

# AMN9 Programme

Subject to change

## Sunday 10 February

12 - 7.30pm	Registration opens - <b>Soundings Theatre Level 2</b>
6 - 7.30pm	Welcome reception - <b>Level 4</b>

## Monday 11 February

7.30am	Registration opens - <b>Soundings Theatre Level 2</b>
8.30 - 9am	Conference Opening - <b>Mihi and Opening speaker Hon Dr Megan Woods - Amokura Gallery Level 4</b>
9 - 10am	Plenary 1 - Professor Dan Nocera - <b>A Complete Artificial Photosynthesis Food and Fuel from Sunlight, Air and Water - Amokura Galley Level 4</b> Chair: <i>Justin Hodgkiss</i>
10-10.30am	Morning Tea - <b>Oceania Level 3</b>

	Amokura Gallery	Soundings Theatre	Rangimarie 2	Rangimarie 1	Icon
	<b>Functional Materials Invited Speaker 1A</b> Chair: <i>Paul Hume</i>	<b>Materials Synthesis and Characterisation Invited Speaker 1</b> Chair: <i>Duncan McGillivray</i>	<b>Theory and Modelling of Materials and Devices Invited Speaker 1</b> Chair: <i>Krista Steenberg</i>	<b>Materials and Technologies for Biological Applications Invited Speaker 1</b> Chair: <i>Jenny Malmstrom</i>	<b>Future Devices and Technologies Invited Speaker 1</b> Chair: <i>Grant Williams</i>
10:30am - 11:11am	<b>Alexandre Dmitriev - I.1</b> Magnetic, chemical and electrical steering of the nanoscale optical antennas	<b>Roy Clarke - I.2</b> II-IV Nitrides: Earth-abundant Semiconductors with Band-gap Tuning via Cation Sub-lattice Ordering	<b>Oleg Tretiakov - I.3</b> Dynamics and Lifetimes of (Anti)Skyrmions	<b>Alexander Zelikin - I.4</b> Enzyme prodrug therapy engineered into biomaterials	<b>Lan Wang - I.5</b> 2D ferromagnetism and spintronic devices based on van der Waals heterostructures
11am - 12:20pm	<b>Functional Materials Invited Speaker 1B</b> Chair: <i>Paul Hume</i>	<b>Materials Synthesis and Characterisation Contributed 1</b> Chair: <i>Duncan McGillivray</i>	<b>Theory and Modelling of Materials and Devices Contributed 1</b> Chair: <i>Krista Steenberg</i>	<b>Materials and Technologies for Biological Applications Contributed 1</b> Chair: <i>Jenny Malmstrom</i>	<b>Future Devices and Technologies Contributed 1</b> Chair: <i>Grant Williams</i>
11-11.20am	<b>Geoffrey Waterhouse I.6 (11-11.30am)</b> Photonic Band Gap Materials for Efficient Solar Hydrogen Production	<b>Geoffrey Laufersky - C4</b> Tuning Indium Phosphide Quantum Dots: From Theory to Practice	<b>Amanda Parker - C8</b> Use of artificial intelligence to avoid biases in materials simulations or experiments	<b>Louise Orcheston-Findlay - C12</b> Oxygen control and measurement to incorporate drug resistant regions into the cancer model	<b>Masahiro Yamashita - C16</b> Quantum Molecular Spintronics Based on Single-Molecule Magnets: Single-Molecule Memory and MOF-Spintronics
