



### Day 1 – Sunday 28<sup>th</sup> May 2017

<b>Time</b>	<b>Location: Shangri-La Hotel – North Bar</b>
6pm – 8 pm	<b>Welcome Reception</b>

### Day 2 – Monday 29<sup>th</sup> May 2017

Time		Location: Ballroom					
8:45am		NDNC 2017 Opening remarks – A/Prof Brant Gibson and A/Prof Igor Aharonovich					
Session Chair – Mark Newton							
9:00am	ID 301	Plenary Speaker - Prof Amir Yacoby “Exploring Condensed Matter Physics Using Nitrogen Vacancy Magnetometers”					
9:45am	ID 304	Invited Speaker - Prof Mutsuko Hatano “Diamond device technologies for quantum sensors”					
10:15am	ID 216	Keynote Speaker - Prof Steven Prawer “Carbon based technologies for Electric Medicine”					
10:35am	COFFEE BREAK						
Location: Trinity Room				Location: Marlin Room			
Diamond Sensing 1 Session Chair – Peter Ciglar				Diamond Power Electronics 1 Session Chair – Hiromitsu Kato			
Time	Paper ID	Title	Presenter	Time	Paper ID	Title	Presenter
11:00am	305	Invited Speaker – The Clinical Translation of Nanodiamonds	Dean Ho	11:00am	306	Invited Speaker – Diamond devices for power electronics	Nikola Rouger
11:30am	157	Contributed Speaker – Ambient high resolution electron spin imaging and spectroscopy with spins in diamond	David Simpson	11:30am	167	Contributed Speaker – The interface of polycrystalline diamond films on AlGaIn/GaN heterostructures	Ken Haenen
11:50am	076	Contributed Speaker – Hyperpolarized Nanodiamond Surfaces	Ewa Rej	11:50am	188	Contributed Speaker- High power beam combination and beam transformation using synthetic single crystal diamond	Rich Mildren



**Day 3 – Tuesday 30th May 2017**

Time		Location: Ballroom					
Session Chair – Amir Yacoby							
9:00am	ID 302	<b>Plenary Speaker</b> – Prof K.P. Loh “ <i>The chemist view on synthesis of carbon nanomaterials</i> ”					
9:45am	ID 309	<b>Invited Speaker</b> – Prof Hua Zhang “ <i>Synthesis and Applications of Novel Two-Dimensional Nanomaterial</i> ”					
10:15am	ID 131	<b>Keynote Speaker</b> – Dr U.F.S. D'Haenens-Johansson “ <i>Photoluminescence defect mapping of NV centers in “Golconda” pink and colorless type IIa natural diamonds and CVD synthetics</i> ”					
10:35am	COFFEE BREAK						
Location: Trinity Room				Location: Marlin Room			
Graphene and other 2D materials 1 Session Chair - Li Chong Chen				Characterization and Modelling Session Chair - Hua Zhang			
Time	Paper ID	Title	Presenter	Time	Paper ID	Title	Presenter
11:00am	310	<i>Invited Speaker – 2D materials chemistry for sustainable future: proton and CO2 reduction</i>	Martin Pumera	11:00am	311	<i>Invited Speaker – Surface structure, defect and chemistry of nanodiamond particles measured using advanced (scanning) transmission electron microscopy</i>	Shery Chang
11:30am	116	<i>Contributed Speaker – Impurity control of hexagonal Boron Nitride to realize their potentials as a 2D wide-bandgap material</i>	Takashi Taniguchi	11:30am	019	<i>Contributed Speaker – Thermal properties of carbon allotropic nanostructures</i>	Liu Xiangjun
11:50am	118	<i>Contributed Speaker – Laser reduction of graphene oxide film by radially polarized beam</i>	Baohua Jia	11:50am	098	<i>Contributed Speaker – First-principles simulation of carbon based 2D materials for energy applications</i>	Xiaojun Wu
12:10pm	107	<i>Contributed Speaker – Properties and Applications of “White Graphene”</i>	Luhua Li	12:10pm	199	<i>Contributed Speaker – Electrical Transport Properties of pH Induced Single Diamond Nanowire Self-Assembly using Chemically Synthesized Fluorescent Diamond Nanoparticles</i>	Kien Wen Sun
12:30pm	106	<i>Contributed Speaker – Two-Dimensional Layered Material/Semiconductor Heterojunctions for Energy and Optoelectronic Applications</i>	Jiansheng Jie	12:30pm	027	<i>Contributed Speaker – Electronic-mechanical-magnetic coupling in 2D materials</i>	Liangzhi Kou
12:50pm	LUNCH						
Nanocarbons and Nanodiamonds Session Chair - Weiya Zhou				Diamond Photonics 2 Session Chair – Alastair Stacey			
13:50pm	103	<i>Contributed Speaker – From Unique Properties of Higher Diamondoids to Practical Applications: Promises and Challenges</i>	Jeremy Dahl	13:50pm	017	<i>Contributed Speaker – Germanium-vacancy centres and the quest for “perfect” diamond qubits</i>	Lachlan J Rogers
14:10pm	018	<i>Contributed Speaker – The progress on the investigations of Transferred-Electron Oscillations in diamond</i>	Nattakarn Suntornwipat	14:10pm	119	<i>Contributed Speaker – Ultrafast Photo-Excitation Dynamics of Nitrogen-Vacancy Defects in Diamond</i>	Ronald Ulbricht
14:30pm	031	<i>Contributed Speaker – Polymer dehalogenation for room-temperature rapid synthesis of doped carbon materials</i>	Xiaoming Sun	14:30pm	201	<i>Contributed Speaker – Stimulated emission from nitrogen-vacancy centres in diamond</i>	Jan Jeske



