their nationhood. I don't usually nap in transit, but it had been an epic interview journey that culminated in me missing a plane for the only time in my life. It's too long a story for this column, but next time you see me wandering around at a RACI event I may be prevailed upon to tell the tale of Nhulunbuy and the United Nations. The point is, the sight of soldiers roaming around Darwin airport is disorientating to say the least and I've seen some peculiar carrying ons up there over the years.

Ding dong ding dong. Must go. Bon voyage on your chemical journeys good people and do try to fly the flag for chemist folk the world over. The more people we explain to that we aren't pharmacists, the easier customs and immigration will be for all of us. Then go to a RACI event where you have to explain nothing and apologise for even less.

Annette Larwood
RACI WA Branch President/Queen

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RACI WA Branch National Science Week Dinner 2017
18 August 2017

RACI WA Branch National Science Week Dinner 2017
to celebrate Science Week, present the 2017 Wilf Ewers Citation
and honour new life members

Friday 18th August, 6.30pm at the Bentley Pines Restaurant

The price below is for dinner only (drinks not included) and seating is limited, so please register ASAP to avoid disappointment.
Members and Partners: $25
Students (members): $20
Non members: $35


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The saddest aspect of life right now is that science gathers knowledge faster than society gathers wisdom.

Of all the things I've lost, I miss my mind the most.
RACI Monthly Meetings

Please come to the RACI Members Monthly Meeting. This is a great chance to meet fellow members and be entertained by guest speakers. All welcome – membership is not a prerequisite to attendance (so please bring a friend).

<table>
<thead>
<tr>
<th>Date:</th>
<th>Usually 3rd Tuesday of every month</th>
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<tbody>
<tr>
<td>Time:</td>
<td>From 5.30pm. Seminar/presentation commences at 6.15pm.</td>
</tr>
<tr>
<td>Venue:</td>
<td>Exhibition Area, Building 500, Curtin University</td>
</tr>
<tr>
<td>Cost:</td>
<td>$5 charge to cover refreshments (limited drinks and snacks) (receipts can be provided)</td>
</tr>
<tr>
<td>RSVP:</td>
<td><a href="mailto:wabranch@raci.org.au">wabranch@raci.org.au</a> to assist with catering purposes</td>
</tr>
<tr>
<td></td>
<td>Or register online (preferably by Friday before meeting)</td>
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**MAY 2017**

**Tues 16th**

**Update on the Centenary Congress** - Professor Mark Buntine (Curtin University) &

**The Fickle Finger of Fate: Recent research into latent fingermark chemistry for forensic purposes** - Professor Simon Lewis (Curtin Institute of Functional Molecules and Interfaces and Department of Chemistry, Curtin University)

Identification of an individual’s presence at the scene of a crime or terrorist incident is vitally important for the successful progression of an investigation. Fingerprints remain the most widely used and reliable means of personal identification and hence are extremely important to law enforcement as contact evidence. A key element in the successful recovery of a latent (hidden) fingerprint from a scene or object is detection and this is an essential task for law enforcement when solving crimes. This presentation will provide an overview of the research at Curtin concerning the detection of latent fingerprints on porous and non-porous surfaces using a variety of approaches, including most recently the application of near infrared luminescence (see [http://www.abc.net.au/news/2016-05-25/ancient-egyptian-blue-pigment-can-help-identify-fingerprints/7442698](http://www.abc.net.au/news/2016-05-25/ancient-egyptian-blue-pigment-can-help-identify-fingerprints/7442698)). Our recent studies into the chemical and physical properties of latent fingerprint residue utilising advanced facilities such as the Australian Synchrotron will also be discussed.

Lecture at the Exhibition Space, Building 500, Curtin University

Registration: [https://www.raci.org.au/events/event/may-wa-branch-mmm](https://www.raci.org.au/events/event/may-wa-branch-mmm)

**JUNE 2017**

No Members Monthly Meeting. Titration Stakes being held at Curtin University this day (Tues 20th June).