11.20-11.40am	<b>Functional Materials Contributed 1</b>	<b>Alyxandra Thiesse - C5</b> Insights into the Structure of Silicon Nanocrystals	<b>James Gilmour - C9</b> On the involvement of d-electrons in the superatom model	<b>Ankita Gangotra - C13</b> Nanoaspiration: Towards Mechanical Sensing on the Nanoscale	<b>Luca Bondi - C17</b> 15N-NMR to predict spin crossover activity in solution?
11.40-12noon	<b>Pieter Geiregat - C1 (11.30 - 11.50am)</b> Optical Gain Spectroscopy of Solution Processable 2D Materials for Integrated Micro-Lasers	<b>Nina Novikova - C6</b> Distorted Porphyrins: Ultrafast Excited State Dynamics of Boron Porphyrins and Porphyrinoids	<b>Shaun Hendy - C10</b> Instabilities in the melting of metal nanowires	<b>Mohammad Tajul Islam - C14</b> Fabrication and characterisation of 3-dimensional electrospun nanofibrous scaffolds	<b>Guy Dubuis - C18</b> Skyrmions and Topological Hall Effect in Mn <sub>2</sub> CoAl
12noon - 12.20pm	<b>Linda Chen - C2 (11.50 - 12.10pm)</b> Gold nanoclusters for solar cells applications	<b>Marcus Jones - C7</b> Exploiting exciton plasmon coupling to enhance optical transitions in colloidal quantum dots 2 min poster talks	<b>Geoff Willmott - C11</b> Collective Dynamics of Janus Particles: Simulations 2 min poster talks	<b>Rossana Boni - C15</b> A novel 3D nanofibrous scaffold for neural tissue regeneration 2min poster talks	<b>Richard Caulfield - C19</b> Miniaturised 3D printed probes for high-resolution all-optical ultrasound imaging 2min poster talks
12noon - 12.20pm	<b>Joanne Rogers - C3 (12.10 - 12.30pm)</b> Metal oxide composites synthesized by arc discharge	<b>Xiaohan Chen - P1</b> Adsorption isotherms of dyes on metallic nanoparticles: the pitfalls of centrifugation	<b>Alexander Smith - P6</b> Droplet Motion on Superhydrophobic Surfaces	<b>Deanna Ayupova - P9</b> An in vitro investigation of cytotoxic effects of InP/ZnS quantum dots with different surface chemistries	<b>Ali Shaib - P13</b> Preferential Growth Mechanisms of Rare Earth Nitrides Thin Films
12.20-12.30pm		<b>Johan Grand - P2</b> What happened to the quadrupolar plasmon resonance of silver nanospheres?	<b>Timothy Duigan - P7</b> Impurities limit the capacitance of carbon-based supercapacitors	<b>Nicola Lacalendola - P10</b> Facile Characterization of Nanopipettes	<b>Kyle Alberti - P14</b> Sensor-based Air Quality Network Measurements
12.30-1.30pm		<b>Lisa Strover - P3</b> Electrochemical behaviour of chain transfer agents for RAFT polymerisation	<b>Jacob Martin - P8</b> Non-graphitising carbon: a multilayered 3D graphene		<b>Anindita Sen - P15</b> Colorimetric aptasensors for methamphetamine detection
12.30-1.30pm	Lunch break - <b>Oceania Level 3</b>				<b>Paul Kilmartin - P16</b> PEDOT electrochemical sensor for flavonoid analysis

