

NEWSLETTER

Society of Crystallographers in Australia and New Zealand

SCANZ PRESIDENT'S REPORT



Dear SCANZ colleagues,

I write to you one last time as President of this wonderful society when my mandate approaches its sunset. The baton is almost ready to be passed to the current vice-president Megan Maher. Truth must be said that Megan has been invaluable at a time that my life ended up bringing me overseas. I want to say thank you to Megan and I am sure she will be a great President of SCANZ in the years to come.

I also want, in the name of SCANZ, to congratulate Emeritus Professor Mitchell Guss for being appointed, in 2020, Officer of the Order of Australia (AO) for “service to education and scientific research in the field of molecular bioscience, and to professional organisations”. The latter together with the 2018 appointment of Professor Jennifer Martin as Companion of the Order of Australia (AC) for “For eminent service to science, and to scientific research, particularly in the field of biochemistry and protein crystallography applied to drug-resistant bacteria, as a role model, and as an advocate for gender equality in science” is of great honour for our community. Their leadership by example but also their accomplishments are learning and role models to us all.

The SCANZ executive and Council have been busy moving along the agenda previously set at the Business meetings.



<http://scanz.iucr.org/>

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Conference and Society policies

Following through from the successful conference speaker policy set in Crystal 29, back in 2014, by Jenny Martin and co-organizers and following input from Science Technology Australia (STA), SCANZ has now established a SCANZ Diversity and Inclusion Policy (<https://www.crystal33.org/scanz-policy/>) in addition to the conference policy (<https://www.crystal33.org/conference-policy/>). SCANZ with these hopes to follow the lead that others in the community have been pushing for a while like the IUCr Gender Equity and Diversity Committee. The SCANZ Council welcomes feedback from all SCANZ members on these policies and how they might be improved in the future.

1987 Maslen fund

As most of you know SCANZ holds a significant amount of equity and this gives the society great financial comfort. As part of keeping the longevity of this fund but also allow a regular consistent income for SCANZ activities there has been a long-going discussion on diversification and professional management. A few steps have been done in the last year namely the Trustees have been refreshed and updated solutions are being searched for the fund future.

The current fund Trustees are:

- Mark Spackman
- Megan Maher
- Charlie Bond

The Trustees are now in the process of searching and obtained updated quotes for two or three investment solutions to be presented to the Council and subsequently to the members. The hope is that by the end of 2020 a new model is in place that guarantees a more diverse and secure regular income to the society.

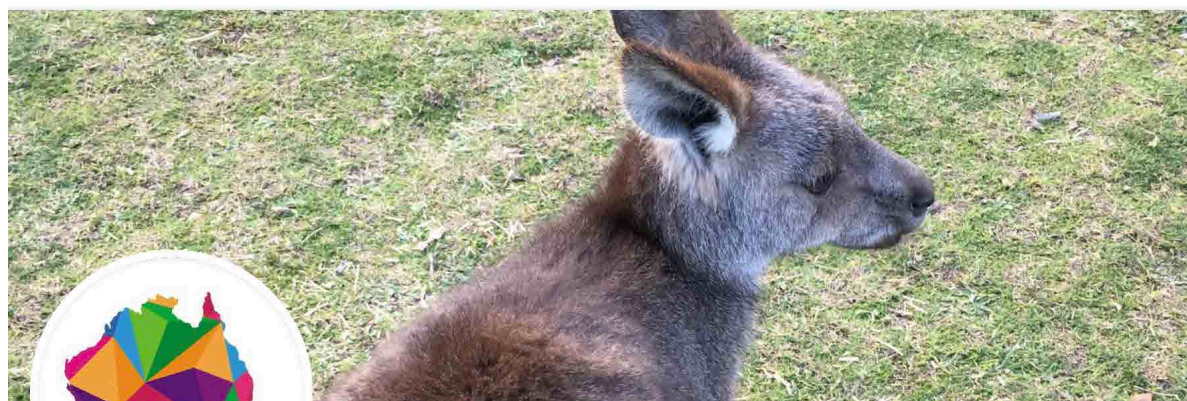
Crystal 33 - 14-17 April 2020



<https://www.crystal33.org/>

The organization of our next Crystal meeting is now moving at pace with less than 70 days to the opening of our regular gathering. I would like in name of SCANZ to thank Chris Ling and all the organizers, programme committee and chairpersons for their work and commitment. More information about Crystal 33 later on this newsletter.

