



The Bulletin 362

The Royal Society of New South Wales

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Jan 2013

Future Events

Lectures in Sydney are held on the first Wednesday of the month at 6:30pm.

February

Wednesday 6 February 2013

6:00pm for a 6:30pm start.

Scholarship Presentations

Union Club

25 Bent St Sydney

\$5 for guests

Details at right.

Wednesday 27 February 2013

5:30pm

Annual Meeting of the Four Societies

Engineers Australia Auditorium

8 Thomas St, Chatswood

Free—registration essential

Details at right.

March

Wednesday 6 March 2013

6:00pm for a 6:30pm start.

The Evolution of Galaxies

delivered by **Dr Ray Norris**

Union Club

25 Bent St Sydney

\$5 for guests

April

Wednesday 3 April 2013

6:00pm for a 6:30pm start.

Fellows Lecture & AGM

An evolutionary history of Australia

delivered by **Prof Mike Archer**

Union Club

25 Bent St Sydney

\$5 for guests

Southern Highlands Branch

See back page of this Bulletin.

6 February 2013

1207th Ordinary General Meeting

Scholarship Presentations

Join the Society for the annual presentation of our sought after Scholarship Awards.

Each recipient of an award will make a short address outlining their area of expertise and current work.

The scholarship recipients are Jendi Kepple from the University of New South Wales, Helen Smith from the University of Sydney and Anwen Krause-Heuer from the University of Western Sydney.

Please join your fellow members and guests at 6:00pm for a 6:30pm start at The Union, Universities and Schools Club at 25 Bent St Sydney.

27 February 2013

The Annual Meeting of The Four Societies

“Going low carbon – the Approach of the International Energy Policy Institute”

Professor Stefaan Simons, Director, International Energy Policy Institute, University College London

Venue: Engineers Australia auditorium
8 Thomas Street
Chatswood, Sydney
Time: 5:30 for 6pm
Cost: Free admittance

Registration: Preferred by Noon, Monday 21 February by online registration at

https://events.engineersaustralia.org.au/ei/getdemo.ei?id=1434&s=_FFCOTGFWK

For further information contact Don Higson at higsond@bigpond.net.au

Happy New Year!



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Patrons of The Royal Society of NSW

Her Excellency Ms Quentin Bryce AC CVO, Governor-General of the Commonwealth of Australia

Her Excellency Professor Marie Bashir AC CVO Governor of NSW

2012 Liversidge Lecture

The 2012 Liversidge Lecture was presented by Professor Thomas Maschmeyer FAA FTSE of the University of Sydney. About 180 people heard Thomas describe his work on catalysis, particularly its application in the transformation of Brown coal into a crude oil substitute and black coal. Thomas also described his work using supercritical water to convert biomass into a liquid fuel product. Thomas intends to write a paper for the Journal and Proceedings summarising his work. This is expected to be published during 2013.



The President congratulates Professor Thomas Maschmeyer

2012 Jak Kelly Award

This award has been set up in honour of Professor Jak Kelly, a former president of the Society.

At the last meeting of 2012, held immediately prior to our Christmas party at St Paul's College, Sydney University, Andrew Ong recipient of the 2012 Jak Kelly Award described his work to develop theoretical foundations for a new generation of atomic clocks. We were delighted to welcome Irene Kelly and other members of Jak's family to hear Andrew's talk and to see Irene present Andrew with his award. (The award is jointly sponsored by the Society and the Australian Institute of Physics.)



Mrs Irene Kelly presents Andrew Ong with his award.

Paperless Bulletin?

If you have the capability to read the Bulletin digitally please let the Society's office know by emailing Emma at royalsoc@royalsoc.org.au.



New Members of the Society

We welcome the following new members to the Society:

- Graham A Bell
- Stuart L Hawkins
- Ray Kerkmez

For information about membership please contact the Society's office or visit the Society's website at

<http://royalsoc.org.au/membership/membership.htm>

or contact Emma at royalsoc@royalsoc.org.au

Australian Institute of Physics and the Royal Society of New South Wales



2012 Postgraduate Group Photo: Dr Scott Martin

The NSW Branch of the AIP in conjunction with the Royal Society of NSW held its annual Postgraduate Awards Day on Tuesday 20 November 2012 in the Slade Lecture Theatre, University of Sydney. Each New South Wales University was invited to nominate one student to compete for

the \$500 prize and Postgraduate medal awarded on that day.

This year we would like thank the generous support of The Royal Society of NSW as the co-sponsor to award the Jak Kelly Scholarship prize of \$500 as a separate award category for this event.

Students were asked to make a 20-minute presentation on their postgraduate research in Physics, and the presentation was judged on the criteria (1) content and scientific quality, (2) clarity and (3) presentation skills. The nominated speakers for 2012 were:

- Andrew Ong, University of New South Wales - Single-ion Atomic Clocks using Highly Charged Ions: Detecting the Variation of Fundamental Constants

- Nick Cvetojevic, Macquarie University - From Photons to Planets: Finding a Second Earth using the Integrated Photonic Spectrograph
- Jung-Ha Kim, University of Sydney - Motion Correction in x-ray CT: First Practical Demonstration
- Peter Lazarakis, University of Wollongong - The biological effect of static magnetic field on irradiated cells
- Alexander Solntsev, Australian National University - Nonlinear Quantum Walks

Fred Osman

From the President



First, I would like to wish all our members a prosperous 2013. The year promises to be an exciting one for the Society – a number of initiatives we've been working on over the last several months will come to fruition in the first half of the year.