**Day 4 – Wednesday 31st May 2017**

Time		Location: Ballroom					
Session Chair – K.P. Loh							
9:00am	ID 303	<b>Plenary Speaker</b> – Mark Newton “New defects in diamond”					
9:45am	ID 314	<b>Invited Speaker</b> – Prof Ryong Ryoo “Zeolite-templated facile synthesis of 3D graphenic carbons for electrical energy storage”					
10:15am	ID 169	<b>Keynote Speaker</b> – Philippe Bergonzo “Catalyst based multi-electrode sensor arrays for advanced electrochemical detection”					
10:35am	COFFEE BREAK						
Location: Trinity Room				Location: Marlin Room			
Diamond Power Electronics 2 Session Chair - Nikola Rouger				Graphene and other 2D Materials 2 Session Chair - Martin Pumera			
Time	Paper ID	Title	Presenter	Time	Paper ID	Title	Presenter
11:00am	315	Invited Speaker – <i>n-type doping and interface control for inversion p-channel diamond MOSFET</i>	Hiromitsu Kato	11:00am	316	Invited Speaker – <i>Towards wafer –level graphene on silicon</i>	Francesca Iacopi
11:30am	166	Contributed Speaker – <i>High-current triple-gate H-diamond MOSFET</i>	Y. Koide	11:30am	200	Contributed Speaker – <i>Two Dimensional Layers Hybridizing with Nanocarbons</i>	Li Song
11:50am	117	Contributed Speaker – <i>High Power Diamond Schottky Diodes</i>	Timothy Grotjohn	11:50am	110	Contributed Speaker – <i>WSe2/graphene heterostructures: a spectromicroscopy investigation</i>	Stefano Agnoli
12:10pm	138	Contributed Speaker – <i>Phosphorus doped diamond homoepitaxy for work function controlled surfaces - thermionic energy conversion</i>	Franz A. Koeck	12:10pm	058	Contributed Speaker – <i>Tuning the electronic and magnetic properties of nitrogen functionalized few layered graphene nanoflakes</i>	Sekhar Chandra Ray
12:30pm	165	Contributed Speaker – <i>Heteroepitaxial diamond FET for power electronics application</i>	M. Syamsul	12:30pm	071	Contributed Speaker- <i>Decoupling Of Zero Layer Graphene On 6H-SiC(0001) By Si Intercalation : Graphene Based Metal-Semiconducting Heterostructure Formation</i>	Mathieu Silly
12:50pm	LUNCH						
Diamond Growth 2 Session Chair - Chris Pakes				Graphene and other 2D Materials 3 Session Chair – Dan Li			
13:50pm	022	Contributed Speaker – <i>Growth of the High Quality Single Crystalline Diamond and Research on H-terminated Diamond MOSFETs with MoO3 Dielectric</i>	Zeyang Ren	13:50pm	001	Contributed Speaker – <i>Formation of hexagonal-diamond from glassy carbon at megabar pressures</i>	Dougal McCulloch
14:10pm	109	Contributed Speaker – <i>Properties of Lightly Boron-Doped CVD Diamond Plates</i>	Yap Chuan Ming	14:10pm	135	Contributed Speaker – <i>Magnetic properties of graphene oxide</i>	Maria A. Augustyniak-Jablokow
14:30pm	114	Contributed Speaker – <i>Effect of phosphorous incorporation on the crystalline quality of (100)-oriented homoepitaxial diamond layers</i>	Verena Zuerbig	14:30pm	009	Contributed Speaker – <i>Graphene-Nanodiamond Hybrid Materials: Microstructure and Hierarchical Defects Evolution with Electron Beam Irradiation</i>	Sanju Gupta

