

Day 1: Tuesday 25 th May	
<p>Welcome and opening remarks Chris Ling 09:00 - 09:15</p>	
<p>Session 1: Keynote presentations 09:20 - 09:50</p>	
<p>Keynote Lecture 1 (20 min) David Turner (Monash) <i>“Self-Assembling Chiral Coordination Complexes and the Roller-Coaster of Serendipity and Zemblanity”</i> Chair: Carol Hua (UoM)</p>	<p>Keynote Lecture 2 (20 min) Tamir Gonen (UCLA) <i>“MicroED: conception, practice and future opportunities”</i> 4:20-4:50 pm in LA Chair: Alastair Stewart (Victor Chang)</p>
<p>Session 2: Concurrent sessions 09:50 - 11:15</p>	
<p>Session 2a <i>Molecular magnetism, spin crossover and spintronics</i> Chair: Carol Hua (UoM)</p>	<p>Session 2b <i>Signalling</i> Chair: Begoña Heras (La Trobe)</p>
<p>9:50-10:10 Invited presentation (15 min) Colette Boskovic (UoM) <i>Valence Tautomerism and Spin Crossover in Cobalt Complexes</i></p>	<p>9:50-10:10 Invited presentation (15 min) Peter Mace (Otago) <i>Using helices to cope with stress</i></p>
<p>10:10-10:30 Invited presentation (15 min) David Cortie (UoW) <i>2D magnets derived from 3D van-der Waals crystal structures</i></p>	<p>10:10-10:30 Invited presentation (15 min) Onisha Patel (WEHI) <i>Structural basis for small molecule targeting of Doublecortin Like Kinase 1</i></p>
<p>10:30-10:45 Abstract 13345 (10 min) Alex Brown (USyd) <i>Expanded chemistry and mixed ionic-electronic conductivity in vanadium-substituted variants of γ-Ba₄Nb₂O₉</i></p>	<p>10:30-10:45 Invited presentation (15min) David Komander (WEHI) <i>Structural studies of Deubiquitinases, towards enabling a new target class</i></p>
<p>10:45-11:00 Abstract 13475 (10 min) Teng Lu (ANU) <i>Ferroelectric wake-up effects and underlying structural mechanism in AgNbO₃-based antiferroelectric materials</i></p>	<p>10:45-11:00 Abstract 13286 (10 min) Megan Outram (ANU) <i>The high-resolution structure of the wheat stem rust effector AvrSr50 provides insights into recognition specificity and possible functions.</i></p>
<p>11:00- 11:15 Abstract 14446 (10 min) Luonan Xu (UNSW) <i>Intrinsic Geometric Frustration in 2D Spin Crossover Coordination Polymers</i></p>	<p>11:00- 11:15 Abstract 14475 (10 min) Connie Darmanin (La Trobe) <i>MyD88 TIR domain higher-order assembly interactions revealed by</i></p>

	<i>microcrystal electron diffraction and serial femtosecond crystallography</i>
Morning Tea 11:15 - 11:45	

Session 3: Concurrent sessions 11:45 – 13:30	
Session 3a <i>Structures and properties of MOFs and other materials</i> Chair: Stuart Batten (Monash)	Session 3b <i>The structural biology of infection and immunity.</i> Chair: Denise Wotten (Monash)
11:45-12:05 Invited presentation (15 mins) Carol Hua (UoM) <i>Coordination Polymers as Chiral Discriminators</i>	11:45-12:05 Invited presentation (15 min) Begoña Heras (La Trobe) <i>Disarming bacteria: new molecular targets for developing antimicrobial agents</i>
12:05-12:25 Invited presentation (15 mins) Stephen Moggach (UWA) <i>The Effect of Pressure, Guest Uptake and Structural Flexibility on a Porous Sc-Based MOF</i>	12:05-12:25 Invited Presentation (15 min) Margie Sunde (USyd) <i>Functional amyloid fibrils used by fungi and viruses to undermine host defences</i>
12:25-12:40 Abstract 13421 (10 min) Luke Conte (UOW) <i>Intercalating C₆₀ into a pillared porphyrin framework for light-harvesting applications</i>	12:25-12:40 Abstract 14432 (10 min) Rhys Grinter (Monash) <i>BonA from Acinetobacter baumannii forms a divisome-localized decamer that supports outer envelope function.</i>
12:40-12:55 Abstract 13303 (10 min) Xiaochen Fu (USyd) <i>Triazine Based 2D Coordination Polymers for new non enzyme Glucose sensing</i>	12:40-12:55 Abstract 13468 (10 min) Gautham Balaji (Monash) <i>Recognition of host Clr-b by the inhibitory NKR-PIB receptor provides a basis for missing-self recognition.</i>
12:55-13:10 Abstract 14424 (10 min) Witold Bloch (UoA) <i>Diversifying the structure and porosity of metal-organic cages through differential crystallization</i>	12:55-13:10pm Abstract 13365 (10 min) Michelle Miller (Johns Hopkins) <i>Engineered antibodies selective for a buried MHC-I epitope derived from mutant IDH2.</i>