IUCr2023 – August 2023 - <http://iucr2023.org/>



IUCr2023

@IUCr2023

@IUCr congress coming to Melbourne in August 2023, organised by the Society of Crystallographers of Australia and New Zealand (SCANZ) [#crystallography](#) [#IUCr2023](#)

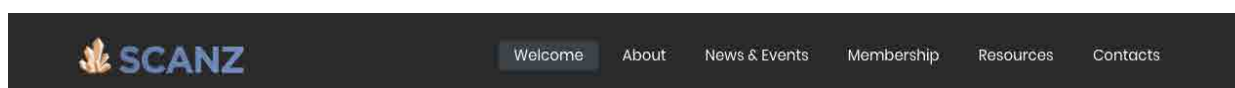
📍 Australia and New Zealand [🌐 scanz.iucr.org](http://scanz.iucr.org) 📅 Joined August 2019

The work for the organizing committee to IUCr2023, to be held in Australia, is now ramping up. Several member of the SCANZ Council are also members of the organizing committee and as SCANZ is underwriting the event all SCANZ members should be proud of be a part of this.

Recent progress has been that a tender was run by the organizing committee and a Professional Conference Organizer has been selected – ICMS Australia, <https://www.icmsaust.com.au/>. Contracts are being drawn, updated budgets and plans for marketing & fund raising being set. We expect the workload to increase after the IUCr2020 in Prague later this year.

At times your help might be requested and I urge you to be our ambassadors promoting or providing support as you can. For example, the organizing committee will prepare some holding slides that could be used at the end of any talk you give between now and the 2023 IUCr General Assembly. More information will be available in IUCr2023 twitter account - <https://twitter.com/IUCr2023>. We have also secured the domains <http://iucr2023.org/> and <http://iucr26.org/> that for now redirect to the SCANZ website but expect news in this space soon.

SCANZ website

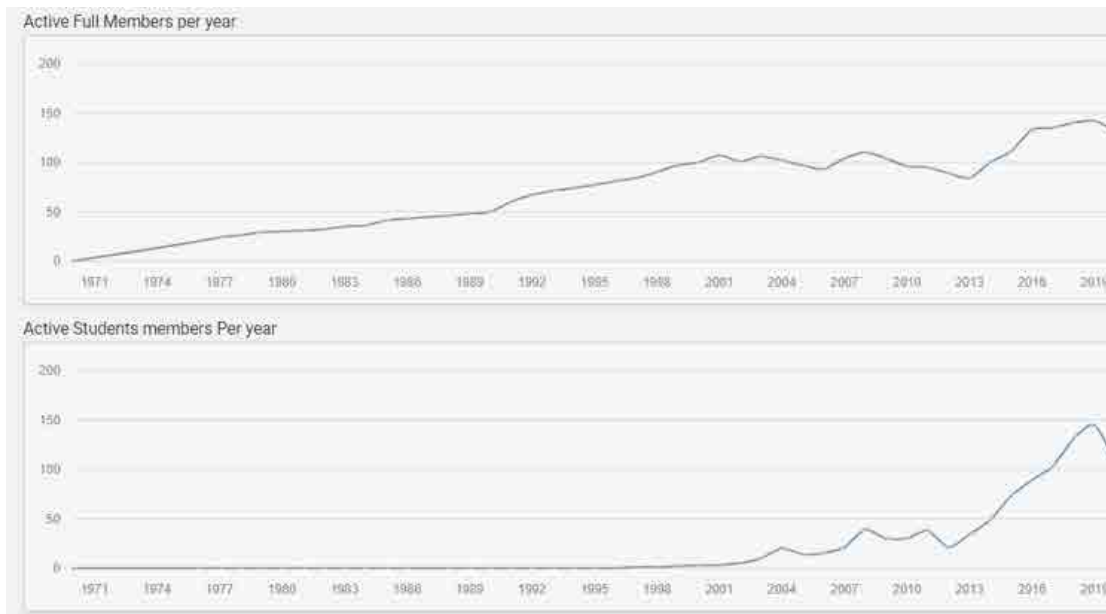


After a long process our website - <https://scanz.iucr.org/> - has very recently being revamped – finally. We hope that will have not only a more modern look but also be less static with regular information being updated automatically from our mailing list – join if you have not yet done so <https://groups.google.com/forum/#!forum/scanz-info> - and twitter account. We are updating all our documentation and conference statistics in the next few weeks but if you have any

comment, suggestion or correction please contact Megan Maher and myself. As a curiosity, please check under resources our historical record with the list of newsletters since 1982

Membership

This is the time of the year for renewal of membership. We currently have 131 Full members (141 in December 2019) and 109 student memberships (from 145 in December 2019) meaning that a few have not yet renewed. If you have not done so, this will serve as a reminder. Our strength comes from reaching out to as many people as possible. For membership, benefits see <https://scanz.iucr.org/#membership>



The above figure shows SCANZ membership since the 1970s. The current drop in 2020 is not real as we are comparing February 2020 numbers with December 2019 and our model expires memberships on the 31st December every year. Renew or become a SCANZ member today so that we can surpass 2019 member numbers soon.