14:50pm	156	<i>Contributed Speaker – Relationship between dislocations and etch pits on the (111) CVD diamond single crystal</i>	Satoshi Masuya	14:50pm	128	<i>Contributed Speaker – Influence of impurity-rich domain in h-BN on optical and electrical properties of 2D materials above</i>	Miyako Isayama
15:10pm	068	<i>Contributed Speaker – Synchrotron Based Techniques to Study CVD Overgrowth of Boron Doped Diamond Layers on HPHT substrates</i>	Thu Nhi Tran Thi	15:10pm	137	<i>Contributed Speaker – Mechanically-assisted Electrochemical Production of Graphene Oxide</i>	Yu Lin Zhong
15:30pm	<b>COFFEE BREAK</b>						
<b>Diamond Photonics 3 Session Chair - Mutsuko Hatano</b>				<b>Nanocarbons for Energy and Beyond Session Chair - Ryong Ryoo</b>			
16:00pm	317	<i>Invited Speaker – Diamond nanophotonic circuits</i>	Wolfram Pernice	16:00pm	318	<i>Invited Speaker – Highly efficient photocatalytic CO2 conversion to selective hydrocarbons using graphene oxides and related 2D hybrids</i>	Li-Chyong Chen
16:30pm	101	<i>Contributed Speaker – Fabrication of single crystal diamond microfluidic for microelectromechanical systems</i>	Jiao Fu	16:30pm	213	<i>Contributed Speaker – Nanocrystalline diamond produced by direct-current micro-plasma: dynamics of the early stages of growth</i>	Federica Inzoli
16:50pm	159	<i>Contributed Speaker – Fabrication of single crystal diamond membrane for nanophotonics and nanomechanics</i>	Afaq Habib Piracha	16:50pm		<i>Contributed Speaker –</i>	
17:10pm	073	<i>Contributed Speaker – Protection of silicon photoelectrodes by nanocrystalline diamond</i>	Petr Ashcheulov	17:10pm	040	<i>Contributed Speaker – High shear thin film fabrication of nanocarbon</i>	Colin Raston
17:30pm	091	<i>Contributed Speaker – UV-photodetector based on NiO/diamond film</i>	Xiaohui Chang	17:30pm	047	<i>Contributed Speaker – Using Liquid Organic Compounds to Improve the Encapsulation Efficiency in the Synthesis of Graphite Encapsulated Metal Nanoparticles by an Arc-discharge Method</i>	Mao-Hua Teng

<b>Time</b>	<b>Location: Shangri-La Hotel</b>
7pm – 10 pm	<b>Conference Dinner</b>

**Day 5 – Thursday 1<sup>st</sup> June 2017**

Time	Paper ID	Title	Presenter	Time	Paper ID	Title	Presenter
<b>Location: Trinity Room</b>				<b>Location: Marlin Room</b>			
<b>New Carbon materials for Energy 2 Session Chair - Francesca Iacopi</b>				<b>Diamond Sensing 3 Session Chair – Andrew Greentree</b>			
9:00am	319	<i>Invited Speaker – Improved Energy Conversion and Storage by Tailoring Carbon Nanostructures.</i>	Bingqing Wei	9:00am	320	<i>Invited Speaker – Nanoscale sensors made from diamond</i>	Christian Degen
9:30am	218	<i>Contributed Speaker – Capacitance of Carbon Based Electrical Double-Layer Capacitors</i>	Hengxing Ji	9:30am	186	<i>Contributed Speaker – Microwave engineering, magnetic sensing technique, and materials science for nitrogen-vacancy centers in diamond</i>	Eisuke Abe
9:50am	035	<i>Contributed Speaker – High-Temperature Solar Cells based on Black Diamond Technology</i>	Daniele M. Trucchi	9:50am	197	<i>Contributed Speaker – Scalable Technology Development for single crystalline Diamond NV-Magnetometers</i>	Christian Giese
10:10am	023	<i>Contributed Speaker – Nanomaterials Embedded Chemically-doped Graphene for Electrocatalytical Energy Conversion and Sensing Applications</i>	Shaikh Nayeem Faisal	10:10am	143	<i>Contributed Speaker – Nitrogen-vacancy centres in nanodiamonds for sensing, bio imaging and other uses: How good they are</i>	Taras Plakhotnik
10:30am	037	<i>Contributed Speaker – The Energizing carbon dots</i>	Zhenhui Kang	10:30am	088	<i>Contributed Speaker – Diamond coated carbon fibre structures for biomedical applications</i>	Kallista Sears
	<b>Location: Marlin Room</b>						
10:50am	<b>NDNC 2017 Closing remarks – A/Prof Igor Aharonovich and A/Prof Brant Gibson</b>  <b>NDNC 2018 Presentation</b>						
11:20am -12pm	<b>MORNING TEA / LIGHT Lunch</b>						

12:30-5pm	<b>Great Barrier Reef Tour OR Kuranda Railway Scenic Tour</b> <b>Details to be confirmed shortly</b>
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