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## PROGRAM SUMMARY

	Tuesday 29 <sup>th</sup> November	Wednesday 30 <sup>th</sup> November
Session AINSE Foyer AINSE Theatre	09:00 - 09:45 <b>Registration / Morning Tea</b>	09:00 – 10:45 <b>Technique development for academia and industry</b>
Morning Tea AINSE Foyer	09:00 - 09:50	10:45 – 11:00
Session AINSE Theatre	09:50 – 12:20 <b>Remembering Rietveld: Powder diffraction</b>	11:00 – 12:20 <b>Structure and Dynamics in Novel Materials</b>
Lunch AINSE Foyer	12:30 – 13:30	12:30 – 13:30 <i>ANSTO Café</i>
Session AINSE Theatre	13:30 – 15:00 <b>Nature and History</b>	13:30 – 14:40 <b>Magnetism and Spectroscopy</b> <i>14:40 – 15:30</i> <i>ANBUG AGM &amp; Award Ceremony</i>
Afternoon Tea AINSE Foyer	15:00 – 15:30	15:30 – 15:40
Session AINSE Theatre	15:30 – 17:00 <b>Soft Matter</b> 17:00 – 17:30 <b>POSTER SLAM</b>	15:40 – 16:40 <b>Neutrons and Nano</b> <b>MEETING CLOSE</b>
Poster Session AINSE Council Room	17:30 – 19:00 <b>Poster Session</b>	
Conference Dinner	19:00 ANSTO Café / Courtyard	



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## PROGRAM

### Tuesday 29<sup>th</sup> November

09:00 – 09:45	Registration, Tea & Coffee (AINSE Foyer)
09:00 – 09:50	Morning Tea (AINSE Foyer)
<b>Session 1</b> AINSE Theatre	<b>Remembering Rietveld: Powder diffraction</b> Chair: James Hester (TBC)
09:50 – 10:00	Official Welcome (David Cortie / Michelle Durant)
10:00 – 10:40	<b>Plenary: E/Professor Brian O'Connor</b> <b>Department of Physics and Astronomy, Curtin University, Perth</b> <i>"The Legacy of Dr Hugo Rietveld (1932 – 2016) - Australian Neutron Diffraction Pioneer"</i>
10:40 – 11:00	Dr Helen Maynard-Casely, Australian Centre for Neutron Scattering, ANSTO <i>"Characterising new planetary materials with neutron diffraction"</i>
11:00 – 11:20	S.G. Duyker, School of Chemistry, The University of Sydney <i>"Hydration as a trigger for new properties in inorganic materials"</i>
11:20 – 11:35	Dr Chris Ling, School of Chemistry, The University of Sydney <i>"Pressure-induced valence transitions in metal oxides: squeezing the electrons out of lone pairs"</i>
11:35 – 11:50	James Pramadutia, School of Chemistry, UNSW Australia <i>"Using Neutron-based Techniques to Investigate Battery Behaviour"</i>
11:50 – 12:05	Gabriel Murphy, School of Chemistry, University of Sydney <i>"Structural Transformative Behaviour in Barium Thorium Oxides: A Neutron and Synchrotron X-ray Diffraction Study"</i>



## Tuesday 29<sup>th</sup> November

12:30 – 13:30 AINSE Foyer	Lunch
Session 2 AINSE Theatre	<b>Nature and History</b> Chair: TBC
13:30 – 13:50	Dr Filomena Salvemini, Australian Centre for Neutron Scattering, ANSTO <i>“Imaging the past: recent applications of neutron imaging in archaeometry”</i>
13:50 – 14:10	Dr Joseph Bevitt, Australian Centre for Neutron Scattering, ANSTO <i>“Neutron micro-CT as a non-destructive tool for palaeontology”</i>
14:10 – 14:25	Professor Michael Cortie School of Mathematical and Physical Sciences, University of Technology Sydney <i>“Residual stress in mollusc shells”</i>
14:25 – 14:40	Dr Stephen Holt, Australian Centre for Neutron Scattering, ANSTO <i>“The Impact of pH on Packing in Tethered Lipid Bilayers”</i>
14:40 – 14:55	Dr Tamim Darwish, The National Deuteration Facility (NDF), ANSTO <i>“Chemical Deuteration and Neutrons for Structure Function Applications”</i>
15:00 – 15:30 AINSE Foyer	Afternoon Tea
Session 3 AINSE Theatre	<b>Soft Matter</b> Chair: Dr Stephen Holt (TBC)
15:30 – 15:50	Dr Kathleen Wood, ANSTO <i>“Kinetic Small Angle Neutron Scattering to Study Large Biomolecular Complexes”</i>
15:50 – 16:10	Rico Tabor, School of Chemistry, Monash University <i>“Watching photo-sensitive surfactant micelles morph in real time using SANS”</i>
16:10 – 16:25	Timothy Murdoch, Priority Research Centre for Advanced particle Processing and Transport, University of Newcastle <i>“The Specific Ion Response of Polyelectrolyte Brushes Depends on Polymer and Anion Hydrophilicity”</i>
16:25 – 16:40	José E.M. Pereira, Niels Bohr Institute, University of Copenhagen <i>“Hydrogen bond dynamics, conformational flexibility and polymorphism in antipsychotics”</i>