13:10pm-13:30pm Invited Speaker (15 minutes) Chris Sumbly (UoA) <i>Examining small molecule activation by matrix isolation in a metal-organic framework</i>	13:10pm-13:25pm Abstract 13434 (10 min) Stephanie Gras (Monash) <i>Pre-existing immunity to SARS-CoV-2</i>
13:30 - 14:15 Lunch	

13:30 – 14:15 Thermo Fisher Workshop Chair: Alastair Stewart	
14:15 – 15:15	<p>Poster session <i>via</i> Breakout rooms</p> <p>Room 1: Geoffrey Cousland, Sam Walker</p> <p>Room 2: Henrik Lyder Andersen, Ryan Trevorah, Winnie Cao</p> <p>Room 3: Matilde Saura-Muzquiz, Nicholas Kyratzis, Ruwini Ekanayake</p> <p>Room 4: Moya Hay, Akshay Jayamohan Nair, Andrew Braz</p> <p>Room 5: Pavel Filipcik, Hui Li, Lisa Hua</p> <p>Room 6: Patrick Shilling, Emily Furlong, Surekha Nimma</p> <p>Room 7: Christopher T Chantler, Maria Andrea Makalinao Tiu, Nilakhi Poddar</p> <p>Room 8: Tom Caradoc-Davies, Sofiya Tsimbalyuk, Weixi Gu</p>

Day 2: Wednesday 26 th May	
13:00 – 14:00	Poster session <i>via</i> Breakout rooms Room 1: Geoffrey Cousland, Manan Ahmed, Zixie Xie Room 2: Pavel Filipcik, Meghna Sobti, Matthew Jackman Room 3: Christopher T Chantler, Katya Bondaruk, Laura Ciacchi Room 4: David Aragao, Clancy Lott Room 5: Yi Cheng Zeng, Airah Javorsky, Andrea Nguyen Room 6: Jason Price, Brady Johnston, Hongyi Xu Room 7: James Hester, Jade Ang, Martin van Koeverden Room 8: Karyn Wilde, Lisa Ciacchi, Yan Li
Session 4: Keynote session 14:00 – 14:30	
Keynote Lecture 3 (20 min) Joanne Etheridge (Monash) Uncovering crystal secrets, picometre by picometre.... Chair: Katrina Zenere	Keynote Lecture 4 (20 min) Denise Wootten (Monash) <i>“Structural insights into G protein-coupled receptor activation”</i> Chair: Tom Caradoc Davies (Australian Synchrotron/ANSTO)
Session 5: Concurrent sessions 14:30-16:00	
Session 5a <i>Crystallography and beyond: complementary methods for the study of molecules and materials #1</i> Chair: Yun Liu (ANU)	Session 5b <i>At and across the cell membrane</i> Chair: Aaron Oakley (UoW)
14:30-14:50 Invited presentation (15 min) Dehong Yu (ANSTO) <i>“Material Structure and Dynamics with Inelastic Neutron Scatterings”</i>	14:30-14:50 Invited presentation (15 mins) Peter Czabotar (WEHI) <i>Understanding Key Molecular Events in Programmed Cell Death</i>
14:50-15:05 Abstract 13451 (10 min) Vanessa Peterson (UOW and ANSTO) <i>The reversible lithiation of graphite: An in operando neutron powder diffraction study</i>	14:50-15:05 Abstract 13442 (10 min) Carus Lau (Victor Chang/St Vincents) <i>Working toward a better understanding of the gating mechanism of the hERG potassium channel</i>

15:05-15:20 Abstract 13361 (10 min) Frederick Yang (USyd) <i>Structural Characterisation of a Na-ion conductor</i>	15:05-15:20 Abstract 13327 (10 min) Joseph Brock (ANU) <i>Malarial parasite transporter structure reveals the molecular basis for sugar import.</i>
15:20-15:35 Abstract 13284 (10 min) Frederick Marlton (Aarhus University) <i>Local structure and big box modelling of Sn-doped BCZT lead-free piezoelectrics</i>	15:20-15:35 Abstract 13425 (10 min) Ichia Chen (USyd) <i>Structural and functional characterization of the relationships between the elevator mechanism and the chloride channel of EAAT1 and GlpH</i>
15:35-15:40 Abstract 13494 (10 min) Alison Edwards (ANSTO) <i>KOALA – the Laue diffractometer at OPAL – hitting above its weight!</i>	15:35-15:40 Abstract 14457 (10 min) Kai-En Chen (UQ) <i>Inhibiting, stabilising and probing the function of the Retromer endosomal trafficking complex through the novel macrocyclic peptides</i>

