



# ANSTO User Meeting 2021

## Thursday 25 November 2021

### Poster Session (17:30-20:30)

time	[id] title	presenter
17:30	[127] EMU cold-neutron backscattering spectrometer at ACNS, ANSTO	KLAPPROTH, Alice
17:31	[218] Full Hemisphere Photoemission Using the Toroidal Analyser	TADICH, Anton
17:32	[84] Status, statistics, and recent research highlights from Echidna	AVDEEV, Max HESTER, James WANG, Chin-Wei
17:33	[92] Scientific computing support for neutron scattering experiments at ANSTO	Dr KUTTEH, RAMZI
17:34	[189] Fusion Peptide Interactions with the Lipidic Cubic Phase	Ms MILOGRODZKA, Izabela
17:35	[96] Recent highlights from the Pelican spectrometer	MOLE, Richard YU, Dehong
17:36	[203] Kowari residual stress diffractometer	REID, Mark
17:37	[38] Current Facilities on the Soft X-ray Beamline	Dr COWIE, Bruce
17:38	[202] ATOS-GOM structured light 3D scanner, replacement new for old or intriguing possibilities!	REID, Mark
17:39	[86] ADS-1 and ADS-2: New high-energy X-ray beamlines at the Australian Synchrotron	AUCKETT, Josie
17:40	[52] Getting better statistics: variable count time data collection with large linear detectors.	Dr ROWLES, Matthew
17:41	[158] Enhancing synchrotron modulated Microbeam Radiation Therapy in vivo with novel high Z nanoparticles	VOGEL, Sarah
17:42	[151] Structural basis of the Trichoplax adhaerens Scribble and Dlg interactions with the PDZ-binding motif of Vangl	Mrs MADDUMAGE, Janesha
17:43	[53] Platypus Neutron Reflectometer	Dr HOLT, Stephen
17:44	[204] Demonstrated enantioselective adsorption with cobalt 1D coordination polymers	CAO, Winnie
17:45	[148] Complex Coacervates as encapsulation system	GHOSH, Sunandita WHITTEN, Andrew MATA, Jitendra
17:46	[17] A multi-analyser upgrading possibility for the thermal-neutron triple-axis spectrometer Taipan	Dr DENG, Guochu
17:47	[13] Taipan – a versatile thermal neutron scattering instrument for materials research.	RULE, Kirrily
17:48	[14] Diffuse Scattering Studies from a Martensitic Fe-Pd Alloy	FINLAYSON, Trevor
17:49	[11] Spin Dynamics, Critical Scattering and Magnetoelectric Coupling Mechanism of Mn <sub>4</sub> Nb <sub>2</sub> O <sub>9</sub>	DENG, Guochu
17:50	[88] Exploring Amine-based MOFs for Electrochemical Water Splitting	ANG, Jade

