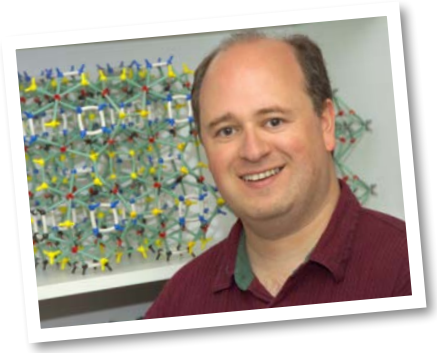
NEWSLETTER

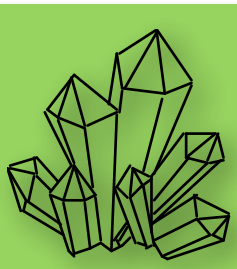
Society of Crystallographers in Australia and New Zealand



From the President

With our local celebrations for the International Year of Crystallography only officially completed very recently with the Minerals to Medicines celebration at the Australian Academy of Science in May (five months after the rest of the world finished celebrating), it has been a busy time for SCANZ and its members. But with the IYCr now behind us, SCANZ has returned to its more usual business.

In particular, we are now looking forward to the upcoming AsCA 2015 (Kolkata, December 5-8; http://www.asca2015.org) and Crystal 30 meetings. I urge you all to support both meetings, and as usual Maslen Scholarships will be available for both meetings for suitably qualified students. The latter meeting is tentatively scheduled for Tuesday March 29 to Friday April 1 in Tasmania (i.e. starting Easter Tuesday 2016). Please pencil these dates into your diary; we will confirm these details very soon, once we have locked in a suitable venue. I am chairing the organising committee, while Peter Czabotar is chairing the program committee. If you have any comments (e.g. speaker suggestions) then feel free to contact either of us.



http://scanz.iucr.org/

Contents

We are:

From the President

Another event for your diaries is the next Australasian Crystallography School. The Australian Synchrotron has again offered considerable sponsorship as well as use of their facilities, and at this stage it is tentatively scheduled for January 25-29, 2016. Again, we will contact members with further details once confirmed.

SCANZ has also been busy with some significant internal re-organisation. Thanks to the hard work of our Treasurer, from June 2014 we began using an online software to manage memberships. This change has allowed us to set up automatic email reminders for renewals, to check at at any time what the membership status is and when it is due, to access receipts for payments, and easier mail merge to send information to members by email or post. It is therefore very important that all members log on to this system to confirm that their email address is correct as well as their postal address. Without it it is impossible to contact members. As we were implementing the system there has been an issue with some universities where the reminder emails were tagged in the SPAM folder. So please check your spam folders or add treasurer@scanz.org on your white list if possible. In any case you can browse to http://members.scanz.org/login and check your status/update your details. We are also working on credit card online payments but this will take a bit more time to implement. At the moment the preferred method to pay your fees is an electronic bank transfer to the society's account - details when you login online. The memberships are growing and we have 116 active members as of 1st July 2015 of which 44 are students (37%).

I am also pleased to note that the constitutional changes proposed at Crystal 29 have subsequently been passed via the recent postal vote. From a total of 91 ballot papers sent out (representing the whole paid-up membership at the time), we received 36 yes votes, 0 no votes, and 4 invalid responses. We now plan to lodge the new constitution with the SA government soon. One of the more significant changes is the formal establishment of a retirement membership. To be eligible, a member must be past the age of 60, retired from full time employment, and have been full members for no less than ten consecutive years. Retirement membership also requires a one-off payment of five year's full membership fees, and needs to be approved by the Council. So if you think you are eligible and would like to become a retired member, please get in touch with the Secretary so we can formally consider it.

