

Day 1 – Sunday 28th May 2017

Time	Location: Shangri-La Hotel – North Bar
6pm –	Welcome Reception
8 pm	

Day 2 – Monday 29th May 2017

Time	Location: Ballroom								
8:45am		NDNC 2017 Opening remarks – A/Prof Brant Gibson and A/Prof Igor Aharonovich							
			Session	Chair – Ma	rk Newton	1			
9:00am	ID 301	Plenary Speaker - Prof Amir Yacoby "Exploring	ng Condensed M	atter Physics	Using Nit	rogen Vacancy Magnetometers"			
9:45am	ID 304	304 Invited Speaker - Prof Mutsuko Hatano "Diamond device technologies for quantum sensors"							
10:15am	ID 216	Keynote Speaker - Prof Steven Prawer "Carbo	on based technol	ogies for Ele	ctric Medi	icine"			
10:35am				COFFEE BRE	EAK				
	Location: Trinity Room					Location: Marlin Room			
		Diamond Sensing 1				Diamond Power Electronics 1			
		Session Chair – Peter Ciglar		Session Chair – Hiromitsu Kato					
Time	Paper	Title	Presenter	Time	Paper	Title	Presenter		
	ID				ID				
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 AlGaN/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		

12:10pm	054	Contributed Speaker – Multi-functional polymer-nanodiamond hybrid material for anti-helmintic drug delivery	Olga Shimoni	12:10pm	030	Contributed Speaker – XAFS study of heavily P doped (111) and (001) diamond	Shinichi Shikata
12:30pm	079	Contributed Speaker – Applications of fluorescent nanodiamonds in cellular molecular tracing	Lindsay Parker	12:30pm	164	Contributed Speaker – Precise Control of Threshold Voltage by Electrochemical Oxygen termination of Boron-doped Diamond Solution- Gate Field Effect transistor (SGFET) for PH sensor	M.S Shaili
12:50pm				LUNCH			
		Diamond Growth 1				Diamond Photonics 1	
		Session Chair – Dean Ho				Session Chair - Wolfram Pernice	
13:50pm	126	Contributed Speaker — Homoepitaxial chemical vapor deposition of diamond film for ultra-light doping	Tokuyuki Teraji	13:50pm	025	Contributed Speaker – Towards a spin quantum bus for large-scale diamond quantum computing	Marcus W. Doherty
14:10pm	172	Contributed Speaker – Growth Parameter Optimisation for Improved Electronic and Crystalline Quality n-type Diamond	Shannon Nicley	14:10pm	183	Contributed Speaker – Spontaneous Superradiance from Single Diamond Nanocrystals	Sarah Kaiser
14:30pm	175	Contributed Speaker – Microstructure evolution and its significance on the characteristics of diamond films	I-Nan Lin	14:30pm	182	Contributed Speaker – Optimization of annealing temperature and time for creation of NV centers with milisecond coherence times	Shinobu Onoda
14:50pm	212	Contributed Speaker – Stress Management of MPCVD Single Crystal Diamond	David King	14:50pm	184	Contributed Speaker – Decoration of growth sector boundaries with single nitrogen vacancy centres in as-grown single crystal HPHT synthetic diamond	Phil Diggle
15:10pm	050	Contributed Speaker – Improving CVD diamond deposition on carbon fibre composites by a surface treatment with polysilazane	Roland Haubner	15:10pm	204	Contributed Speaker – Realizing diamond subwavelength gratings working in the near infrared wavelength region	Ernesto Vargas
15:30pm				COFFEE BRE	AK		
		Carbon Nanotubes				Diamond Surfaces and Interfaces	
		Session Chair - Anyuna Cao				Session Chair – Shery Chang	
16:00pm	307	Invited Speaker — Carbon nanotube yarns and their potential applications	Weya Zhou	16:00pm	308	Invited Speaker – Carbon Defects at the Diamond Surface: Implications for Quantum Devices	Alistair Stacey
16:30pm	129	Contributed Speaker – Flexible and porous 3D carbon nanotube electrodes: controllable preparation and stable electrochemical properties	Mingchu Zou	16:30pm	066	Contributed Speaker – Phase coherent transport in two-dimensional surface-doped diamond	Golrokh Akhgar
16:50pm	082	Contributed Speaker — The influence of the inner structure of CNT forest on the IR properties	Adam Pander	16:50pm	005	Contributed Speaker – Nuclear Magnetic Resonance Study of Nanodiamond Surface Modification	Alexander Panich
17:10pm	206	Contributed Speaker – Electrically Conductive Transparent Films from Polyacrylonitrile (PAN) and Carbon Nanotubes	Yanqing Wang	17:10pm	187	Contributed Speaker – 2D Electronic Transport properties of surface transfer doped H terminated diamond with Transitional Metal Oxides	Rafi Kalish
17:30pm	062	Contributed Speaker – Blown Bubble Assembly of Nanomaterials and Graphene- Hybridized Structures for Advanced Electronic Nanodevices	Shi-ting Wu	17:30pm	016	Contributed Speaker — Comparison of polycrystalline and single crystalline CVD Diamond for sub-mm and THz applications - Testing of surface modified diamond at high microwave power	T. A. Scherer
17:50pm			D	OSTER SESSI	ON 1		