	Amokura Gallery	Soundings Theatre	Icon	Rangimarie 1	Rangimarie 2
	<b>Functional Materials Invited Speaker 2</b> Chair: <i>Carla Meledandri</i>	<b>Materials Synthesis and Characterisation Invited Speaker 2</b> Chair: <i>Guy Dubuis</i>	<b>Soft Matter Invited Speaker 1</b> Chair: <i>Bill Williams</i>	<b>Materials and Technologies for Biological Applications Invited Speaker 2</b> Chair: <i>Laura Damigan</i>	<b>Materials and Devices for Energy Sustainability Invited Speaker 1</b> Chair: <i>Geoff Waterhouse</i>
1.30 - 2pm	<b>James Crowley - I.7</b> Metallosupramolecular Cages: Self-assembly, Molecular Recognition and Catalysis	<b>Benjamin Mallett - I.8</b> Controlling charge-order in superconductor sandwiches	<b>Emilia Nowak - I.9</b> Interfacial and bulk flows triggered by the presence of surfactants	<b>William Peveler - I.10</b> Detecting Liver Fibrosis from Serum with a Rapid and Robust Multichannel Polymer-based Sensor Array	<b>Nonglak Meethong - I.11</b> Structural and Electrochemical Properties of Li and Mn-rich Oxide Cathode Materials for Next Generation High Energy Density Li-ion Batteries
2-2.20pm	<b>Functional Materials Contributed 2</b> Chair: <i>Carla Meledandri</i>	<b>Materials Synthesis and Characterisation Contributed 2</b> Chair: <i>Guy Dubuis</i>	<b>Soft Matter Contributed 1</b> Chair: <i>Bill Williams</i>	<b>Materials and Technologies for Biological Applications Contributed 2</b> Chair: <i>Laura Damigan</i>	<b>Materials and Devices for Energy Sustainability Contributed 1</b> Chair: <i>Geoff Waterhouse</i>
2-2.20pm	<b>Colm Healy - C20</b> Multicomponent Framework Materials for Photon Upconversion and Photocatalysis	<b>Gabriel Bioletti - C23</b> Pressure Dependant Measurements of Critical Current Density in the Nickel-doped Ba122 Superconductor	<b>Catherine Whitby - C26</b> From rings to bumps in colloid patterning: the effect of short chain amphiphiles	<b>Nicola Altenhuber - C29</b> Diabetes Management: Developing a Point-of-Care Insulin Sensor	<b>Shalini Divya - C32</b> New Cathodes for Aluminium Ion Batteries (AIBs)
2.20 - 2.40pm	<b>Przemyslaw Data - C21</b> Electrochemically driven synthesis of conjugated polymers for use as electrochromic materials and organic light-emitting diode emitters	<b>Heedae Kim - C24</b> Fractional Aharonov-Bohm Oscillations in a Single Quantum Ring	<b>Matheu Broom - C27</b> Symmetry Splitting of Impacting Droplets on Partly Wetting Surfaces	<b>Jenny Malmstrom - C30</b> Functional surfaces as biointerfaces and beyond	<b>Keith Gordon - C33</b> Using Raman Spectroscopy and Computational Chemistry to Understand Molecular Electronic Materials
2.40-3pm	<b>Mahsa Motesakeri - C22</b> Comparison of PEDOT-Sensors with HPLC for the analysis of uric and ascorbic acid antioxidants in milk	<b>Ciaran Moore - C25</b> Measurement of surface plasmon resonance intensity in thin film plasmonic sensors	<b>Qaisar Latif - C28</b> Fundamental understanding of structure, function and properties of chitosan biopolymer gels	<b>Yu-Kaung Chang - C31</b> Antibacterial Activity of Quaternized Chitosan/ Polyvinyl Alcohol Nanofiber Membrane	<b>John Kennedy - C34</b> Thermoelectric Properties of Isovalent Ion Doped Bismuth Telluride Films
3 - 3.30pm	Coffee break - <b>Oceania Level 3</b>				
3.30 - 4.15pm	Keynote 1 - Professor Adam Engler - <b>Improving Cardiovascular "Diseases-in-a-dish" with Dynamic Materials - Amokura Gallery Level 4</b> Chair: <i>Viji Sarajini</i>				
4.15 - 5pm	Keynote 2 - Dr Stefan Kupfer - <b>Tuning Unidirectional Energy and (Multi-)Electron Transfer Processes in Photocatalysis - Amokura Gallery Level 4</b> Chair: <i>Keith Gordon</i>				
5 - 6.30pm	Poster session 1 - <b>Oceania Level 3</b>				