The system emails automatically all expiring memberships at the beginning of a new year. However, it relies on having updated information about you. If you have recently moved institution or our email address has changed please login into your member area

<https://scanz.iucr.org/#membership>

Already a member?

Login to your account to check your membership status or update your details.

[Login](#)

and update your details. If on the other hand if you think you are receiving more than one reminder when your membership is current please contact myself or the treasurer – Brandan Abrahams – so that we can fix a known bug in the system.

Finally, one area of membership that SCANZ would like to improve is New Zealand member numbers. If you are a NZ member and are willing to help spread the word, we would love to speak with you. Please reach out.

Other matters

In 2019, SCANZ participated again in Science Meets Parliament via our membership of STA. SCANZ also managed the selection and attributed Maslen scholarships to the 2019 AsCA meeting in Singapore. Finally SCANZ supported the “My Aunt is a Crystal Scientist: That’s RAD” book by Jenny Martin. You can read about all this later on this newsletter.

We have excitement times ahead with new diffraction beamlines being built in Australia and also the organization of a world event like IUCr in Oceania but there is much more that SCANZ can do. We exist for our members and our members are the force behind all our activities. You do not need to be a member of a SCANZ body to have an idea or to help manage an event. If you have ideas join forces with your colleagues, put a proposal together and we are more than happy to be approached. We are here to help grow your ideas into positive outcomes.

I personally wish you a great 2020 with the scientific outcomes you wish for the years to come.

David Aragão
President of SCANZ

SCIENCE MEETS PARLIAMENT

In late November 2019, Sarah Atkinson (Monash) and myself (Megan Maher, UoM) travelled to Canberra to attend Science Meets Parliament. We had the privilege to hear an inspiring presentation from Winthrop Professor Fiona Wood (Director of Burns Services WA and 2005 Australian of the Year) describing her career where she has continually challenged the boundaries of science and medicine for the benefit of her patients. It was a fantastic experience to learn about the policy- and decision-making aspects of the parliamentary process and to connect with parliamentarians to communicate how science contributes to Australia’s health, environment, wealth and wellbeing.



NEW MEMBERS WELCOME!!!

SCANZ welcomes new members, particularly from New Zealand. Benefits of membership include:

- Global representation through ASCa, IUCr and STA*
- Prestigious Awards*
- Discounted conference fees*
- Exceptionally generous student travel support*
- Information and job vacancy sharing*
- Membership from as little as \$10 per year for students*

Membership applications can be made through the newly improved SCANZ website, contact your friendly SCANZ committee members if you require a sponsor for your application.

<https://scanz.iucr.org/>

AsCA 2019 MASLEN SCHOLARSHIP REPORTS

The 16th Conference of the Asian Crystallographic Association (AsCA), held in Singapore from the 17th to 20th December 2019, was my very first international conference as a PhD student. It was a fantastic event that brought together crystallographers from a diverse range of international backgrounds. I would like to thank the conference organising committee for putting together such a great program.

At this conference, I was given the opportunity to present, share and communicate my current research findings. I participated in the poster and flash presentation sessions for the protein crystallography category. By presenting my research to a large audience, I was able to receive positive, constructive feedback on my research by discussing certain aspects of my project with more experienced researchers in the field. In addition, I was able to practice my communication skills and was fortunate to be awarded a flash presentation prize sponsored by AsCA.