Stuart Batten

Legacy of IYCr 2014

Recently, Australia has finished its International Year of Crystallography celebrations with the Science in the Shine Dome Symposium "Minerals to Medicines - 100 Years of X-ray Crystallography" (28 May in Canberra). Internationally, the IUCr has also concluded its celebrations with the "Crystallography for the next generation: the legacy of IYCr" conference in Morocco 22-24 April 2015, which was attended by Jenny Martin on behalf of SCANZ (report included below). We thought therefore that this would be a good time to recap what has happened in Australia and New Zealand. I have had the privilege to serve as the President of SCANZ during much of the preparations for IYCr, as well as part of 2014, and I was also appointed as a coordinator for Australian activities by the National Committee for Crystallography. I would like to thank everybody who led specific activities, and most of these individuals have provided short summaries of their activities below. Thanks also to others who have tried to get ideas off the ground but for various reasons were not able to do so. Many of the eventual activities were a result of discussions and arm-twisting, thanks to everyone who put up with this, but special thanks to those who came up with initiatives themselves without the need for any prodding! Finally, thanks to all those who participated in various activities by attending, competing (see if you can spot any Australian entries here http://www.iycr2014.org/participate/photo-competition/result) or supporting them in other ways. As you will remember, Australia has been the first to get celebrations off the ground with the Bragg Symposium back in 2012, and we hope that there is a legacy that has been left by IYCr in Australia and New Zealand through higher awareness of crystallography and that many activities will continue beyond 2014.

Bostjan Kobe

Legacy of IYCr 2014

Bragg Centennial Symposium held on 6 December 2012 in Adelaide

The 2014 celebration of the International Year of Crystallography (IYCr) appropriately started early in Australia (on the 6th of December 2012) with the Bragg centennial symposium held in Adelaide immediately following the AsCA 12/CRYSTAL 28 conference. The symposium was held to pay tribute to Lawrence Bragg and his father William Henry Bragg who made pioneering and far reaching contributions to the development of X-ray crystallography and who spent important periods of their lives in Adelaide.

The specific event being commemorated was the presentation to the Cambridge Philosophical Society on 11 November 1912, by W.L. (Lawrence) Bragg, of a paper entitled "The Diffraction of Short Electromagnetic Waves by a Crystal", which shortly after appeared in the Society's *Proceedings*. In this paper he outlined what we now call Bragg's Law and also presented the first correct indexing of a diffraction pattern, namely that for zinc blende. The symposium was recently, again appropriately, book–ended with the Science at the Shine Dome symposium "From Minerals to Medicine: 100 years of X-ray crystallography" which celebated the centennial of the awarding of the Nobel Prize to the Bragg's in 2015!

A report on the very successful Bragg symposium, written by our former colleague Steve Wilkins, follows:

The symposium included a very distinguished list of speakers who covered many aspects of the Braggs' life and work, especially that of Lawrence. Six members of the Bragg family specially made the journey from the UK to Australia for the symposium, including Mrs Patience Thomson, younger daughter of Sir Lawrence Bragg. Patience gave a wonderful talk recounting her fond memories of her father and also quelled a few popular myths about him. Her talk was followed by an outline of the relative roles of WH and WL Bragg in the development of X-ray crystallography.

Brian Matthews then spoke about the early days of biomolecular crystallography and some memories of the role of Lawrence Bragg. Anders Liljas spoke about the background to the award of the Nobel Prizes in 1915 to the Braggs referring to internal correspondence and records of the Nobel Committee. Anthony Kelly spoke about the early days of metal physics in the Cavendish and the influence of Lawrence on the development of this field as well as that of X-ray and electron microdiffraction. Other speakers covered the birth of neutron diffraction (Thom Mason), the role of Bragg's law in electron diffraction (Colin Humphreys), the evolution of microdiffraction from simple lab-based set-ups to XFEL-based studies (John Spence). Tony Cheetham gave an impressive overview talk on the impact of crystallography in various frontier areas of materials science. Many Bragg related papers by speakers at the Symposium have been published in the special Bragg Centennial issue of Acta Cryst A (another legacy of IYCr), see http://journals.iucr.org/a/issues/2013/01/00/isscontents.html

Towards the conclusion of the Symposium, Jenny Martin gave a very personal tribute to Dame Louise Johnson who died a few months before the Bragg Symposium. Jenny is a former PhD student of Louise. Louise had been invited to be a speaker at the Symposium and had worked under Lawrence Bragg at the Royal Institution on the structure of lysozyme. However, this unfortunately was not to be.

The Symposium Dinner for speakers and special guests was held in the former home of the Braggs, now operated as the Public Schools Club. The menu consisted of favourite dishes of Lawrence Bragg. Grandchildren Clare and Nick Heath gave short vignettes on their memories of their grandfather. A special Bragg-labelled wine was served at the Dinner. Other special events in the AsCA/Bragg week were a Civic Reception at the Adelaide Town Hall held in honour of the Bragg family and an unveiling of a statue of Lawrence Bragg in a prominent place on North Terrace in front of Government House.