## Tuesday 12 February

8.30am	Registration opens - <b>Soundings Theatre Level 2</b>
9 - 10am	Plenary 2 - Professor Rose Amal - <b>Harnessing Solar Energy Through Catalysis - Closing the Carbon Loop - Amokura Gallery Level 4</b> Chair: <i>Nicola Gatson</i>
10 - 10.30am	Morning tea - <b>Oceania Level 4</b>

	Amokura Gallery	Soundings Theatre	Icon	Rangimarie 1	Rangimarie 2
	<b>Functional Materials Invited Speaker 3</b> Chair: <i>Joe Trudahl</i>	<b>Materials Synthesis and Characterisation Invited Speaker 3</b> Chair: <i>James Crowley</i>	<b>Future Devices and Technologies Invited Speaker 2</b> Chair: <i>James Storey</i>	<b>Materials and Technologies for Biological Applications Invited Speaker 3</b> Chair: <i>Natalie Plank</i>	<b>Materials and Devices for Energy Sustainability invited Speaker 2</b> Chair: <i>Sally Brooker</i>
10.30 - 11am	<b>Avadh Saxena - I.12</b> Nonreciprocity, Chirality and PT-Symmetry in Photonics and Functional Materials	<b>Annie K Powell - I.13</b> Approaching a quantum critical point using chemical means - a science fiction wormhole in a science fact scenario	<b>Ethan Minot I.14</b> Electron-electron interaction driven phenomena in carbon nanotube devices	<b>Silvia Giordani - I.15</b> Carbon Nano-Onions for Biomedical Applications	<b>Antoni Llobet - I.16</b> Hybrid molecular materials for water splitting applications
11am - 12:20pm	<b>Functional Materials Contributed 3</b> Chair: <i>Joe Trudahl</i>	<b>Materials Synthesis and Characterisation Contributed 3</b> Chair: <i>James Crowley</i>	<b>Future Devices and Technologies Contributed 2</b> Chair: <i>James Storey</i>	<b>Materials and Technologies for Biological Applications Contributed 3</b> Chair: <i>Natalie Plank</i>	<b>Materials and Devices for Energy Sustainability Contributed 2</b> Chair: <i>Sally Brooker</i>
11 - 11.20am	<b>Nerea Bilbao - C35</b> The impact of grafted surface defects on the on-surface Schiff-base chemistry at the solid-liquid interface.	<b>Selvan Demir - C39</b> Radical-Bridged Lanthanide Single-Molecule Magnets	<b>Jeff Tallon - C43</b> The long road to room temperature superconductivity - basically there, but...	<b>Sharali Malik - C47</b> Few-layer graphene based nanocomposites for potential use in dental/biomedical applications	<b>Shane Teifer - C51</b> Gas Separations using Metal-Organic Frameworks