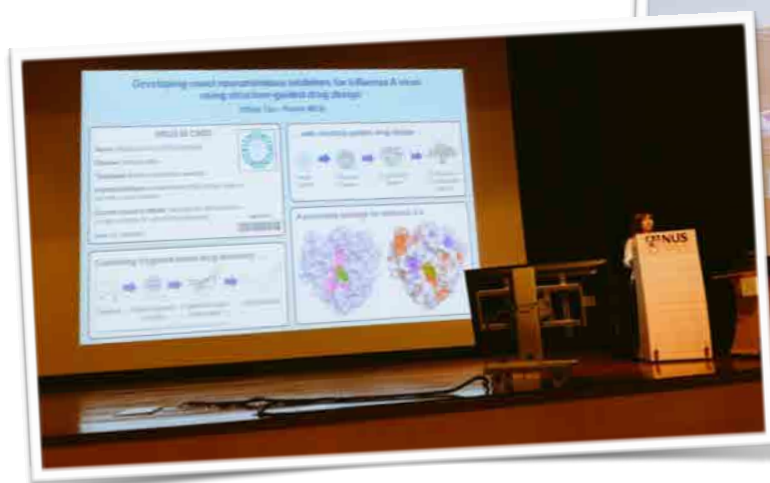
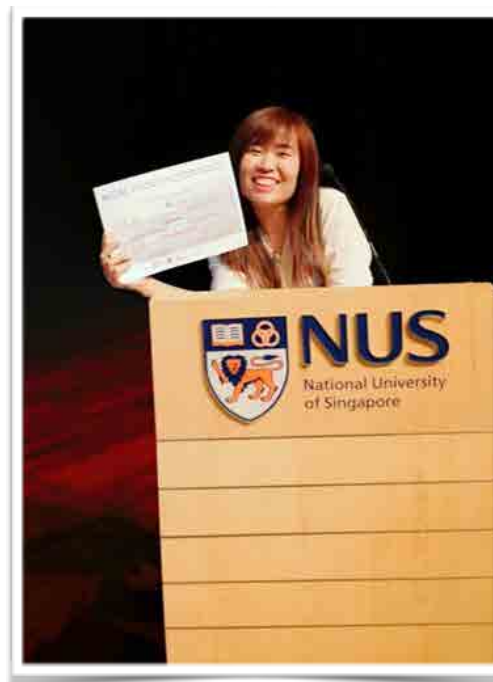
By attending this conference, I also learnt a great deal about the recent scientific advances in the crystallography field. Furthermore, I was able to network and meet expert crystallographers as well as talented, like-minded PhD students.

Meeting the conference exhibitors from various scientific companies was also helpful in providing me with advice and feedback on current crystallography techniques and instruments.

Additionally, the pre-conference CCP4 program workshop was extremely helpful and well delivered. I was able to gain a better understanding of the program and was provided with assistance whenever required. Dr. Charles Ballard and his team were wonderful and presented detailed tutorials that were easy to understand and follow.

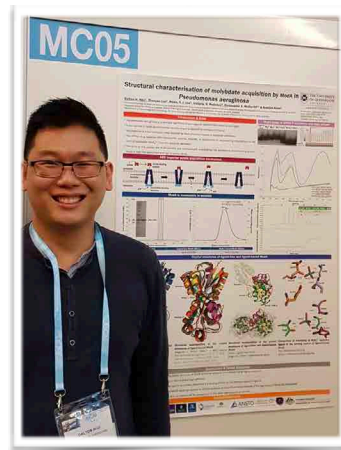
Overall, this conference was a great experience and I highly recommend attending future AsCA conferences. I am very grateful for all the things I have learnt and would like to thank SCANZ for providing me with the Maslen Scholarship to attend this conference.

*Olivia Tan
Institute for Glycomics
Griffith University*



From the 17th to the 20th December (Tuesday to Friday), I attended the 16th Conference of the Asian Crystallographic Association (AsCA 2019) that was held at the National University of Singapore, in the beautiful city of Singapore. The conference was fantastic and very engaging with researchers from around the world presenting their work in both oral presentations and poster sessions, covering a wide range of general and specialised topics within the field of crystallography. During the opening address of the conference, it was mentioned that there were close to 500 delegates and this conference was like a homecoming because the first AsCA conference was also held in Singapore back in 1992.