It was a very full week and one that will linger in the minds of those who were present for a long time to come. We were extremely fortunate that we had people present who could still speak with firsthand knowledge about Sir Lawrence Bragg.

Ray Withers

Legacy of IYCr 2014

Bragg Symposium Speakers

***Front row(l to r)**:, Prof John Spence, Prof Anthony Kelly, Mrs Patience Thomson, Dr Steve Wilkins, Prof Brian Matthews. **Second row**: Prof Gautam Desiraju, , Dr John Jenkins, Prof Anthony Klein, Prof Peter Colman, Mr David Thomson. **Back row:** Sir Colin Humphreys, Prof Tony Cheetham, Prof Anders Liljas, Prof. Wayne Hendrickson.*

"Crystallography in Everyday Life" Photo Competition

The Australian satellite of the IYCr "crystallography in everyday life" photo competition organised in collaboration with IUCr and Agilent Technologies was held on April 22 2014 as part of the SCANZ Crystal 29 conference. The conference was held at O'Reilly's Rainforest Retreat in Lamington National Park Queensland. Over 130 images submitted from around the world were shortlisted to 25 images by a select committee, and these were displayed on poster boards at the conference mixer. Conference delegates were asked to select their favourite images. The winner of the competition was Graziano Lolli from Italy for his image, #9 "Romanesco broccoli".

This event was organised with the assistance of Poulomi Agrawal (Australian Academy of Science), Michele Zema (IYCr), Julia Archbold, Patricia Walden and Jenny Martin (all from UQ). Photo credit Patricia Walden, UQ. The prize of $500 was sponsored by the Crystal29 conference. In addition, 15 images were selected for display in public venues throughout Australia during 2014 and 2015. They featured prominently at the Academy of Science at the Shine Dome event in May.

Jenny Martin

Legacy of IYCr 2014

Australian National Crystal Growing Competition

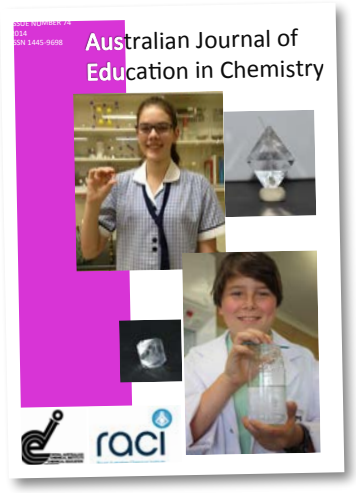
The first ever Australian National Crystal Growing Competition took place in 2014 in celebration of IYCr. It was supported by SCANZ, RACI and The Australian Academy of Science and was organised via the already existing six local RACI State/Territory competitions (NT does not run a competition). All local coordinators were enthusiastic about the idea of a national competition and happy to comply with the criteria of growing a single crystal of potash alum. Each state/territory judged their own competition and then five of these submitted up to 7 of their best crystals in each of the two divisions - primary and secondary - for national judging early in December (SA chose not to send any).

Three crystallographers judged the competition and awarded a winner and two runners-up in the primary division and a winner and three runners-up in the secondary division - all of whom received framed certificates. Highly Commended and Finalist certificates were also awarded so that each student associated with a crystal sent into the national competition received acknowledgement. Winners also received a glass plaque and a replica was also given for the school trophy cabinet. Much to his delight, the teacher associated with the winner of the primary division (secondary was not able to attend) was sponsored to attend the RACI National Congress in Adelaide in December 2014 and was presented with his school's plaque before the 900 delegates. Both 'winning teachers' were sponsored to attend the Academy's Celebration of Crystallography day in 2015. Pictures of the two winning students and their crystals graced the cover of the latest edition of the Australian Journal of Education in Chemistry (see below).

Several thousand students grew crystals of alum in 2014 and the national competition engendered much interest and excitement from the states/territory, schools and students judging from comments received when results were announced. The intention is that a national competition will become an annual event as an extension of the local RACI state/territory competitions. A fitting tribute to IYCr2014.

Thanks must go to SCANZ, The Australian Academy of Science and RACI for sponsoring the competition as well as to the students, teachers, state and territory coordinators for helping make this happen.

Dr Jenny Jones OAM
National Crystal Competition Coordinator IYCr2014.