11.20 - 11.40am	<b>William Holmes-Hewett - C36</b> Optical and transport properties of rare earth nitrides	<b>Valerie Cornuault - C40</b> Investigating the impact of complex pectin structures on gelling	<b>Frederick Wells - C44</b> Nanoparticle Colloids for Improved Superconducting Films	<b>Azadeh Hashemi - C48</b> Characteristics of bioimprinted casein microdevices as biodegradable cell-culture substrates	<b>Charlie Ruffman - C52</b> Hydrogen production using MoS <sub>2</sub> electrocatalysts: The effect of applied potential and catalyst support
11.40-12noon	<b>Charlotte Boott - C37</b> Functional Materials from Cellulose Nanocrystals	<b>Chris Fitchett - C41</b> Turning the Switch: Redox Active Bridging Ligands	<b>Jakub Jagielski - C45</b> Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells	<b>Renee Goreham - C49</b> InP quantum dots conjugated with targeting ligands to fluorescently label and track extracellular vesicles	<b>Jay Chan - C53</b> Breaking molecular nitrogen with an atomically clean lanthanide surface
12 - 12.20pm	<b>Johannes Seibel - C38</b> An in-situ nanoshaving protocol to achieve control over 2D crystallization at the liquid/solid interface 2 min poster talks	<b>Courtney Ennis - C42</b> The DFT Prediction of Molecular Crystal Far-Infrared Spectra: From Planetary Ices to Forensics 2 min poster talks	<b>Jakub Jagielski - C46</b> Colloidal quantum confined perovskites - achieving ultrapure green and blue electroluminescence 2 min poster talks	<b>Zeineb Ayed - C50</b> Aptamer conjugated InP/ZnS QDs to target and label <i>Acinetobacter baumannii</i> 2 min poster talks	<b>Frantisek Fendrych - C54</b> Nanocrystalline Diamond Films for Anticorrosion Protection of Zirconium Nuclear Fuel Rod Cladding 2 min poster talks
12.20-12.30pm	<b>P17</b>	<b>Mohsen Maddah - P21</b> Selective growth of ZnO nanowires	<b>T Murugathas - P25</b> Artificial olfactory sensors using insect odorant receptors and graphene FETs	<b>Claude Meffan - P30</b> Application of the 3os <sup>2</sup> method to microfluidics	<b>Hyeok Kim - P34</b> Organic Solar Cells for Indoor Application through Optimal Design
12.30 - 1.30pm	<b>Tarek Kollmetz - P19</b> Analysis of protein release from Polystyrene-block-Poly(Ethylene Oxide) thin films co-assembled with	<b>Jonathan Falconer - P22</b> Nano-MOF Engineering Meets Materials Science: Toward New Functional Hybrid Materials	<b>Ahmad Ayesh - P26</b> Production of selective hazardous chemical sensors using graphene decorated by nanomaterials	<b>Praveen Vadakkedath - P31</b> Dynamic peptide nanostructure formation using reversible boronate ester chemistry	<b>Santiago Rodriguez-Jiménez - P36</b> Surface attachment of hydrogen evolution catalysts