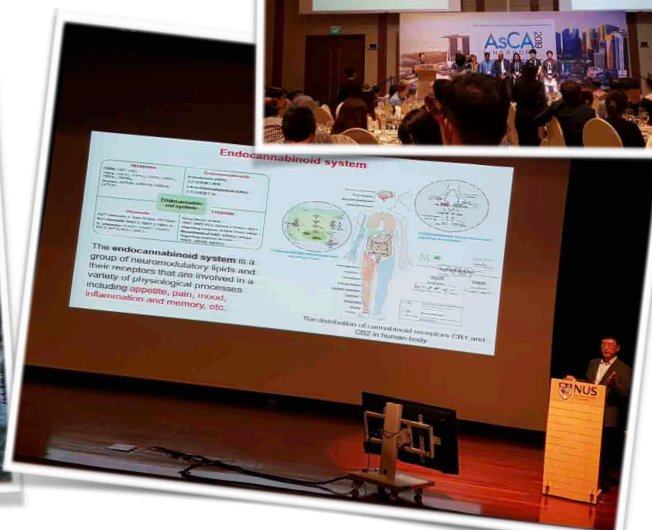
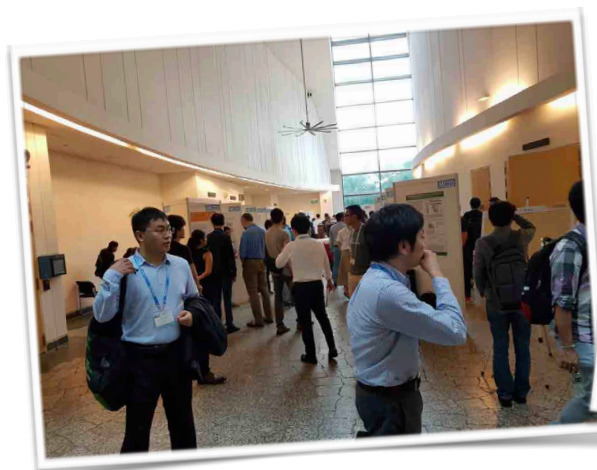
The main highlight of this conference for me was the keynote address given by Prof. Zhi- Jie James Liu on the human cannabinoid receptors CB1 and CB2. In his talk, he presented really interesting crystal and cryo-EM structures of the two receptors. I was very amazed that in order to solve the crystal structure of the CB1 receptor in different conformational states, approximately 400 different protein constructs with introduced stabilising mutations were made and tested for crystallisation. This shows an example of the difficulty of crystallising membrane proteins and the tenacity and perseverance one needs in order to be successful in this field of protein crystallography.



On Tuesday afternoon, I had the opportunity to present my PhD project in the form of a flash presentation. Despite the nerves, I am very glad for the experience. Later in the evening, I presented my poster during the first poster session of the conference and had really interesting and insightful exchanges with researchers within and outside my field of research. I also really enjoyed the rest of the poster sessions as I interacted with other researchers about their research projects and learnt from them about different crystallographic and lab techniques that I can apply to my own research. I was also able to attend the conference dinner held at NUS Kent Ridge Guild House on Thursday evening and it was a wonderful social event with a great special lecture by Prof. Guatam R. Desiraju on some key events in the history of crystallography.

I would like to thank the AsCA organising committee for putting together an excellent conference and the opportunity to network with fellow members of the AsCA community. I would also like to thank the SCANZ committee for not only giving me this opportunity to attend and present my work at the AsCA 2019 conference, but also for the generous Maslen Scholarship to support my conference attendance and travel. I am very grateful to be part of this wonderful SCANZ community. Last but not least, I would like to thank my supervisors Prof. Bostjan Kobe and Dr. Zhenyao Luo and the rest of the Kobe Lab for their continual support and mentorship.

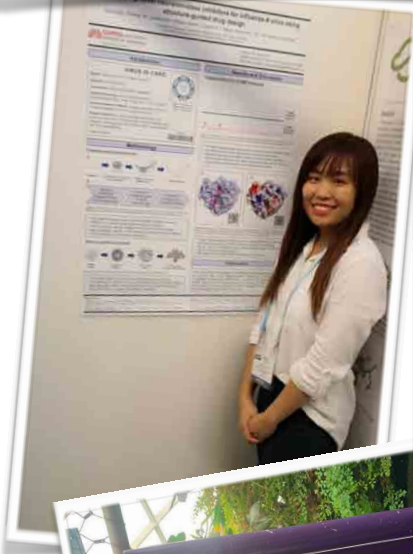
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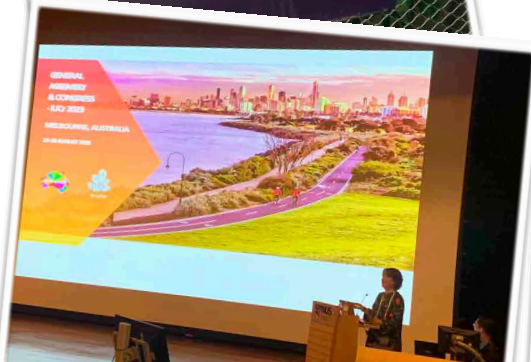
AsCA 2019, SINGAPORE