NATIONAL CRYSTAL GROWING COMPETITION RESULTS

Primary Division K-6:

Winner: Hunter Murrin, Year 6, Wollondilly Anglican College, NSW

Runners-up:

Liam Smith, Year 4, Table Cape Primary School, Tas
Laura Hercules. Year 4-6 , Toorak College, ViC

Highly Commended:

Jesse Miller, Year P-3, Anakie Primary School, Vic
Alex Harman, Year 6, Table Cape Primary School, Tas

Secondary Division 7-10:

Winner: Macinley Butson, Year 8, The Illawarra Grammar School, NSW

Runners-up:

Andrew Brincat, Nikolaj Mikic and Jake Fenech, Year 8, Mamre Anglican School, NSW
Matt Hird, Year 7, Barham High School, NSW
Steve Gordon, Year 7, Barham High School, NSW

Highly Commended:

Alana Lentini, Natasha Koutoufides & Isabella Henry-Jerrett, Year 7-8, Our Lady of Mercy College, Vic.
Renee Gasiamis, Jessica Feng and Grace Xu, Year 7-8, Our Lady of Mercy College, Vic
David White, Year 7, Aquinas Catholic School, NSW

Legacy of IYCr 2014

Crystals in the City

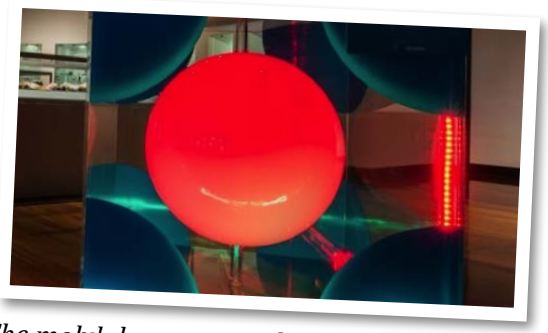
Helen Maynard-Casely from ANSTO and Neeraj Sharma from UNSW joined forces to develop an exhibition of life-sized crystal structures. These models entertained, educated and inspired the general public being displayed at various public spaces around Australia (e.g. Centennial Parklands and Botanical Gardens in Sydney, Questacon and the Australian Academy of Science in Canberra, and the Australian Synchrotron in Melbourne). We had structures representing various sub-fields including perovskites, diamond, molybdenum, neuraminidase and glucose. The structures are now on permanent display at various institutes.
Read more at www.crystalsinthecity.com.au and keep up to date *@Crystal_in_city*

Neeraj Sharma

The diamond crystal structure model at the Royal Botanical Gardens in Sydney, now at ANSTO.

The mini-perovskite crystal structure model at QUESTACON in Canberra, now at the Australian Synchrotron.

The perovskite crystal structure model at Centennial Park in Sydney, now at UNSW.



The molybdenum crystal structure model at the Australian Museum in Sydney, now at ANSTO

The neuraminidase model at the Australian Academy of Science in Canberra.

Legacy of IYCr 2014

Verge Gallery Exhibition

Chris Ling, Josie Auckett and Althea Arguelles-Ling organised an exhibition called "Representations of Matter in Real and Reciprocal Space: Images and Objects from Crystallography" at the Verge Gallery of the University of Sydney. The exhibition featured artistic images of crystallographic diffraction data, 2D and 3D-printed models of a variety of crystal structures.

Chris Ling

IYCr Journal Special Issues

A number of special issues of journals were published in 2014 to celebrate IYCr. One with a local flavour was the December 2014 issue of Australian Journal of Chemistry, edited by Stuart Batten, Bostjan Kobe and Luke Guddat. It contained twenty articles from both Australian and overseas research groups, and covered both chemical and protein crystallography. A special issue of CrystEngComm celebrating crystallography in the Asia-Pacific region (issue 28, 2014), edited by Stuart Batten and JJ Vittal (Singapore), was also published and contained a number of contributions by SCANZ members. A special IYCr virtual issue of Crystal Growth & Design also had a significant contribution of papers from SCANZ members. Finally, Chemistry in Australia, the magazine of the RACI, also got into the act, with the August 2014 issue featuring crystallography on the cover and containing inside a guest editorial by Stuart Batten and a fascinating article by Dave Sammut on some of the early history of crystallography.

Stuart Batten

Crystallography 365: A legacy, Every Day of the Year!