12.00 - 12.30pm	Liam Carroll - P20	Controlling Surface Conductivity and Chemical Reactivity at SnO2 Thin Films using Aryldiazonium Ion Electrochemistry	Matthew Arnold - P23	Co-sputtered refractory polarizers and reverse-switching thermal emitters	Nireekshan K Sodavaram - P27	The Effect of Residual Stresses and Hygroscopic Swelling on MEMS ICP Sensor Drift	Santhosh Kumar Pandian - P32	Drop Impact of High Viscosity and Non-Newtonian Fluids on Patterned Polymer Surfaces		
			David Uhrig - P24	Thermal post processing of FeSe1-xTex: Changes in physical properties and enhancement of Jc						
12.30 - 1.30pm	Lunch break - Oceania Level 3									
	Amokura Gallery		Soundings Theatre		Rangimarie 1		Rangimarie 2		Icon	
1.30 - 2pm	Functional Materials Invited Speaker 4 Chair: Nadine van der Heijden		Quantum Technologies Invited Speaker 1 Chair: Uli Zueicke		Theory and Modelling of Materials and Devices Invited Speaker 2 Chair: Anna Garden		Soft Matter Invited Speaker 2 Chair: Petrik Galvosas		Future Devices and Technologies Invited Speaker 3 Chair: Stuart Wimbush	
	Agustin Schiffrin - I.17	Organic Nanostructures on Surfaces Towards Nanoscale Control of Interfacial Electronic Properties	Jevon Longdell - I.18	Microwave-optical quantum signal conversion using rare earths in solids	Gianluca Rastelli - I.19	Electron-vibration and electron-photon interaction in nanoscale hybrid systems	Erik Reimhult - I.20	Tailoring colloidal and protein interactions of superparamagnetic nanoparticles for biomedical applications	Adam Micolich - I.21	Regaining a lost dimension – from InAs nanowires to InAs nanofin Hall bars by templated epitaxy
	Functional Materials Contributed 4 Chair: Nadine van der Heijden		Quantum Technologies Contributed 1 Chair: Uli Zueicke		Theory and Modelling of Materials and Devices Contributed 2 Chair: Anna Garden		Soft Matter Contributed 2 Chair: Petrik Galvosas		Future Devices and Technologies Contributed 3 Chair: Stuart Wimbush	
2 - 2.20pm	Penelope Brothers - C55	POMs (polyoxometallates) as building blocks for magnonics devices	Rakesh Arul - C58	Lighting up chemical bonds - Can quantum optics be used to control chemical reactions?	Walter Somerville - C61	Understanding pathlength distributions in a photon random walk	Susav Pradhan - C64	Using microrheology and biophysical techniques to probe biological microparticles	Natalie Plank - C67	Carbon nanotube network field effect transistors as a sensing platform
2.20 - 2.40pm	Sesha Manuguri - C56	Spatial organization and characterization of magnetic nanocrystals in di-block copolymer micellar thin films	Hannah Stern - C59	Imaging single visible emitters in hBN monolayers.	Geoffrey Weal - C62	Using structural recognition methods to improve the efficiency of global optimisation algorithms for nanoparticle structure determination	Joe Berry - C65	Measuring mechanical properties of hydrogel particles using AFM	Abu Rifat Ullah - C68	Switching Highly Doped p-type GaAs Nanowire FETs
2.40 - 3pm	Viji Sarojini - C57	Designing Antimicrobial Surfaces	Robin Guehne - C60	Exploring electronic properties of topological insulator Bi2Se3 using nuclear magnetic resonance	Chhayly Tang - C63	Modeling molecular orientation effects in dye-coated nanostructures using a thin-shell approximation of Mie theory for radially anisotropic media	Sevgi Onal - C66	Design and Fabrication of a Microfluidic System for Force Application on Cancer Cells	Carlos Torres-Torres - C69	Magnetoplasmonic influence on multiphotonic effects exhibited by carbon/metal nanostructures
3 - 3.30pm	Coffee break - Oceania Level 3									
3.30 - 4.15pm	Keynote 3 - Professor Norman Birge - <b>Ferromagnetic Josephson Junctions for Cryogenic Memory</b> - Amokura Gallery Level 4 Chair: Ben Ruck									
4.15 - 5pm	Keynote 4 - Professor Richard Palmer - <b>Nanoparticle Beam Deposition: A Novel Route to the Solvent-Free Creation of Heterogeneous Catalysts</b> - Amokura Gallery Level 4 Chair: John Kennedy									
5 - 6.30pm	Poster session 2 - Oceania Level 3									