17:51	[103] Chain alignment and charge transport anisotropy in blade-coated N2200/PS blend films	Ms TANG, Lin-jing
17:52	[144] Investigation of the Diffusion of Cr2O3 into different phases of TiO2 upon Annealing	ALOTABI, Abdulrahman
17:53	[108] Energy Storage Rocks: Metal Carbonates as Thermochemical Energy Storage Materials	Mr WILLIAMSON, Kyran
17:54	[15] Data processing technique for the Taipan Be-filter spectrometer	RULE, Kirrily
17:55	[64] Discovering peptide inhibitors against FtsY, an antibiotic target	ZHAO, Jennifer
17:56	[40] Zeolitic imidazolate frameworks (ZIFs) structure and properties correlation to nucleic acid delivery	POLASH, Shakil Ahmed
17:57	[136] Inelastic Neutron Scatterings Reveal Intense Ferromagnetic Fluctuations Preceding Magnetoelastic First-Order Transitions in LaFe13-xSix	YU, Dehong
17:58	[153] Characterisation of an Antimony-based Catalysts for Acid Water Oxidation Catalysis – Insights through X-ray Absorption Spectroscopy and the challenges of multi-metal systems	KERR, Brittany
17:59	[85] Biocompatible ionic liquids as designer solvents for the formation of non-lamellar lyotropic liquid crystalline nanoparticles as drug delivery vehicles	Mr EL MOHAMAD, Mohamad
18:00	[104] Understanding the structural basis of TIR-domain assembly formation in TRAM- and TRIF- dependent TLR signalling	Ms PAN, Mengqi
18:01	[55] Structural basis of coronavirus E protein interactions with human PALS1 PDZ domain	Mrs JAVORSKY, Airah
18:02	[193] Crystal Structures of Protic Ionic Liquids and their hydrates	HASSETT, Michael
18:03	[129] Ocean acidification alters the nutritional value of Antarctic diatoms	Ms DUNCAN, Rebecca
18:04	[215] Synchrotron Light for Exploring Arsenic Environments in Arsenian Pyrite	FORSON, Philip
18:05	[217] Acidophilic iron- and sulfur-oxidizing bacteria driven primary mineral weathering and secondary mineral formation in Fe ore tailings	Mr YI, QING
18:06	[181] Comparison between calculated texture-derived velocities and laboratory measurements conducted on samples from a gold-hosting structure.	Mr CALAZANS MATOS DE SOUZA, Andre Eduardo
18:07	[62] Towards real-time analysis of liquid jet alignment in SFX	Mr JAYDEEP PATEL, Jaydeep
18:08	[139] Combating “fishy” seafood using nuclear techniques	Mr GOPI, Karthik
18:09	[69] Effect of different cladding alloys and grinding on residual stress in laser clad light rail components using neutron diffraction	Prof. ABRAHAMS, Ralph
18:10	[188] Data Constrained Modelling with multi-energy X-ray computed microtomography to evaluate the porosity of plasma sprayed ceramic coatings	Mr KAHL, Bruno
18:11	[116] Microbeam radiation therapy in a heart beat	PAINO, Jason
18:12	[222] Using low energy ion beams to pattern the surface of novel semiconductors	BAKE, Abuduliken
18:13	[105] Characterising the temperature dependent spectra of polyethylene for terahertz optics	SANDERS, Thomas
18:14	[195] Inelastic Neutron Scattering of Liquid Metal Gallium	STAMPER, Caleb
18:15	[157] Understanding and controlling the formation of photonic crystals from polydisperse colloidal systems	CHEA, Katherine
18:16	[171] Radiation monitor for astronaut safety and prediction of electronic failure in the space mission	PAN, Vladimir

18:17	[145] Canine osteosarcoma positioning and dosimetry study	PAINO, Jason
18:18	[33] Lithium Lanthanide Halides: A New Family of Solid Electrolytes	BRENNAN, Michael
18:19	[73] Wombat – the high intensity diffractometer at OPAL	MAYNARD-CASELY, Helen
18:20	[72] Investigating negative thermal expansion in aliphatic metal-organic frameworks	Ms CHEN, Celia
18:21	[63] Chiral CPs formed using chiral heterotopic ligands	Mr KYRATZIS, Nicholas
18:22	[107] The N-methyl-D-aspartate receptor ligand binding domain and the interactivity with ion-channel control	CHEN, Zheng
18:23	[115] Chiral Detection with Fluorescent Coordination Polymers	THOONEN, Shannon
18:24	[150] The investigation of structural and electronic configurations of noble-metal free nanocomposite and electrocatalytic oxides for acidic water electrolysis	SIMONDSOON-TAMMER, Darcy
18:25	[207] Investigating the dielectric properties of the cornea and tympanic membrane using Synchrotron ATR and transmission at THz frequencies	Ms FOUROUGHIMEHR, Negin
18:26	[210] Ruthenium-Based Pyrochlore Oxides for Improved Electrocatalysis	MULLENS, Bryce
18:27	[78] SNAKE VENOM-CONTROLLED 3D FIBRIN ARCHITECTURE REVEALED BY SANS/USANS DICTATES FIBROBLAST DIFFERENTIATION	Mr WANG, Zhao
18:28	[219] Physical insights into self-assembly of enzymatic protein particles using Small-Angle X-ray Scattering (SAXS)	Dr SHANBHAG, Bhuvana Dr YOUNAS, Tayyaba
18:29	[95] A precisely piezo-controlled macro-ATR for characterizing the dynamic behaviour electrolyte/electrode interface	Ms LIU, SAILIN
18:30	[191] Analysis of Thermoresponsive Dextrans via Small-Angle X-ray Scattering	OTTO, Sarah
18:31	[114] Exploring the Surface of Vanadium Phosphate Cathode Materials	Mr JENKINS, Tristram
18:32	[122] Synthesis and structural characterisation of novel perovskite-type Na-ion conductors	YANG, Frederick
18:33	[118] Self-Assembly of Carbon Dioxide Nonionic Surfactants in Ionic Liquids	MIAO, Shurui
18:34	[198] Scaling behaviour of the skyrmions lattices in Cu <sub>2</sub> OSeO <sub>3</sub> single crystals from small angle neutron scattering	Mr SAUCEDA FLORES, Jorge Arturo
18:35	[196] Structural basis of higher-order assembly formation in Toll-like receptor 1,2 and 6 signaling pathway	LI, YAN
18:36	[192] Cholesterol catabolism: An exploitable weakness in mycobacterial infections?	Mr DOHERTY, Daniel
18:37	[190] X-ray structure of a transmembrane domain from an ABC-transporter dependent system from <i>Neisseria meningitidis</i> in a non-biological state	MASSELOT--JOUBERT, Lorelei
18:38	[169] Size, shape and colloidal stability of fluorescent nanodiamonds in aqueous suspension	Mr SAMIR ELDEMRDASH, samir
18:39	[121] Breaking boundaries, or is it? Physical disruption at the nano- and micro scales for an in situ flow setup	BAYRAK, Meltem
18:40	[197] Small Angle Neutron Scattering instrument Bilby: capabilities to study mainstream and complex systems	SOKOLOVA, Anna WHITTEN, Andrew DE CAMPO, Liliana WU, Chun-Ming
18:41	[6] Continuous chemical redistribution following amorphous-to-crystalline structural ordering in a Zr-Cu-Al bulk metallic glass	WU, Xuelian
18:42	[194] Working Mechanisms of Conversion-Type Metaphosphate Electrodes for Lithium/Sodium-Ion Batteries	Dr XIA, Qingbo