Following on from the success of the *'Crystallography 365'* project – the IuCr have adopted the content from the successful blog to build and host an educational website. The undertaking preserves all of the information from the original blog, but adds a number of nifty features, including a perpetual calendar of crystallography. You can find the new website at http://www.iycr2014.org/learn/crystallography365.

Image from the IUCr

Helen Maynard-Casely

Legacy of IYCr 2014

Public Demonstration of X-ray Crystallographic Data Collection

During the 2014 International Year of Crystallography several members of the Collins, Martin and Kobe labs at the University of Queensland organised a public lecture and demonstration of X-ray crystallographic data collection using the Australian Synchrotron. This session was held at the Queensland Museum on the 21st of August, during the National Science Week. In a live-link demonstration to the Melbourne based Australian Synchrotron, primary, and high school students as well as interested members of the public were invited to experience how synchrotron technology assists researchers to investigate the sub-microscopic secrets of materials and biological macromolecules. We discussed questions such as What is a Synchrotron? How the Synchrotron uses particle accelerators to produce a beam of high energy electrons that is converted to intense synchrotron light. How different beam lines use this light to study everything from material science to art history, to the design of new drugs to combat pressing human health problems. Then with help from Daniel Ericksson at the MX beam line we showed people in real time how we use this critical Australian research facility to collect data using remote access to robots and diffraction imaging. This proved a highly enjoyable experience and we hope to be able to continue it as an annual event to educate and entertain the public. We would like to thank Olivia Muir from the Queensland Museum for her help in organising this demonstration.

Also related to National Science Week, Dr. Brett Collins gave an interview to local Brisbane radio station 4ZZZ science presenter Dr. Reece Jackson on the Australian Synchrotron. We discussed how the synchrotron works, what it's used for and its importance to the Australian scientific community. This is available as a podcast from the radio station.

Brett Collins

Macromolecular Crystallography Symposium at ComBio 2014

At COMBIO 2014 in Canberra we had a special macromolecular crystallography symposium in celebration of the IYCr. Prof Mitchell Guss (USyd) gave a fascinating historic overview of "crystallography down under". Dr Nan Li (UOW) talked about crystallographic structures of DNA replication proteins from the pathogen *Acinetobacter baumannii*. PhD students Stephen Scally (Monash) and Barbara Hadley (Griffith) talked about structural immunology and membrane transport protein crystallography respectively. SCANZ sponsored poster prizes for PhD candidates presenting work that featured results obtained by crystallography. Three prizes went to Sahil Balotra, Amy McGrath and Gabrielle Watson. Overall, these SCANZ sponsored events were well received and raised the profile of crystallography at COMBIO 2014.

Aaron Oakley

IYCr Activities in New Zealand

The NZ Structural Biology meeting was held in 2014 in Hanmer Springs as a themed meeting celebrating the IYCr. This was a very successful meeting attracting more than 120 participants from all around NZ (~half students). Prof. Michael Parker (St. Vincents) gave a plenary lecture at the Hanmer meeting, with other invited speakers including Prof. Jacqui Matthews (The University of Sydney) and Prof. Joel Mackay (The University of Sydney).

Prof. Ted Baker also gave a public lecture in Wellington on the contributions crystallography has made to human health, entitled "Seeing molecules: a bridge between genes and drugs" to a meeting on Frontiers of Biology, in association with the NZ Microbiological Society and the NZ Society for Biochemistry and Molecular Biology.

Chris Squire

Legacy of IYCr 2014

Stephen Curry IYCr Public Lecture Tour

As part of the International Year of Crystallography celebrations in Australia we were fortunate to have Professor Stephen Curry give a public lecture speaking tour at a number of cities around the country during the month of August 2014. Professor Stephen Curry is an outstanding scientist, a crystallographer, a teacher and science educator. He is a strong advocate for increasing public awareness of science in general and the science of crystallography. He is a founder member and vice-chair of "Science is Vital" a grassroots not for profit organization made up of UK scientists that actively campaign government to protect Science research funding. He has a strong profile as a science blogger and has written on scientific issues in places such as the Guardian, The Times, New Scientist and the Times Higher Education. He speaks to a wide range of audiences on scientific interests and topics. He was interviewed by the BBC to discuss the International year of Crystallography and particularly "what is crystallography". In October 2013 he presented a Friday Evening Discourse at the Royal Institution on crystallography highlighting the importance of this rather enigmatic field of research and the role it has played in our understanding of the workings of molecules and the chemistry that they perform.