### Wednesday 13 February

8.30am	Registration opens - Soundings Theatre Level 2									
9 - 10am	Plenary 3 - Professor Michael Fuhrer - <b>Topological materials for low-energy electronics</b> - Amokura Gallery Level 4 Chair: Michele Governale									
10 - 10.30am	Morning tea - Oceania Level 3									
	Amokura Gallery		Soundings Theatre		Icon		Rangimarie 1		Rangimarie 2	
10.30 - 11am	Functional Materials Invited Speaker 5 Chair: David Williams		Materials Synthesis and Characterisation Invited Speaker 4 Chair: Chris Bumby		Future Devices and Technologies Invited Speaker 4 Chair: Saurabh Bose		Materials and Technologies for Biological Applications Invited Speaker 4 Chair: Maan Alkaisi		Materials and Devices for Energy Sustainability Invited Speaker 3 Chair: Komal Patil	
	Karina Hudson - I.22	Towards topological quantum computing: demystifying the first 1D subband	Grzegorz Lisak I.23	Waste-to-Materials Circular Economy Concept: Carbon Nanotubes Derived from Plastic Waste	Sumeet Walia - I.24	Electronics of the future	Laura Domigan - I.25	Lens protein biomaterials for use in ocular surgery	Julio Lloret-Fillol - I.26	From Well-defined Coordination Complexes towards Materials for Artificial Photosynthesis
	Functional Materials Contributed 5 Chair: David Williams		Materials Synthesis and Characterisation Contributed 4 Chair: Chris Bumby		Future Devices and Technologies Contributed 4 Chair: Saurabh Bose		Materials and Technologies for Biological Applications Contributed 4 Chair: Maan Alkaisi		Materials and Devices for Energy Sustainability Contributed 3 Chair: Komal Patil	
11 - 11.20am	Paul Baek - C70	UV-curable Highly Elastomeric Conducting Polymers for Stretchable Electronics	Mark Waterland - C74	Characterising 2D nanoribbon edges with IR and Raman spectroscopy	Simon Brown - C78	Self-assembled percolating networks for brain-inspired computing	Rebecca Soffe - C82	Building an Artificial-Leaf-on-a-Chip	Sreelakshmi Chandrabose - C86	High exciton diffusion in Fused Ring Electron Acceptor films
11.20 - 11.40am	Yen Truong - C71	Functional Cross-Linked Electrospun Polyvinyl Alcohol Membranes and Their Potential Applications	Colleen Marlow - C75	Experimental investigation of the transport asymmetry in sparse networks of randomly aligned carbon nanotubes	Felicia Ullstad - C79	Making magnetic tunnel junctions using contrasting intrinsic ferromagnetic semiconductors	Lisa Strover - C83	Photodegradation mechanisms in crosslinkable polymer blends for organic solar cells	Sean Collins - C87	Interfacial charge transfer between gold nanorods and electropolymerized metallophthalocyanine nano-coatings
11.40 - 12noon	Jadranka Travas-Sejdic - C72	Functionalisation of Conducting Polymers: Towards Advanced Electronic Biomaterials for Biomedical Applications	Yung-Sen Lin - C76	Synthesis of flexible organosilicon oxynitride films using an atmospheric pressure plasma jet for enhancing scratch resistance of flexible carbon fiber-reinforced polymer composites	Alex Risos - C80	Future's sensing platforms using light and electric fields.	Yiling Sun - C84	Trapping and Maintenance of Individual Zoospores On-Chip for Single Cell Protrusive Force Measurements	Shinuk Cho - C88	High efficiency polymer homo-tandem solar cells with carbon quantum dot doped tunnel junction intermediate layer
12 - 12.20pm	Michael Price - C73	Long range exciton transport in conjugated polymer nanofibers prepared by seeded growth	Carla Meledandri - C77	Nano-MOF Engineering Using Microemulsions	Pawel Wagner - C81	Developing Photosensitive Droplets for Chemopropulsion	Maryam Hejazi - C85	Deposition of conductive diamond on carbon fiber microelectrodes for neural stimulation	Jin Young Kim - C89	Nanoparticle-Enhanced Silver Nanowire Plasmonic Electrodes for High-Performance Organic Optoelectronic Devices
12.20 - 1.30pm	Lunch break - Oceania Level 3									
1:30 - 2:15pm	Keynote 5 - Dr Anna Phan - <b>The Possible Applications of Near Term Quantum Computers</b> - Amokura Gallery Level 4 Chair: Simon Brown									
2:15 - 3pm	Keynote 6 - Dr Thomas Watson - <b>Quantum Computing with Spins in Silicon</b> - Amokura Gallery Level 4 Chair: Simon Brown									
3 - 3.30pm	Coffee break - Oceania Level 3									
3.30 - 4.15pm	Keynote 7 - Professor Harm-Anton Klok - <b>Polymers at synthetic and living surfaces</b> - Amokura Gallery Level 4 Chair: Jeff Tallon									
4:15 - 5pm	Keynote 8 - Dr Cathy Foley - <b>One HTS Josephson Junction - An Array of Applications: Has anything come from research on HTS devices in the last 30+ years?</b> - Amokura Gallery Level 4 Chair: Jeff Tallon									
6.30pm - late	Conference Dinner - Amokura Gallery Level 4									