18:43	[43] A photon counting detector for x-ray imaging: advantages and challenges	HALL, Chris
18:44	[61] Kookaburra, the ultra-small-angle neutron scattering instrument at ANSTO: design and recent applications	MATA, Jitendra
18:45	[135] Quokka, the Pinhole Small-Angle Neutron Scattering Instrument at ANSTO	WOOD, Kathleen
18:46	[208] Novel techniques with ATR apparatus at THz frequencies	VILAGOSH, Zoltan
18:47	[159] Structural characterization of SARS-Cov-2 spike derived peptides presented by the Human Leukocyte Antigen A*29:02.	MURDOLO, Lawton
18:48	[21] Understanding and controlling the formation of photonic crystals from polydisperse colloidal systems	CHEA, Katherine
18:49	[126] Synthesis and characterization of K2YbF5 upconversion nanoparticles	AMBAY, John Arnold
18:50	[20] Effects of Mn and Co Ion Implantation on Pseudocapacitive Performance of Ceria-Nanostructures on Ni-Foam	Mr CHEN, Ewing Y.
18:51	[32] The Nanoprobe beamline at the Australian Synchrotron: towards day #1, July 2024	DE JONGE, Martin
18:52	[224] Investigation of Residual Stress and Mechanical Properties of Steelwork After Laser Cleaning	TSUMURA, Yutaka
18:53	[164] Medium Energy Spectroscopy (MEX) – The spectroMEX High Resolution Crystal Spectrometer	WYKES, Jeremy
18:54	[178] Stability and Applications of Model Membranes	ASHENDEN, Alex
18:55	[26] A high-temperature furnace for MEX	FINCH, Emily
18:56	[180] Do reduced aggregation and crystallinity really help to improve the photovoltaic performance of terpolymer acceptors in all-polymer solar cells?	VU, Doan
18:57	[142] Current and future capabilities of the IRM beamline at the Australian Synchrotron, and guidance on applying for use of the facility.	Dr TOBIN, Mark
18:58	[119] KOALA 2: making a good instrument better!	EDWARDS, Alison PILTZ, Ross
18:59	[77] High crystallinity nitrogen doping of $\text{AlLaTiO}_4$ and $\text{A}_2\text{La}_2\text{Ti}_3\text{O}_{10}$ ( $\text{A} = \text{Na}^+, \text{K}^+$ ) photocatalysts	Mr JUNWEI LI, Junwei
19:00	[161] Completing the library of amino-acid neutron structures	Prof. MCINTYRE, Garry