His 3 week speaking tour around Australia was spent advocating crystallography and highlighting its importance as a science. His public lecture entitled "***What is X-ray Crystallography and how did it transform our view of the world?"*** was presented at

August 3rd - IUPAB conference, Brisbane
August 18th - University of Sydney
August 20th - Monash University, Melbourne
August 22nd - University of Tasmania (RACI Tasmanian Branch), Hobart
August 25th - Institute of Advanced Studies, University of Western Australia, Perth

We were very fortunate to have received funding support for Stephen's visit from SCANZ who agreed to pay for all his airfares. The individual hosts covered his local costs. His talks were all very well received and well attended.

Alice Vrielink

Crystallography for the Next Generation: The Legacy of IYCr, Morocco, April 2015.

The conference "Crystallography for the next generation: the legacy of IYCr", was held at the Hassan II Academy of Science and Technology of Morocco in Rabat on 22-24 April 2015. The conference was organised by the IUCr and the Moroccan Crystallographic Association with the support of UNESCO, ICSU and The World Academy of Science (TWAS). The aim was to review the many initiatives undertaken during IYCr (including crystal growing comps, photo comp, summit meetings, Open Labs) and how some of these might be continued into the future. Prof Jennifer Martin attended the conference as an invited representative of SCANZ and of the Asian Crystallography Meeting to talk about the initiatives for IYCr in the region. Prof Martin also participated as a panelist in a roundtable to discuss how the IUCr is helping to grow the crystallographic community, with a special focus on journals and publishing. A summary of the conference program including photos can be found here: http://www.iycr2014.org/legacy/conference. The main achievements of IYCr2014 were increased engagement, increased awareness, media interest, archive of resources, improved collaboration between IUCr and other international organisations and the growth within the IUCr community. Michele Zema, the IYCr coordinator, has done an outstanding job in making IYCr such a great success.

Jenny Martin

Legacy of IYCr 2014

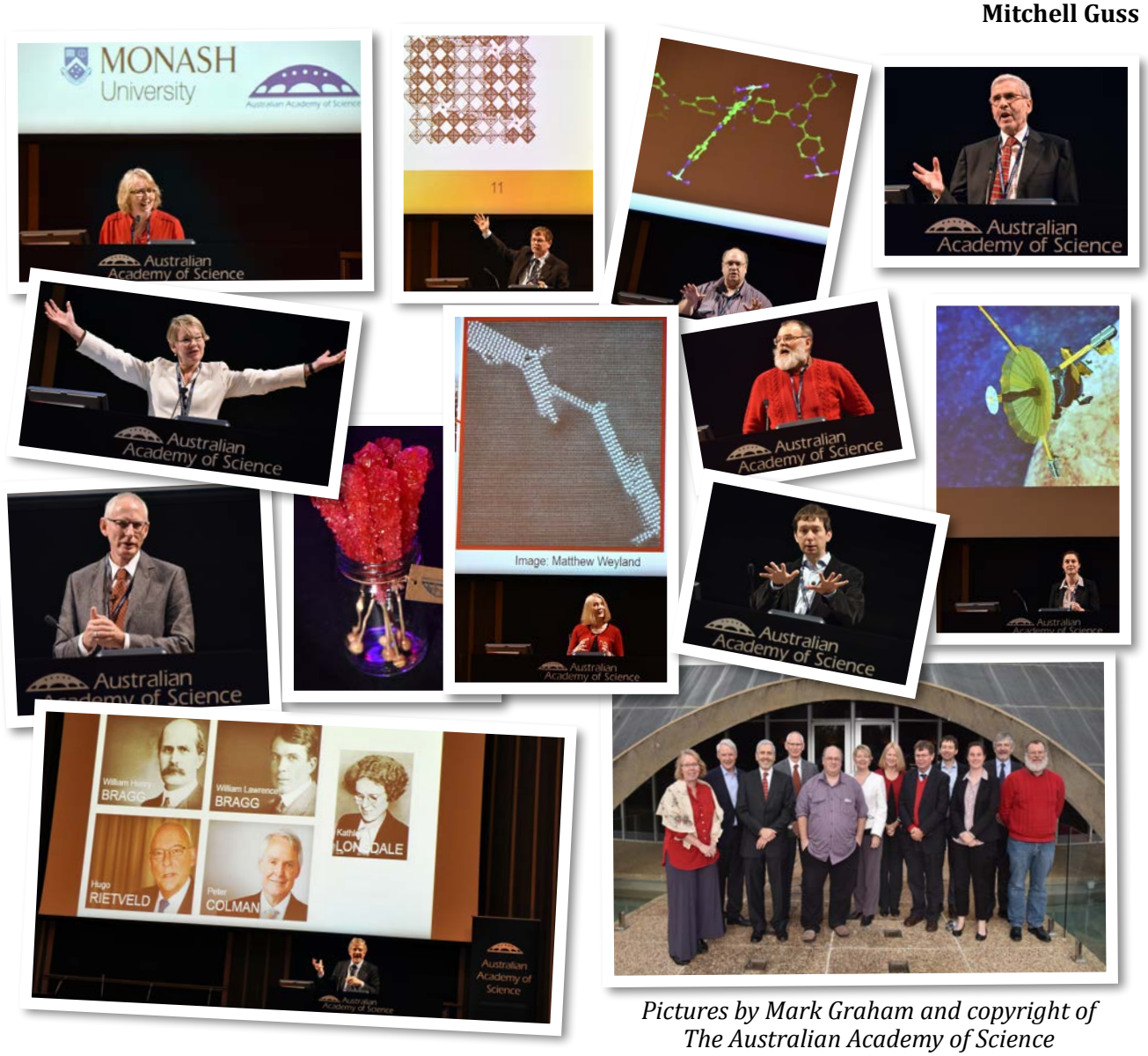
Report on the Annual Symposium on "Minerals to Medicines: 100 Years of X-ray Crystallography"