15:40-16:00 Abstract 14478 (10 min) Laure Bourgeois (Monash) <i>Discovering and transforming precipitate phases in aluminium alloys using in situ transmission electron microscopy</i>	15:40-16:00 Abstract 13292 (10 min) Jerome Le Nours (Monash) <i>A class of $\gamma\delta$ T cell receptors recognize the underside of the antigen-presenting molecule MRI</i>
16:00 – 16:30 Afternoon tea	
Session 6: 1987 Fund Lecture (30 min) 16:30 – 17:20 (08:30 – 09:20 in Prague) Lukáš Palatinus <i>“Structure analysis from single nanocrystals by electron diffraction: current status and prospects”</i> Chair: Chris Ling	
17:30-18:30 SCANZ Business meeting The University of Melbourne – Bio21 Institute (more detail to be provided) ZOOM: Join from PC, Mac, iOS or Android: https://unimelb.zoom.us/j/88589922630?pwd=dkJrSm5RdDRUU5ia1FwSnNuQTNTQT09 Password: 755887	
For those who wish to attend in person, please register by COB Monday 17th May using the following link: https://www.eventbrite.com.au/e/scanz-business-meeting-tickets-153894008121	

Day 3: Thursday 27 th May	
Session 7: Rising Star Awards and Science Outreach 09:00-10:20 Chair Helen Maynard-Casely	
9:00-9:15 Rising Star #1 Abstract 13463 (10 min) Shane Horsefield (UQ) <i>Structural Characterisation of SARMI in Neurodegeneration and Cell Death</i>	
9:15-9:30 Rising Star #2 Abstract 13310 (10 min) Tess Malcolm (Monash) <i>Metal-dependent dynamic equilibrium: A mechanism for regulation of the Plasmodium M17 aminopeptidases?</i>	
9:30-9:35 Rising Star #3 Abstract 13470 (10 min) Shadi Maghool (UoM) <i>Structural characterisation of mitochondrial complex IV assembly factors</i>	
9:35-9:50 Rising Star #4 Abstract 13459 (10 min) James Walshe (Victor Chang) <i>Structural characterisation of an ANTAR domain anti-terminator protein bound to RNA</i>	
9:50-10:05 Rising Star #5 Abstract 13464 (10 min) Jeff Nanson (UQ) <i>NMN/NAD⁺ Ratio Triggers SARMI-Mediated Axon Degeneration</i>	
10:05-10:20 Abstract 13467 (10 min) Stuart Batten (Monash) <i>Element sample sets for schools – an outreach story</i>	
10:20 – 10:50 Morning tea	
Session 8: Concurrent sessions 10:50-12:30	
Session 8a <i>Crystallography and beyond: complementary methods for the study of molecules and materials #2</i> Chair: Alison Edwards	Session 8b <i>Crystallography and beyond: complementary methods for the study of macromolecules</i> Chair: Jade Forwood
10:50-11:05 Abstract 13312 (10 min) Helen Maynard-Casely (ANSTO) <i>P2₁₃ or not P2₁₃; that is the question of α Nitrogen</i>	10:50-11:10 Invited Presentation (15 min) Lawrence Lee (UNSW) <i>“Twisted and curved DNA origami nanostructures in solution characterised with small angle X-ray scattering”</i>

<p>11:05-11:20 Abstract 13322 (10 min) Bryce Mullens (USyd) <i>Disorder by design: Energy, pyrochlores and the art of ‘stuffing’</i></p>	<p>11:10-11:30 Invited Presentation (15 min) Colin Jackson (ANU) <i>Using protein crystallography and complementary techniques to study protein dynamics</i></p>
<p>11:20-11:35 Abstract 13436 (10 min) Amy Thompson (UQ) <i>Mechanistic Exploration of Elastically Flexible Crystals by Automatic Analysis</i></p>	<p>11:30-11:45 Abstract 13423(10 min) Michael Parker (UoM) <i>GSTs: hanging onto heavy metal</i></p>
<p>11:35-11:50 Abstract 13278 (10 min) Junwei Li (USyd) <i>Structural and bandgap modification of KLaTiO₄ hydrogen evolution catalyst</i></p>	<p>11:45-12:00 Abstract 13457 (10 min) Chris Horne (WEHI, Canterbury) <i>The cooperative assembly of the GntR-type sialoregulator NanR</i></p>
<p>11:50-12:05 Abstract 13366 (10 min) Jiatu Liu (USyd) <i>In situ Neutron Diffraction Study on Layered Oxides Na_{0.5}Ni_{0.25}Mn_{0.75}O₂</i></p>	<p>12:00-12:15 Abstract 14514 (10 min) Shan Zheng (UQ) <i>Structural studies of a dodecameric Ketol-acid reductoisomerase</i></p>
<p>12:05-12:20 Abstract 14441 (10 min) Josie Auckett (Durham and ANSTO) <i>Implications of disorder for oxide-ionic conductivity in Ba₃NbMO_{8.5} (M = Mo, W)</i></p>	<p>12:15-12:30 Abstract 13293 (10 min) Ruwini S. K. Ekanayake (UoM) <i>Structural interpretation of Cu binding in N-Truncated Amyloid-β peptides from X-ray Absorption Spectroscopy</i></p>
<p>12:20-12:35 Abstract 14472 (10 min) Patrick Tung (UNSW) <i>Trindex - 3D Grain Orientation Mapping with Neutron Imaging</i></p>	
<p>12:30 – 13:00 Lunch</p>	
<p>Session 9: Bragg Medal Lecture (60 min) 13:00 – 14:15 Chair: Charlie Bond</p>	
<p>End of conference, closing remarks, poster awards 14:15 – 14:30 Chris Ling</p>	