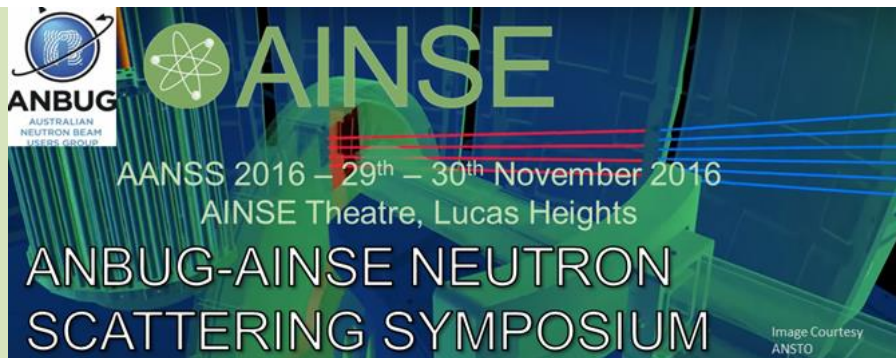
## Tuesday 29<sup>th</sup> November

16:40 – 16:55	Professor John White, Research School of Chemistry, Australian National University
	<i>“Deuterium effects in Human Serum Albumin with Nanoparticle Silica Kinetics”</i>
17:00 – 17:30	<b>POSTER SLAM</b>
Poster Presentation	<b>AINSE Council Room / Foyer</b>
17:30 – 19:00	
19:00 onwards	Conference Dinner (ANSTO Café / Courtyard)

## Wednesday 30<sup>th</sup> November

Session 4 AINSE Theatre	<b>Technique development for academia and industry</b> Chair: Klaus-Dieter Liss
09:00 – 09:20	Dr Rezwanul Haque, University of the Sunshine Coast <i>“Residual stress in self-piercing riveting (SPR) joints: Industrial application”</i>
09:20 – 09:35	Dr A.M. Paradowska, ANSTO <i>“Neutrons for Structural Integrity Applications of Engineering Components”</i>
09:35 – 09:50	Dr Christine Rehm, ANSTO <i>“Large scale structure investigations via neutron scattering techniques”</i>
09:50 – 10:05	Dr Jitendra Mata, ANSTO <i>“Ionic Liquid Based Nanoparticle Emulsions as a Corrosion Inhibitor”</i>
10:05 – 10:20	Dr Anna Sokolova, ANSTO <i>“The time-of-Flight SANS Instrument BILBY: design, construction, commissioning and first results”</i>
10:20 – 10:45	<b>Sample Environments: Questions and Answers</b>
10:45 – 11:00	Morning Tea (AINSE Foyer)
Session 5 AINSE Theatre	<b>Structure and Dynamics in Novel Materials</b> Chair: Vanessa Peterson
11:00 – 11:20	Clemens Ulrich, School of Physics, University of New South Wales <i>“Multiferroic Thin Films (A Comprehensive Neutron Scattering Investigation)”</i>





## Wednesday 30<sup>th</sup> November

11:20 – 11:40	Dr Josie Auckett, Australian Centre for Neutron Scattering, ANSTO
	<i>“Experimental and theoretical approaches to understanding selective gas adsorption in metal-organic frameworks”</i>
11:40 – 12:00	Julia Wind, University of Sydney
	<i>“Type II BiWO dimensional comensurate modulation that stabilised fast ion conducting”</i>
12:00 – 12:15	Q.Y. Ren, School of Physical, Environmental and Mathematical Sciences, The University of New South Wales, Canberra
	<i>“Magnetic structures of magnetocaloric (Mn<sub>1-x</sub>Ni<sub>x</sub>)CoGe and Mn(Co<sub>1-x</sub>Ni<sub>x</sub>)Ge alloys”</i>
12:15 – 12:30	Dr Richard Mole, ANSTO
	<i>“Inelastic neutron scattering of lanthanoid single molecule magnets”</i>
12:30 – 13:30 ANSTO Café	Lunch
Session 6 AINSE Theatre	<b>Magnetism and Spectroscopy</b> Chair: Dehong (TBC)
13:30 – 13:50	Takatsuga Masuda, University of Tokyo
	<i>“Neutron Scattering Study in Breathing Pyrochlore Antiferromagnet Ba<sub>3</sub>Yb<sub>2</sub>Zn<sub>5</sub>O<sub>11</sub>”</i>
13:50 – 14:10	Dr. Kirrily Rule, ANSTO
	<i>“The Frustrated Quantum Spin Chain, Linarite, In High Magnetic Fields”</i>
14:10 – 14:25	Professor Sean Cadogan, UNSW ADFA
	<i>“Spin-reorientation in Quaternary Dy<sub>2</sub>Fe<sub>2</sub>Si<sub>2</sub>C”</i>
14:25 – 14:40	Jiabao Yi, School of Materials Science and Engineering, University of New South Wales
	<i>“Magnetization enhancement by exchange coupling of antiferromagnetic nanoparticles embedded in ferromagnetic matrix”</i>
14:40 – 15:30	<b>ANBUG AGM &amp; Award Ceremony</b>
15:30 – 15:45 AINSE Foyer	Afternoon Tea



## Wednesday 30<sup>th</sup> November

<b>Session 7</b> AINSE Theatre	<b>Neutron Reflectometry To Explore the Nanoworld</b> Chair: Andrew Nelson (TBC)
<b>15:45 – 16:05</b>	Dr Andrew Clulow, Monash University <i>"The Influence of Glass Transitions on Diffusion in OLED Stacks"</i>
<b>16:05 – 16:25</b>	Khondker Rufaka Hossain, School of Life Sciences, University of Technology Sydney <i>"X-ray and Neutron Reflectivity Study of the Membrane-bound CLIC1 protein at the Air-Water Interface"</i>
<b>16:25-16:40</b>	Dr Anton Le Brun, ANSTO <i>"SPATZ: The Second Time-of-Flight Neutron Reflectometer at the OPAL Research Reactor"</i>
<b>16:40</b> AINSE Theatre	<b>PRIZE-GIVING, FINAL REMARKS</b>