The Australian National Committee for Crystallography organised a one-day scientific meeting as part of the 2015 Australian Academy of Science annual symposium. The meeting celebrated the 100th anniversary of the award of the Nobel Prize in Physics to the father and son team of William Henry and William Lawrence Bragg. The day was introduced by Dr Adi Patterson, the Chief Executive Officer of ANSTO, who generously funded a Platinum support package for the meeting.

The talks were chosen to highlight the contributions made by X-ray crystallography to a broad range of scientific disciplines ranging from its origins in physics (Spackman) to contributions to developments in modern medicine and structure-based drug design (Colman) and biology (Martin). In the course of the day talks were presented on the importance of crystallography to the Australian mining industry (Pring) and to the chemistry of new materials (Batten). The topics even ventured out of this world with a venture into crystallography in space (Maynard-Casely). The exciting new developments in electron crystallography and microscopy (Etheridge) and free electron lasers (Chapman) concluded the day.

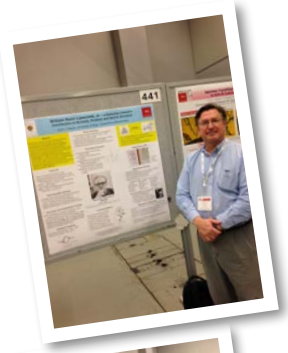
The talks were recorded and are freely available on the Australian Academy of Science website (https://www.science.org.au/events/science-shine-dome-2015/schedule/2015-05-28)

Mitchell Guss



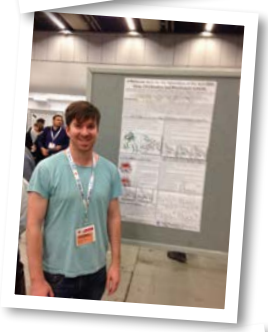
Pictures by Mark Graham and copyright of The Australian Academy of Science