**JULY 2017**

**Tues 18th**

50th Members Monthly Meeting - Alistair Day

**AUGUST 2017**

No Members Monthly Meeting. National Science Week Awards Dinner will be held Friday 18th August at the Bentley Pines Restaurant.

*An expert is a person who has made all the mistakes which can be made in a very narrow field.*
Are you a teacher of primary or secondary school students? Do you have children, grandchildren, nieces/nephews at school? This is a great way to get them interested in chemistry!

**WA CRYSTAL GROWING COMPETITION**

The 2017 WA Crystal Growing Competition is being held during School Term 2 - i.e. Tuesday 25 April - Friday 30 June 2017.

**About the Competition**

Have your students ever tried to grow crystals? Here is an opportunity for students to take part in a national scientific competition. Crystals are everywhere, just think of our daily lives. Sugar, salt, diamonds and emeralds are crystals and LCD computer and television screens work because of the many tiny crystals inside. Where else can you find crystals? How about your classroom? Enter this Competition to create your own crystals within six weeks and have a chance to have these crystals judged and entered into a National Competition organized by The Royal Australian Chemical Institute. Read the separate flyer for more information about the National Crystal Growing Competition.

The process is safe and simple, and designed to encourage students to develop an interest in Chemistry from a young age. Students can participate as individuals or with a friend, small groups or class groups. The competition is open to students in Grades PP – 6 at the primary level, and students in Grades 7, 8, 9 & 10 at the secondary level. And from 2016, the competition will be open to students in Grades 11 & 12. Students at this level are invited to demonstrate their broader knowledge and grow more complex crystals, from any substance that can be safely sent through the mail.

During the project, the students observe the process and write observations, and submit a one-page report with each crystal for judging. Prizes are allocated for each grade (grades Prep – 3 are judged together). If insufficient entries are received for a grade, more than one grade may be judged together. All students participating will receive a crystal sticker and a participation certificate. The winner(s) will receive an award and a team / individual merit certificates.

**How do you enter?**

1. The student(s) grow the crystals during School Term 2.
2. **When you are ready to mail the crystals Register and Pay ONLINE first!**
3. Cost is $5.50 per crystal (GST Incl)
4. Then mail the crystals – complete and include the separate entry details form including the online registration number and the student names.
5. Results will be published by email to the participating schools by the end of School Term 3 – (i.e. Friday 22 September 2017).

ONLINE REGISTRATIONS ARE NOW OPEN FOR THE 2017 COMPETITION
ONLINE REGISTRATION AND PAYMENT IS REQUIRED FOR THIS EVENT

See this link for how to pay, info on growing good crystals, order form for alum and information on the national competition:
https://www.raci.org.au/branches/wa-schools/crystal-comp
Membership Drive 2017 - Call for Volunteers

The WA Branch Committee is looking for volunteers to assist with a Membership Drive. The plan is:

- Visit Universities and talk to students and researchers about the RACI.
- Assign at least two people per university on a selected day for to visit for a few hours.
- The proposed format is a 2 to 3 minute talk in front of students about to begin lectures or labs making them aware of the RACI and the advantages of membership.
- Volunteers can either be involved in presenting information or be “moral support” for the volunteer talking about the RACI.
- Anyone who is keen to promote the RACI can volunteer including University students/researchers. Coaching will be provided so that we are all “singing from the same song-sheet”.
- Note that Universities will be contacted prior to any visits to request access and to co-ordinate the potential visit to minimise any disruption.

Hope you can help - If you are interested please contact @AlfLarcher or larcheralf@gmail.com.
The PERTH SCIENCE FESTIVAL is a major event in Perth’s Cultural Calendar. As a Science Outreach activity, the WA RACI wants help to set up a booth for the 2017 event in August – Do you want to Help? We need volunteers to:

- Man/woman the RACI display, demonstrating experiments and interacting with the big crowd that now attends this event.
- Generate ideas on which experiments to demonstrate.

