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<td>0930-0945</td>
<td>Opening Remark</td>
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<td>1230-1300 Lunch Break</td>
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<td>1450-1520 Afternoon Tea</td>
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<td>0945-1030</td>
<td>Veena Sahajwalla</td>
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<td>1800-2200 Gala Dinner at Leighton Hall</td>
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<td>1100-1140</td>
<td>Xuemin Lin</td>
<td>Room LG01</td>
<td>1100-1130 Morning Tea</td>
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<td>1140-1205</td>
<td>Michael Ashley</td>
<td>Room LG02</td>
<td>1130-1210 Lunch Break</td>
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<td>Rundong Li</td>
<td>Room LG03</td>
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<td>1400-1445</td>
<td>Martin Green</td>
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<td>1445-1530</td>
<td>David Wartle</td>
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<td>1645-1730</td>
<td>Dustin Gooding</td>
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No. | Title | Name | Area | Speech Title
---|---|---|---|---
1 | Senior Professor | Matthew England | Environment | Global high-resolution ocean modelling and Antarctic climate processes
2 | Senior Professor | Justin Gooding | Health & Biotech | From Ultrasensitive to Single Molecule Biosensors
3 | Senior Professor | Martin Green | Energy | Photovoltaic Solar Research and Education at UNSW Sydney
4 | Professor | Deep Prasad | Environment | Low carbon buildings and cities
5 | Professor | Veena Sahajwalla | Materials | Microfactory Technologies – Transforming Waste into Value-added Materials and Products
6 | Professor | David Waite | Environment | UNSW Centre for Transformational Environmental Technologies (CTET) - an exciting venture in technology translation
7 | SHARP Professor | Chunhui Wang | Manufacturing | Multifunctional structures, sensors and devices
8 | SHARP Professor | Omid Ravani | Energy | Towards AI and data driven new energy systems
9 | Professor | Nigel Lovell | Health & Biotech | Bionic Eyes and Telehealth Systems: Tales of Translation in Biomedical Engineering at UNSW
10 | Professor | Perminndle Sachdev | Health & Biotech | Healthy ageing and the prevention of dementia: Research at the Centre for Healthy Brain Ageing
11 | Professor | Michelle Simmons | ICT | Title

