## **AANSS 2013 SUMMARY PROGRAM**

Please note: Conference Program correct at the time of printing, subject to change

	Monday 2 <sup>nd</sup> December	Tuesday 3 <sup>rd</sup> December
Session	10:00 Registration	09:00 – 10:30
Morning Tea		
Session	10:45 – 12:30	11:00 – 12:30
Lunch		
Session	13:30 – 15:00	13:30 – 15:00
Afternoon Tea		
Session	15:30 – 17:00	1500 – 1515 ANBUG AGM
		15:15 – 15:30 Meeting Close
Guest Speaker	17:00 – 17:30 Professor Emeritus Anthony Klein University of Melbourne	
Poster Session	17:00 – 19:00  Poster Session  AINSE Council Room	
BBQ Dinner	19:00 Barbeque Dinner ANSTO Café Courtyard	

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## Monday 2<sup>nd</sup> December 2013

10:00 - 10:45	Registration, Tea & Coffee	
Session 1	Chair: Chris Ling	
10:45 - 11:00	Official Conference Opening and Housekeeping	
	Frank Bruhn / Rachel Caldwell (AINSE)	
11:00 - 11:30	Keynote: Dr Andrew Wildes – Institu Laue-Langevin	
	"Structural correlations and melting of A-DNA fibres"	
11:30 - 11:45	Emma Rath – University of Sydney	
	"Determining the structure of the anti-cancer BAMLET complex using neutron scattering"	
11:45 – 12:00	Khondker Rufaka Hossain – University of Technology	
	"A Study of the Spontaneous Membrane Insertion of Chloride Intracellular Ion Channels (CLIC) into Model Lipid Membranes"	
12:00 – 12:15	Dr Anton Le Brun – ANSTO	
	"The Role of Deposition pH on Dodecyl Phosphate Self-Assembled Monolayer Formation on TiO₂ Surfaces"	
12:15 – 12:30	Peter Akers – University of Auckland	
	"Studying the fusogenic killing mechanism of hydramacin-1"	
12:30 – 13:30	Lunch (ANSTO Café)	
Session 2	Chair: Dr Darren Goossens	
13:30 - 14:00	Keynote: Dr Anna Paradowska - ANSTO	
	"Neutron Diffraction Measurements of Residual Stress in Large Scale Components"	
14:00 – 14:15	Bahar Khodabakhshi – Monash University	
	"Investigating the Effect of Pre-heating on the Magnitude of Residual Stresses in Aluminothermic Rail Welds Using Neutron Diffraction"	
14:15 – 14:30	Tim Slingsby – Monash University	
	"Measuring Residual Stress in Parts Built Using Selective Laser Melting"	
14:30 – 14:45	Afshin Mohammadhosseini – Swinburne University of Technology	
	"Residual stress measurement of Electron Beam Melting process using neutron beam diffraction"	
14:45 – 15:00	Dr Sara Callori - ANSTO	
	"Pinned Magnetization in Permalloy/CoO/Co Trilayers Due to Oxygen Implantation in the Co Layers"	
15:00 – 15:30	Tea & Coffee	
Session 3	Chair: Prof Stuart Campbell	
15:30 – 16:00	Daniel Wilson – University of Auckland	
	"Structural and Magnetic Tunability of $Cu_5SbO_6$ via doping of Mn and Mo"	
16:00 - 16:15	Zakiah Mohamed – University of Sydney	
	"Determination of magnetic structure in LiFe $_{1-x}Mn_xPO_4$ by neutron powder diffraction"	

16:15 – 16:30	Qingyong Ren – UNSW Canberra
	"Magnetism and the magnetocaloric effect of Mn <sub>1-x</sub> Fe <sub>x</sub> CoGe"
16:30 – 16:45	Frederick Marlton – Australian National University
	"Microwave Synthesis and Structural Phase Diagram of Hexagonal Yttrium Manganates"
16:45 – 17:00	Ruoming Tian – University of New South Wales
	"Structure investigation and thermoelectric properties of $[Ca_2CoO_3][CoO_2]_{1.61}$ based p-type materials"
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17:00 – 17:30	Guest Speaker
17:00 – 17:30	
17:00 – 17:30	Guest Speaker
17:00 – 17:30	Guest Speaker Professor Emeritus Anthony Klein
17:00 – 17:30  Poster Presentation	Guest Speaker  Professor Emeritus Anthony Klein University of Melbourne
	Guest Speaker  Professor Emeritus Anthony Klein University of Melbourne

## Tuesday 3<sup>nd</sup> December 2013

Session 4	Chair: Dr Elliot Gilbert
09:00 - 09:30	Keynote: Dr Stefan Salentiniga – Monash University
	"pH Responsive Colloidal Lipid Digestion Products"
09:30 - 09:45	Dr Nageshwar Yepuri - ANSTO
	"Synthesis of Per-deuterated Alkyl Amines for Preparation of Deuterated Organic Pyromellitamide Gelators"
09:45 - 10:00	Dr Chris Garvey - ANSTO
	"Diffraction methods in soft matter"
10:00 - 10:15	Dr Stephen Holt - ANSTO
	"'Building' Asymmetric Model Cell Membranes."
10:15 - 10:30	Dr Anthony Duff - ANSTO
	"Protein Structure Studies using Small Angle Neutron Scattering with Protein Deuteration and Contrast Variation: Some case studies"
10:30 - 11:00	Tea & Coffee
10:30 - 11:00 Session 5	Tea & Coffee Chair: Dr Vanessa Peterson
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Session 5	Chair: Dr Vanessa Peterson  Keynote: Dr Mark Henderson – Australian National University
Session 5 11:00 – 11:30	Chair: Dr Vanessa Peterson  Keynote: Dr Mark Henderson – Australian National University  "Pillared clays and graphites for hydrogen storage?"
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Session 5 11:00 - 11:30 11:30 - 11:45	Chair: Dr Vanessa Peterson <b>Keynote: Dr Mark Henderson – Australian National University</b> "Pillared clays and graphites for hydrogen storage?"  Dr Wei Kong Pang - ANSTO  "Structural evolution of a $LiNi_{0.5}Mn_{1.5}O_4$ cathode and a $Li_4Ti_5O_{12}$ anode in a functioning lithium-ion battery"
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	"Examination of reaction intermediates in the synthesis of sterically demanding bis(NHC) palladium complexes"	
12:30 – 13:30	Lunch	
Session 6	Chair: Dr Frank Klose	
13:30 - 14:00	Keynote: Dr Christine Rehm - ANSTO	
	"Exploring Microstructures of Materials Using Ultra-Small-Angle Neutron Scattering"	
14:00 - 14:15	Dr Trevor Hicks – Monash University	
	"Straightforward derivation of the polarisation analysis cross-sections"	
14:15 – 14:30	Henry Kirkwood – La Trobe University	
	"High Resolution Three-Dimensional Strain Mapping Using Neutron Bragg-Edge Transmission"	
14:30 – 14:45	Dr Anna Sokolova – ANSTO	
	"BILBY: new Time-of-Flight Small Angle Neutron Scattering instrument at ANSTO"	
14:45 – 15:00	Dr Dehong Yu – ANSTO	
	"Progress in Commission of the Time of Flight Polarization Analysis Spectrometer – Pelican"	
15:00 – 15:15	ANBUG AGM	
15:15 – 15:30	Meeting Close	