### Thursday 14 February

8.30am	Registration opens - Soundings Theatre Level 2									
9 - 10am	Plenary 4 - Associate Professor Brigitte Stadler - <b>Micro-and Nanoreactors in Cell Mimicry</b> - Amokura Gallery Level 4 Chair: Jadranka Travas-Sejdic									
10 - 10.30am	Morning tea - Oceania Level 3									
	Amokura Gallery		Soundings Theatre		Rangimarie 1		Icon		Rangimarie 2	
10.30 - 11am	Functional Materials Invited Speaker 6 Chair: Simon Granville		Materials Synthesis and Characterisation Invited Speaker 5 Chair: Baptiste Auguie		Theory and Modelling of Materials and Devices Invited Speaker 3 Chair: Uli Zueicke		Soft Matter Invited Speaker 3 Chair: Renee Goreham		Material and Devices for Energy Sustainability Invited Speaker 4 Chair: Alison Downard	
	Axel Hoffmann - I.27	Topological Quasiparticles Magnetic Skyrmions	Paula Angelome - I.28	Nanomaterials obtained by chemical synthesis: design, characterization and applications	Elke Pahl - I.29	Melting of Nano-Clusters in Strong Magnetic Fields	Michel Nieuwoudt - I.30	Differentiation of human cortical hip bone composition according to age and gender using Raman microscopy	Tae-Hyuk Kwon - I.31	Carbon Modifications for Energy Storage System
	Functional Materials Contributed 6 Chair: Simon Granville		Materials Synthesis and Characterisation Contributed 5 Chair: Baptiste Auguie		Theory and Modelling of Materials and Devices Contributed 3 Chair: Uli Zueicke		Soft Matter Contributed 3 Chair: Renee Goreham		Materials and Devices for Energy Sustainability Contributed 4 Chair: Alison Downard	
11 - 11.20am	Konrad Suschke - C90	Near-Surface Cobalt Implantation Into Amorphous Carbon Films: Observation Of Complex Magnetic Nanostructures And Multiple Magnetic Phases	Anna Garden - C94	Contrasting the motif preference of platinum and gold nanoclusters between 55-309 atoms	Bushra Anam - C98	Exploring group 13 structures: Elemental 2-dimensional Gallium, Aluminium, and Indium	Kyle Webster - C102	Engineering, Functionalisation, and Peptide Templated Self-assembly of Human Peroxiredoxin Three	Han Y Woo - C106	Single Component OPVs Based on Oligothiophene-Fullerene Conjugate
11.20 - 11.40am	Nadine J. van der Heijden - C91	Magnonic crystal bottom-up synthesis through self-assembly	Kristel Castillo - C95	Towards the next generation of polymeric materials	Michael Kammermeier - C99	Control of spin helix symmetry in semiconductor quantum wells by crystal orientation	Rona Chandrawati - C103	Liposome-based nanosensors for chemical and biological sensing	Nathaniel Davis - C107	Singlet Fission and Triplet Transfer to Pbs Quantum Dots in TIPS-Tetracene Carboxylic Acid Ligands
11.40 - 12noon	Andris Sutka - C92	Triboelectric Nanogenerator from Inversely Polarised Ferroelectric Contacting Layers	Marion Dubernet - C96	Luminescent nanocomposite thin films of molybdenum metal clusters for energy applications	Nicola Gaston - C100	The electronic and thermodynamic properties of two-dimensional gallium	Shinji Kihara - C104	Small angle neutron scattering study of soft and hard component of protein corona	Justin Hodgkiss - C108	Ultrafast photoinduced refractive index changes in metal halide perovskites
12 - 12.20pm	Michael Slota - C93	Electron coherence transfer in magnetic graphene nanoribbons	Mieczyslaw Lapkowski - C97	Bis-peryimidine segment as novel conjugated polymer-building blocks	Krista Steenbergen - C101	Gallium Nanotubes	Isabela Monteiro - C105	Self-assembling block copolymer for signalling molecules delivery by collagen layer degradation	Sajal Biring - C109	Influence of Inhomogeneous Schottky Barrier on Voc in Small Molecular Organic Photovoltaics
12.20 - 1.30pm	Lunch break - Oceania Level 3									
1:30pm-2:30pm	Plenary 5 - Distinguished Professor Dame Margaret Brimble - <b>Applications of Peptide-Based Materials: Drugs, Vaccines and Biomaterials</b> - Amokura Gallery Level 4 Chair: Shane Telfer									
2.30 - 3pm	Closing Ceremony - Amokura Gallery Level 4									