Sponsorship: This event is a prominent place to promote your brand to the many Scientists and Science enthusiasts who visit. Contact us for details!

To discuss contact larcheralf@gmail.com or @AlfLarcher

Q: How many theoretical physicists specializing in general relativity does it take to change a light bulb?

A: Two. One to hold the bulb and one to rotate the universe.

The RACI - what do you get for your membership dollar?

- Professional Recognition - use of the MRACI or FRACI post nominal which improves your professional status;
- Code of Ethics - establishes and maintains high standards;
- Knowledge - improves your efficiency and opportunity for promotion;
- Education - broadens your understanding;
- Professional Development activities keep you informed of current technologies, research and applications;
- RACI Publication ‘Chemistry in Australia’ - keeps you current within the wider chemical community;
- Eligibility for The RACI National, Branch or Divisional awards. Achievement in these areas can enhance your CV;
- Access to a wide range of local functions for networking with colleagues from all sectors - improve your contacts and knowledge;
- Discounted registration to RACI lectures, functions and conferences;
- Special interest groups;
- Global Access - access to RACI network expands your access to others.

The RACI is actively promoting the value of professional qualifications to employers for consideration at employment, promotion and salary review occasions. In addition to professional qualifications, a magazine and professional development activities. The RACI offers Financial Members, a range of other incentives which are listed here www.raci.org.au/national/membership/benefits.html
Q: Where does bad light end up?
A: In a prism.

Q: What did one uranium-238 nucleus say to the other?
A: “Gotta split!”

Physics quote of the day: Anything that doesn’t matter has no mass.

WA RACI Branch Opening Centenary Event

For those of you who missed the 12th March event celebrating the 100 year anniversary of the formation of the WA Branch of the RACI, here are a couple of short videos of the event, courtesy of Alf Larcher.

The first few minutes of Steve Errington’s talk on the history of the RACI:
https://youtu.be/7oZ0LSoUWdc

A toast to the RACI centenary:
https://youtu.be/nrsnGQsAuBk
WILF EWERS AWARD 2017

Nominations from RACI (WA) members are now required for the W E EWers Citation Award. The citation recognises contributions made to furthering the profession of chemistry. It is expected these contributions will normally be made by virtue of the nominee’s activities within and for the RACI Western Australian Branch. The Wilf Ewers citation is not meant to cover achievements in chemical science and technology since these are recognised by other RACI awards such as the H G Smith and Applied Research Medals.

Previous Wilf Ewers award winners are:

1990  Dr David Phillips, Curtin University (Editor, Branch Newsletter)
1991  Mrs Margaret Martin, Aquinas College (BYL activities)
1992  Mr Reg Wray, Wray Associates (WA Branch President)
1993  Mr Chris Dodd, CCWA (Analytical Chemistry Group activities)
1994  Mr Jan Hosking, CSIRO (12AC/3EC Chair and organiser)
1995  Dr Armand Zurhaar, Zedcon Scientific Services (NCW activities)
1996  Mr Harry Douglas, E&DG Consultancy (WA Branch Coordinator)
1997  Professor Mel Sargent, UWA Chemistry Dept. (SAC Chair for WA)
1998  Mr Ian Sills, Curtin University (Chair, Analytical Chemistry Group)
1999  Dr Steve Errington, Curtin University (WA Branch activities)
2000  Mr Roger Schulz, CCWA (Health, Safety & Environmental activities)
2001  Dr Mauro Mocerino, Curtin University (Chair Chem. Ed. Group)
2002  Mr Stewart Jones, Aust. Govt Analytical Labs (WA Branch activities)
2003  Mrs Oana Chirila, Aust. Govt Analytical Labs (WA Branch activities)
2004  Mr Peter McCafferty, CCWA (WA Branch activities)
2005  Mr Mike Rowe, Dept of Industry and Resources (Services to the WA Branch)
2006  Dr Paula McLay, National Measurement Institute (Branch Newsletter Editor)
2007  Mr Rick Staker, SGS Australia Pty Ltd (Chair, Analytical Chemistry Group)
2008  Mr Reg Rowe, Rowe Scientific Pty Ltd. (WA Branch Committee, Treasurer, Sponsor)
2009  Mr Kelvin Lord, Lord & Co (WA Branch Committee, Treasurer, Sponsor)
2010  (not awarded)
2011  Dr Maree Baddock - St Hilda’s Anglican School for Girls (Chemical Ed Group activities)
2012  Dr Kathryn Linge, Curtin Uni (WA Branch Activities)
2013  Mr Shane Koenig, Nufarm (WA Branch Activities)
2014  Professor Simon Lewis – Curtin Uni (WA Branch & Chemical Education Group activities)
2015  Mr Peter Anstis, NMI (Analytical Chemistry Group)
2016  (not awarded)