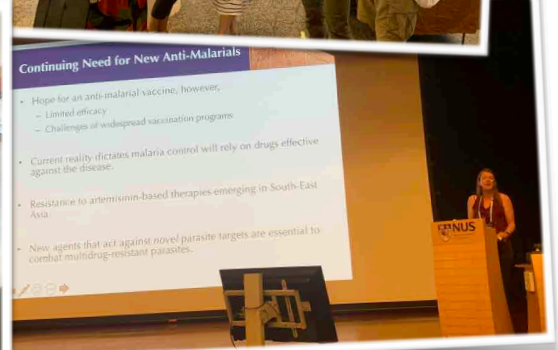
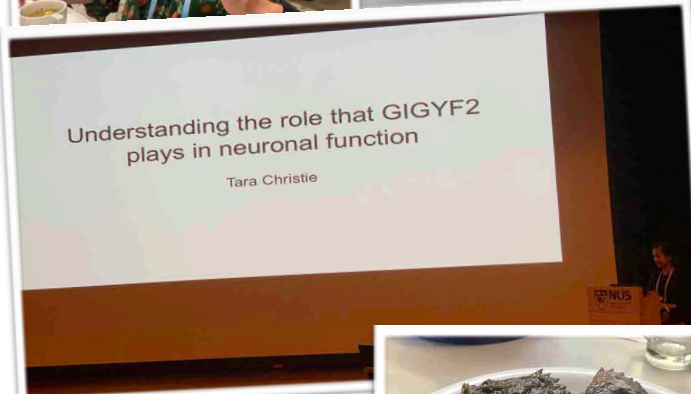
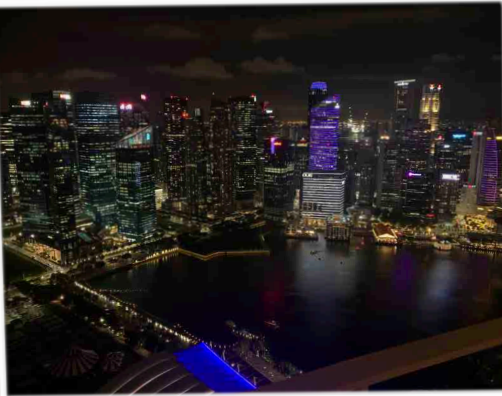
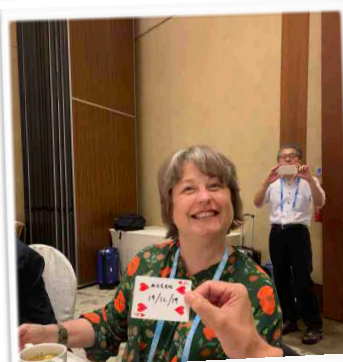


Pre-conference CCP4 workshop



Pre-conference CCP4 workshop attendees





LAUNCH OF “MY AUNT IS A CRYSTAL SCIENTIST: THAT'S RAD”

Authored by our own Jenny Martin! With production editing by Kathy Andrews, design by Rachel Andrews, cartoons by Brian Doyle, editing by Donna Pendergast and Megan Cross, and supported by sponsorship from SCANZ.



SCANZ COMMITTEES



- | | |
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<https://www.crystal33.org>

The Crystal meetings highlight leading-edge structural science, with a focus on crystallography and allied methods including spectroscopy, microscopy, and computational modelling. Contributions are welcome in all relevant fields from mathematics to physics, chemistry, pharmacology, biology, geology, engineering and beyond.

SCANZ particularly encourages abstract submissions from female researchers and ECRs, in line with its strong commitment to equity and diversity (our specific [Conference Policy](#) and general [Diversity and Inclusion Policy](#) are published on the Crystal 33 web site).

Confirmed [Plenary](#) and [Keynote](#) speakers include:

[Lukáš Palatinus](#), Czech Academy of Sciences (“1987” Plenary Lecture)

[Tamir Gonen](#), UCLA

[Aina Cohen](#), Stanford University

[Valeska Ting](#), University of Bristol

As well as a long list of confirmed [Invited](#) speakers. Other highlights will be the award of the [Bragg and Mathieson Medals](#) and the [Rising Star Award](#) session.

Close of early bird registration
Conference opening

Friday 14 February 2020
Tuesday 14 April 2020