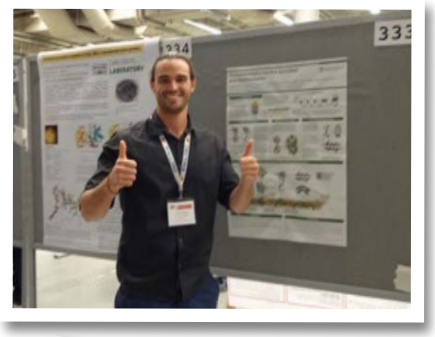
IUCr 2014, Maslen Scholarship Report

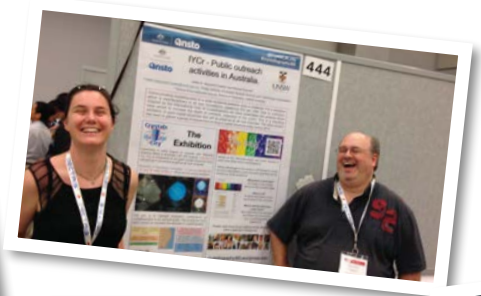


Montreal in the summertime created an amazing backdrop for the 23rd Congress and General Assembly of the International Union of Crystallography. Nobel laureate Dan Shectman opened the conference with a fascinating introduction to quasicrystals. The following talks encompassed a wide variety of disciplines all connected through crystallography. One session I was listening to Wayne Hendrickson talk about using multiple crystals to enhance the signal to noise ratio in SAD phasing, the next I was hearing from David Bish about the first x-ray powder diffraction measurements on Mars! Peter Kwong presented a great lecture on the progress towards a structure-based vaccine for HIV-1, while Isabel Uson talked about the powers of *ab initio* phasing using ARCIMBOLDO. The conference provided an invaluable opportunity to meet some of the best crystallographers in the world. I want to thank SCANZ for awarding me an International Maslen Scholarship to travel to Montreal to take part in this amazing meeting.

Jason Brouwer
Walter and Eliza Hall Institute







Upcoming Meetings

The 2015 Asian Crystallographic Association Meeting (AsCA 2015) will be held from December 5-8, 2015 at Science City, Kolkata (old name Calcutta). There is an exciting lineup of speakers including Four Plenary and five Keynote addresses. The microsymposia are arranged under three broad headings – Chemical Crystallography, Structural Biology, and Specialized Techniques. In total there are eighteen microsymposia, organized in three parallel sessions. Additionally there are two Crystallographic Software sessions – dealing with the structure solution/analysis of small and macro-molecules. Finally there will be a General Interest Session covering different aspects of pharmaceuticals.

Registration and abstract submission are now open. Please visit the conference webpage: (www.asca2015.org) for information on registration, abstract submission and accommodation. Please book your accommodation as soon as possible since availability is limited.

Important Dates

Conference dates:	Dec 5-8, 2015
Call for papers and Registration opening	May 11, 2015
Abstract submission deadline	Sept 15, 2015
Travel support application deadline	Aug 31, 2015
Travel support announcement	Sept 30, 2015
Early registration deadline	Sept 5, 2015
Regular registration deadline	Nov 20, 2015
Final program	Nov 27, 2015

To support excellence in crystallographic research carried out by young scientists the organizers are seeking application for the ***AsCA Rising Star Award***. The details are available at the conference website. The six finalists will be invited to present their work in a special session. A limited number of young scientists will be provided partial travel support from the grant received from IUCr.

Participants from outside India are requested to register early so that all the visa formalities can be completed well ahead of the conference date.

We look forward to welcoming you to Kolkata.

Kind regards

Alice Vrielink
Chair of the International Program Committee

Pinak Chakrabarti
Chair of the Local Organizing Committee

Funding to support attendance at this conference is available for postgraduate students from SCANZ in the form of Maslen scholarships.

Applications must be submitted by midnight on Friday August 28, 2015 (in order that applicants can be notified of the outcome before the early-bird registration deadline of September 5).

Application forms and Award Conditions will be sent to the SCANZ membership by our Secretary Chris Ling. For further details contact Chris at: **chris.ling@sydney.edu.au**

Upcoming Meetings

Asia Oceania Forum for Synchrotron Radiation Research 2015, in conjunction with the Australian Synchrotron's User Meeting 2015

25-27 November

The Australian Synchrotron is proud to host the 9th Asia Oceania Forum for Synchrotron Radiation Research (AOFSRR 2015), in conjunction with User Meeting 2015.

The two meetings will share a joint program across three days, on 25-27 November, at the Australian Synchrotron's award winning National Centre for Synchrotron Science in Melbourne.

AOFSRR 2015 brings together the synchrotron community from across the Asia Oceania Region, enhancing co-operation and collaboration opportunities for the advancement of synchrotron science and technology.

Our annual User Meeting will again showcase the best research from the Australian Synchrotron, and update our 5000-strong user community on the latest techniques and application developments.

NOW OPEN FOR ABSTRACT SUBMISSIONS – CLOSING 20 JULY

For more information:

Email: aofsrr2015@synchrotron.org.au

Website: aofsrr2015.synchrotron.org.au

Helen Maynard-Casely's take on Stuart Batten's talk for the Minerals to Medicines symposium.

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