Nominations must be submitted to the RACI WA Coordinator, wabranch@raci.org.au, before COB Friday, 21 July 2017. All nominations will be considered by a selection committee consisting of the Past President, current President and two non-Branch Council RACI members. The award is a cheque for $250 and an official scroll which will be presented at the National Science Week Dinner on 18th August 2017.

Chemistry in Australia online
Did you know you can read Chemistry in Australia online?
Find a free pdf of each month’s full issue here:

The evening of Tuesday April 18 was clear and cool: a perfect day for a RACI Members Monthly Meeting. This was a special event – a laboratory tour of Microanalysis. And as our President says, who doesn’t like to see how another lab does it? So, the RACI members (and non-members) gathered in the carpark in front of the building as the light slowly faded from the sky. The laboratory is situated in East Perth, and across the prettily landscaped road was a row of swanky apartments/town houses – not the scruffy industrial look many chemists are used to. Over the bowls of chips, the drinks and the sizzling sausages the 25 or so attendees mingled with the Microanalysis staff and chatted. What a diverse bunch: highly respected chemists enjoying retirement, chemists from a number of industries and laboratories, recent retirees, chemistry students in their undergraduate years – even a 3 year old mini chemist! After 30 minutes or so of eating/drinking/gossiping networking, Alistair Day, the host for the day (and Chair of the RACI WA Analytical Group), divided the mingling mob in two, sending the first half into the lab while the other gobbled sausages networked.

The laboratory retained strong traces of the property group that had previously inhabited the premises. A big kitchenette with heaps of comfy leather chairs. Big open plan office. Huge spherical white woven light fittings in the lab spaces (which staff wanted to decorate as Deathstars) and more carpet than you expect in laboratory work areas. A green and white wall of healthy green plants in fresh white pots separated the reception and office areas from the laboratory areas. The lab was clearly divided into wet sample handling areas, preparation areas with a huge bench to provide plenty of space, neat little side rooms containing the twin scanning electron microscopes and a big room with lots of other analytical equipment (various types of microscopes, X-ray diffraction equipment, laser surface scanners and other cool bits of kit we didn’t have time to play with).

The twenty or so staff at Microanalysis are involved in materials analysis – a nice catch-all phrase for all sorts of testing of materials. They measure asbestos and respirable crystalline silica for occupation exposure monitoring. They do particle characterisation, including size, shape, morphology and density. There is forensic analysis (including of gunshot residue). Mineralogy and petrography are undertaken and there was some interesting discussion of the examination of concrete to look at cracking and possible failure. Microanalysis undertake dangerous goods testing – these days if you ship it or fly it you need to know how corrosive/nasty “it” is and Microanalysis can find out. Think little metal plates soaking in “it” and lasers reading how deep each corroded pit is (or isn’t). Microanalysis is one of those classic labs where you can send some of that goop that came out of a pipe, ended up in a filter, or otherwise appeared unexpectedly – and they can hopefully tell you what it is. That takes some skill and is a very useful service.