The second 2012 edition of the *Journal and Proceedings* has been published to the website and will be available in printed form within the

next 3-4 weeks. The new editor, Professor Michael Burton, has done a great job with his first edition.

Our first meeting for the year will be the 2012 Royal Society of NSW Scholarship presentations that were originally intended to take place in December but had to be rescheduled. There will be presentations of 20 minutes each from each of the scholarship winners. I would encourage you to attend – the Scholarship winners have done some outstanding work.

The Governor of NSW, her Excellency Professor Marie Bashir has generously agreed to host a function to invest the two Fellows appointed in 2012, Professor Barry Jones and Professor Brian Schmidt. This will take place in March.

In April, we will hold our annual dinner (a little later this year to better fit in with members summer commitments). At the dinner, we will present the 2012 Clarke Medal, Edgeworth David Medal and the Royal Society of NSW Medal.

Planning is well underway for the Royal Society of NSW Forum 2013. We are most fortunate to have an agreement with the Powerhouse Museum to hold the function in one of their large theatres and the ABC has agreed to broadcast the forum on *Big Ideas* on Radio National. We expect the Forum will be in the first week of June.

We expect that our full speakers programme for 2013 for both Sydney and the Southern Highlands branch will be available on the website within the next week or so and so members can plan their diaries for the year.

If there are any issues you would like to raise with me, I am easily contacted by e-mail at president@royalsoc.org.au and would like to hear from you.

Donald Hector

Book Review

Imperial science under the Southern Cross is an intellectual and social biography of Archibald Liversidge.

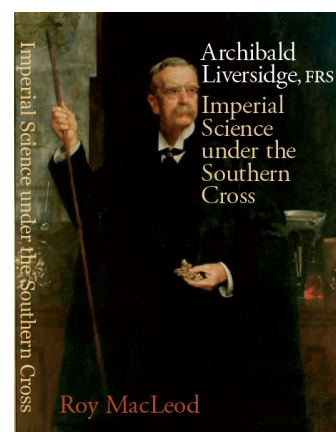
It explores a range of questions associated with the diffusion of British and European science; the respective roles played by "metropolis" and "periphery" in imperial science; and the particular demands made upon scientific and technical education in a society whose wealth was based principally upon agriculture, farming, mining and trade.

It inquires into the process of transplanting what Donald Horne has called the "memorised culture" of England, as well as a particular metropolitan vision of science, into the life of New South Wales.

It describes some of the key events that shaped the character of "public science" and the politics of academic life. At the same time, it considers the nature of the progressive ideology of "practical idealism" advanced by Liversidge, and his contribution to the movement for imperial efficiency. Roy MacLeod is Professor of History at the University of Sydney. He is the author and editor of a number of studies on the role of science in colonial Australia.

Review extracted from the website
<http://www.mightyape.com.au>

**To order your very own copy
Contact the Society's office**



Southern Highlands Branch

Future Events

February

Wednesday 6 February 2013

6:00pm for a 6:30pm start.

Depressive & Mood Disorders

delivered by **Prof Gordon Parker**

Chevalier College, Bowral

\$5 for members and \$10 for guests



Details on separate flyer and on Facebook.



Professor Gordon Parker

Royal Society of NSW Ties



Every purchase helps support the Society. Contact the office for an order form.

royalsoc@royalsoc.org.au

Scientists In Schools

Scientists in short supply in the Southern Highlands?

Scientists and Mathematicians in Schools has three teachers in Bowral who would like to welcome either a scientist or a mathematician into their classroom.

The Gifted and Talented Co-ordinator at **Bowral Public School** would like a partnership with one or more enthusiastic mathematicians who can introduce interested students to different areas of mathematics. She would like someone to visit if possible and to help develop activities for students that will encourage further reading and thinking.

A teacher at **Chevalier College** (Bowral) is interested in a partnership with a chemist from any field, to support students in Years 8 – 10 undertaking project work. The teacher would also like the chemist to share their research with students and perhaps assist with the development of interesting and engaging practical tasks.

The Head of Science at **Chevalier College** (Bowral) would like to partner with local scientists able to visit the school, but is

also interested in collaborating with scientists working in remote locations (Antarctica, Great Barrier Reef, Space Station), using communication technology available at the school - perhaps to set up experiments and analyse data.

If you have a degree qualification in science or maths and would enjoy the opportunity to share your knowledge, then Scientists and Mathematicians in Schools is for you! For more information visit www.scientistsinschools.org.au or call the NSW project Officer, Sabine Schreuder, on 9490 8405.

Register for Scientists in Schools here: <http://www.scientistsinschools.edu.au/scientists/registration.htm>

Register for Mathematicians in Schools here: <http://www.mathematiciansinschools.edu.au/mathematicians/registration.htm>



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