**Keynote (15)**

12 | Senior Professor | Gernot Heiser | ICT | Making cyberphysical systems safe and secure with sel.
13 | Senior Professor | Xuejin Lin | ICT | Big Graph Processing: Applications, Challenges, and Advances
14 | SHARP Professor | Liming Dai | Materials/Energy | Multidimensional Carbon Materials for Multifunctional applications
15 | Professor | Andrea Morello | ICT | Quantum computing and quantum chaos with single-atom spins in silicon
16 | Professor | Chuyang Tang | Environment | Novel Membranes and Membrane Processes for Water and Beyond
17 | SHARP Professor | Bingjie Li | Social Policy | Social Policy and Governance of urbanisation in China
18 | SHARP Professor | John Church | Environment | Implications of anthropogenic sea-level rise for mitigation and adaptation decisions
19 | Professor | Siti Zlatanova | ICT | Use of voxels for 3D precinct modelling
20 | SHARP Professor | Tom Haix Wu | Materials | Binary Materials for Photodetection from Mid-Infrared, Visible, to X-ray
21 | Associate Professor | Cheemun Chong | Energy | Progress of Crystalline Silicon Solar Cells
22 | Associate Professor | Renate Egan | Energy | Data for Smart Energy Decisions - integrating residential rooftop solar into the grid
23 | Professor | Sean Li | Materials | Bridging the Innovation Gap between Fundamental Research and Industrial Manufacturing
24 | Professor | Qingzhao Xu | Energy | Hydrogen - the energy of the future
25 | Professor | Bill Walsh | Health & Biotech | UNSW Research Matters: Research/Design/Development = Clinical Impact
27 | Professor | Richard Kingsford | Environment | Ecology and management of Australia’s rivers - the search for sustainability
28 | Senior Professor | Bernard Balleine | Health & Biotech | Title
29 | Associate Professor | Richard Bryant | Health & Biotech | Title
30 | Professor | Mark Wilcox | Materials | Antimicrobial surfaces - from laboratory to clinical trials
31 | Professor | Fiona Stapleton | Health & Biotech | Title
32 | SHARP Professor | Chris Heschen | Health & Biotech | Novel technology platforms for precision medicine approaches
33 | SHARP Professor | Ieva Goldin | Health & Biotech | Submitted 4 abstracts
34 | Professor | Ross Buckley | Finance | How China is Leading the World in Data-driven Finance and FinTech
35 | Professor | Kaarin Ansety | Health & Biotech | Title
36 | Professor | John Fletcher | Energy | Power electronics for energy systems
37 | Dr. | Ruth Webster | Health & Biotech | SMARTHealth - digitally enhancing guidelines based care
38 | Associate Professor | Sammy Chan | Energy | Advanced Remote Area Renewable Power Supply System/Growth Acceleration of Ribbon Anode in Impressed Current Cathodic Protection Systems in Concrete
39 | Associate Professor | Jay Katupitiya | Manufacturing | Autonomous Field Vehicles
40 | Associate Professor | Tomasz Bednarczuk | Health & Biotech | Expanded Perception and Interaction - Visual Analytics, Simulations and AI
41 | Dr. | Yanzong Shen | Energy | Automation and Intelligence in Construction
42 | Associate Professor | Julien Epps | Health & Biotech | Automatic emotion, mental state and task analysis for wearable computing
43 | Associate Professor | Kritit Kiatwong | Energy | A water distillation system powered by air conditioner waste heat
44 | Dr. | Da-Wei Wang | Energy | Safe and Reliable Ion-Type Lithium-Sulfur Battery
45 | Associate Professor | Bram Hoex | Energy | Enabling low-cost high-efficiency solar cells using nano-scale atomic layer deposited films
46 | Professor | Pier Zetterlund | Materials | Electrically conductive polymer/graphene films via sustainable technology
47 | Dr. | Wei Geng | Health & Biotech | Controlled gene and drug release from a liposomal delivery platform triggered by low dose X-ray radiation
48 | Dr. | Desheng Peng | Health & Biotech | Field-deployable fault tolerant motor drive of open-end winding permanent magnet synchronous machine
49 | Associate Professor | Tracie Barber | Health & Biotech | Engineering arterial flows for personalized medicine
50 | Dr. | Qiyuan Li | Environment | Title
51 | Professor | Michael Ashley | Energy | Remote power and communications for the high Antarctic plateau
52 | Dr. | Weicong Xu | Manufacturing | A novel lead-free solder for green electronic packaging
53 | Dr. | Xuefei Liu | Environment | Title
54 | Dr. | Guochen Liu | Health & Biotech | Cell selection technology/Device for in vivo real time detection/Paper based test strips for insulin/Field-deployable device for detection of nucleic acids/Paper based electrochemical chips for multiplex cancer biomarkers at point-of-care/intelligent nanoparticles for precision medicine
55 | Dr. | Weicong Kong | Energy | A Smarter Electricity Meter Infrastructure with Non-Intrusive Load Monitoring Technology
56 | Dr. | Sophia Gu | Health & Biotech | An active nanocarrier - amplified therapeutic effect of anti-cancer drug for more efficient and safer cancer treatment/Dual mode magnetic resonance imaging (MRI) contrast agent for accurate tumour detection
57 | Dr. | Kefeng Zhang | Environment | Biofiltration technology for stormwater management in Jiangsu, China
58 | Dr. | Xiaoshen Sheng | Health & Biotech | Antimicrobial Coating Technologies for Biomedical and Food Safety Applications
59 | Professor | Michael Ashley | ICT | High Reliability control systems for the high Antarctic plateau
60 | Dr. | Colin Bonner | Environment | A remotely operated sonic radar for an astronomical observatory in Tibet
61 | Professor | Kay Kruiz | Materials | Structural Materials for Challenging Applications: Preventing and Predicting Failures
62 | Professor | Jon Lawrence | Manufacturing | Precision Instrumentation for Observational Astronomy
63 | Dr. | Qiyuan Li | Energy | A water distillation system powered by air conditioner waste heat
64 | Dr. | Rundong Li | ICT | Design and Optimise Synchronous Reluctance Machines in Sensorless Control
65 | Dr. | Kang Liang | Health & Biotech | Applications of advanced nanoporous materials for biotechnology
66 | Dr. | Manreyee Yang | Health & Biotech | Examining New Ways of Visualising Tear Film Lipids Using Quantum Dots
67 | Associate Professor | Shelli R. McAlpine | Health & Biotech | Producing Chemical Tools Designed to Control Disease
68 | Associate Professor | Adam Micolic | Materials | Hybrid nanowire ion-to-electron transducers for integrated bioelectronic circuitry
69 | Dr. | Peter R. Wich | Health & Biotech | Biopolymer-based Nanomaterials for Applications in Drug Delivery, Immunotherapy and Catalysis
70 | Associate Professor | Vinayak Dixit | ICT | Title