After half the attendees had their look around the lab, the groups switched over so everyone could have their share of laboratory examination and drinking with a sausage-in-a-bun in the other hand. In due course, all were re-united in the carpark for further vigorous discussion. Eventually the sausages were eaten, the drinks packed away and talkative groups dispersed into the night.

The RACI wishes to thanks the staff of Microanalysis for their hospitality and the opportunity to familiarise chemists with the laboratory, techniques, equipment and services. Thanks also to Alistair and the Analytical Group for organising the visit.

Paula McLay FRACI, Editor RACI WA Newsletter
CALENDAR OF EVENTS FOR 2017
Presented by Rowe Scientific Pty Ltd

16.05.2017 Monthly Members Meeting Exhibition Space, Building 500, Curtin Uni. WA Branch RACI
13.06.2017 Branch Committee Meeting Room 500.3101 "pod", Building 500, Curtin Uni WA Branch RACI
20.06.2017 Titration Stakes Part 1 Building 500, Curtin Uni Chem Ed Group
18.07.2017 Monthly Members Meeting Exhibition Space, Building 500, Curtin Uni. WA Branch RACI

8.08.2017 Branch Committee Meeting Room 500.3101 "pod", Building 500, Curtin Uni WA Branch RACI
12-20.08 2017 National Science Week
18.08.2017 Science Week Dinner The Pines, Bentley WA Branch RACI
August 2017 Titration Stakes Final Murdoch Uni, Building TBA Chem Ed Group
28.08.2017 Student Career's Night Curtin University, Building 500 M&CD Group
28.08.2017 National Chemistry Quiz National Office
19.09.2017 Monthly Members Meeting Exhibition Space, Building 500, Curtin Uni. WA Branch RACI
10.10.2017 Branch Committee Meeting Room 500.3101 "pod", Building 500, Curtin Uni WA Branch RACI
12.10.2017 AGM / Monthly Members Meeting Exhibition Space, Building 500, Curtin Uni. WA Branch RACI

Enquiries to Branch Coordinator Ben Fletcher: 0403 022 968, wabranch@raci.org.au

Business Quotes
• The fellow who never makes a mistake takes his orders from one who does
• Wise people don’t need advice. Fools won’t take it.
• Choose a job you like and you will never have to work a day of your life.
• The secret of getting ahead is getting started.
• The best way to predict the future is to invent it.
• A company is known by the people it keeps.
• Poor planning on your part does not constitute an emergency on my part.
• Quitters never win, and winners never quit, but those who never quit AND never win are idiots.
• A clean desk is a sign of a cluttered desk drawer.

E-MAIL ADVERTISING RATES
Three-quarters of the total RACI WA Branch membership and Environmentalists (totalling about 500 of a select and highly targeted group) are registered to receive e-mail notices from the Branch Committee. Those RACI members who have a need to circulate an urgent message or advertisement of general interest to WA Branch members can request approval (wabranch@raci.org.au) to have the advert (sans attachment) circulated free of charge. If the advert is of a revenue producing nature then a charge of $120 +GST will be made.

NEWSLETTER ADVERTISING RATES
SINGLE ADVERTISEMENT: $120 +GST for one-quarter A4 page, $160 +GST for one-third A4 page, and multiples thereof, for print ready artwork or a print ready MS Word file.
MULTIPLE ADVERTISEMENTS: for three or more consecutive newsletter issues, a discount of 25% applies.
PAYMENT for all issues must be made in advance and within 7 days of receipt of invoice.

Branch Newsletter Deadlines For 2017
<table>
<thead>
<tr>
<th>Month of Journal</th>
<th>Deadline Date</th>
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</thead>
<tbody>
<tr>
<td>June</td>
<td>Fri 26 May</td>
</tr>
<tr>
<td>July</td>
<td>Fri 23 June</td>
</tr>
</tbody>
</table>

Deadline is close of business (5 pm) on the nominated dates.
Please submit all articles to raciwanewsletter@gmail.com