**Invited Speakers (34)**

1. Dr. Vinayak Dixit
2. Dr. Ruth Webster
3. Assoc. Prof. John Fletcher
4. Dr. Qiyuan Li
5. Dr. Weicong Xu
6. Dr. Weicong Kong
7. Dr. Guochen Liu
8. Dr. Xiaoshen Sheng
9. Dr. Kefeng Zhang
10. Dr. Michael Ashley
Plenary Speakers

Scientia Professor Michelle Simmons (ICT)
https://research.unsw.edu.au/people/scientia-professor-michelle-yvonne-simmons

Scientia Professor Martin Green (Energy)
https://research.unsw.edu.au/people/scientia-professor-martin-green

Scientia Professor David Waite (Environment)
https://www.engineering.unsw.edu.au/civil-engineering/staff/david-waite

Scientia Professor Matthew England (Environment)
https://research.unsw.edu.au/people/scientia-professor-matthew-heathcote-england

Scientia Professor Justin Gooding (Health & Biotech)
https://research.unsw.edu.au/people/scientia-professor-justin-gooding

Scientia Professor Nigel Lovell (Health & Biotech)
https://research.unsw.edu.au/people/scientia-professor-nigel-lovell

Scientia Professor Deo Prasad (Environment)
https://research.unsw.edu.au/people/scientia-professor-deo-karan-prasad

Scientia Professor Perminder Sachdev (Health & Biotech)
https://research.unsw.edu.au/people/scientia-professor-perminder-singh-sachdev

Scientia Professor Veena Sahajwalla (Advanced Materials)
https://research.unsw.edu.au/people/scientia-professor-veena-sahajwalla

Professor Chun-Hui Wang (Advanced Manufacturing)
https://research.unsw.edu.au/people/professor-chun-wang

Professor Joe Dong (Energy)
https://research.unsw.edu.au/people/professor-joe-dong
Keynote Speakers

Energy
Professor John Fletcher
https://research.unsw.edu.au/people/professor-john-fletcher
Professor Chuan Zhao
https://research.unsw.edu.au/people/professor-chuan-zhao
Associate Professor CheeMun Chong
https://www.engineering.unsw.edu.au/energy-engineering/staff/cheemun-chong
Associate Professor Renate Egan
https://research.unsw.edu.au/people/associate-professor-reneat-judith-egan

Materials
Professor Sean Li
http://www.materials.unsw.edu.au/profile/sean-li
Professor Liming Dai
https://www.engineering.unsw.edu.au/chemical-engineering/staff/liming-dai
Professor Tom Wu
http://www.materials.unsw.edu.au/profile/tom-wu

Environment
Professor Chuyang Tang
https://www.engineering.unsw.edu.au/civil-engineering/staff/chuyang-tang
Professor John Church
https://www.ccrc.unsw.edu.au/ccrc-team/academic-research/john-church
Professor Ana Deletic
https://research.unsw.edu.au/people/professor-ana-deletic
Professor Richard Kingsford
https://www.bees.unsw.edu.au/richard-kingsford

Health and Biotech
Professor William Walsh
https://research.unsw.edu.au/people/professor-bill-walsh

Scientia Professor Bernard Balleine
http://www.psy.unsw.edu.au/contacts-people/academic-staff/scientia-professor--bernard-balleine

Scientia Professor Richard Bryant
http://www.psy.unsw.edu.au/contacts-people/academic-staff/scientia-professor-richard-bryant

Professor Mark Willcox
https://research.unsw.edu.au/people/professor-mark-duncan-willcox

Professor Fiona Stapleton
https://research.unsw.edu.au/people/professor-fiona-jane-stapleton

Professor Christopher Heeschen
https://research.unsw.edu.au/people/professor-christopher-heeschen

Professor Ewa Goldys
https://www.engineering.unsw.edu.au/biomedical-engineering/staff/ewa-goldys

Professor Kaarin Anstey
https://research.unsw.edu.au/people/professor-kaarin-jane-anstey

**ICT and Reliable Systems**

Scientia Professor Gernot Heiser
https://research.unsw.edu.au/people/scientia-professor-gernot-heiser
https://en.wikipedia.org/wiki/Gernot_Heiser

Scientia Professor Xuemin Lin
https://www.cse.unsw.edu.au/~lxue/

Professor Andrea Morello
https://research.unsw.edu.au/people/professor-andrea-morello

Professor Sisi Zlatanova
https://research.unsw.edu.au/people/professor-sisi-zlatanova
Policies

Scientia Professor Ross Buckely

http://www.law.unsw.edu.au/profile/ross-buckley

Associate Professor Bingqin Li