Day 3 – Tuesday 30th May 2017

Time			Lo	cation: Ball	room			
			Session	n Chair – Am	ir Yacoby			
9:00am	ID 302 Plenary Speaker - Prof K.P. Loh "The chemist view on synthesis of carbon nanomaterials"							
9:45am	ID 309 Invited Speaker – Prof Hua Zhang "Synthesis and Applications of Novel Two-Dimensional Nanomaterial"							
10:15am	ID 131							
10.134111	10 131	natural diamonds and CVD synthetics"	on motorum	micscence a	cject map	pring of two centers in Goldonad prink and colonies.	s type na	
10:35am				COFFEE BRE	AK			
		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	Invited Speaker — 2D materials chemistry for sustainable future: proton and CO2 reduction	Martin Pumera	11:00am	311	Invited Speaker – Surface structure, defect and chemistry of nanodiamond particles measured using advanced (scanning) transmission electron microscopy	Shery Chang	
11:30am	116	Contributed Speaker – Impurity control of hexagonal Boron Nitride to realize their potentials as a 2D wide-bandgap material	Takashi Taniguchi	11:30am	019	Contributed Speaker – Thermal properties of carbon allotropic nanostructures	Liu Xiangjun	
11:50am	118	Contributed Speaker – Laser reduction of graphene oxide film by radially polarized beam	Baohua Jia	11:50am	098	Contributed Speaker – First-principles simulation of carbon based 2D materials for energy applications	Xiaojun Wu	
12:10pm	107	Contributed Speaker – Properties and Applications of "White Graphene"	Luhua Li	12:10pm	199	Contributed Speaker – Electrical Transport Properties of pH Induced Single Diamond Nanowire Self-Assembly using Chemically Synthesized Fluorescent Diamond Nanoparticles	Kien Wen Sun	
12:30pm	106	Contributed Speaker – Two-Dimensional Layered Material/Semiconductor Heterojunctions for Energy and Optoelectronic Applications	Jiansheng Jie	12:30pm	027	Contributed Speaker – Electronic-mechanical-magnetic coupling in 2D materials	Liangzhi Kou	
12:50pm				LUNCH				
		Nanocarbons and Nanodiamonds				Diamond Photonics 2		
		Session Chair - Weiya Zhou				Session Chair – Alastair Stacey		
13:50pm	103	Contributed Speaker – From Unique Properties of Higher Diamondoids to Practical Applications: Promises and Challenges	Jeremy Dahl	13:50pm	017	Contributed Speaker – Germanium-vacancy centres and the quest for "perfect" diamond qubits	Lachlan J Rogers	
14:10pm	018	Contributed Speaker – The progress on the investigations of Transferred-Electron Oscillations in diamond	Nattakarn Suntornwip at	14:10pm	119	Contributed Speaker – Ultrafast Photo-Excitation Dynamics of Nitrogen-Vacancy Defects in Diamond	Ronald Ulbricht	
14:30pm	031	Contributed Speaker – Polymer dehalogenation for room-temperature rapid synthesis of doped carbon materials	Xiaoming Sun	14:30pm	201	Contributed Speaker – Stimulated emission from nitrogen-vacancy centres in diamond	Jan Jeske	

14:50pm	191	Contributed Speaker – Oriented-attachment growth of diamond single crystal from detonation nanodiamonds	Sergey Kidalov	14:50pm	160	Contributed Speaker – Highly Confined and Tunable Optical Addressing in Metal- Diamond Nanostructures	Tzach Jaffe
15:10pm	056	Contributed Speaker – Facile synthesis of graphene quantum dots by microplasma-assisted electrochemistry	Jhih-Siang Yang	15:10pm	220	Contributed Speaker – Controlling the stability of Diamond's surface conductivity	Travis Wade
15:30pm				COFFEE BRE	AK		
		New Carbon Materials for Energy 1				Diamond Sensing 2	
		Session Chair - Bingqing Wei				Session Chair - Christian Degen	
16:00pm	312	Invited Speaker – Carbon Nanotube Sponges and Energy Storage Applications	Anyuna Cao	16:00pm	313	Invited Speaker – Nanoscale monitoring of chemical processes using nanodiamonds with nitrogen-vacancy centers	Peter Ciglar
16:30pm	155	Contributed Speaker – Diamond and graphene related nanocarbons for optoelectronics and energy storage applications	Yonhua Tzeng	16:30pm	146	Contributed Speaker- Graphene yarn neural interface electrodes delivered via water soluble microneedles	David J. Garrett
16:50pm	115	Contributed Speaker – Towards Tuneable Lignin-Derived Activated Carbons for Water Filtration Applications	Jemma Rowlandson	16:50pm	100	Contributed Speaker – A Nanodiamond Platform for Stimuli-Responsive Detection and Treatment of Hepatic Cancer	Edward Kai- Hua Chow
17:10pm	205	Contributed Speaker – Nitrogen-Doped Carbon Quantum Dots Modified Ag3PO4 with Enhanced Photocatalytic Performance for Organic Dyes Degradation and Mechanism Insight	Chaosheng Zhu	17:10pm	010	Contributed Speaker – Nanodiamond-polycaprolactone composites for sub-dermal imaging	Kate Fox
17:30pm	224	Contributed Speaker – Engineering the Surface States of Carbon Dots for Tuning Their Properties and Functionalities	Qin Li	17:30pm	199	Contributed Speaker – Electrical Transport Properties of pH Induced Single Diamond Nanowire Self-Assembly using Chemically Synthesized Fluorescent Diamond Nanoparticles	Kien Wen Sun
17:50pm			P	OSTER SESSI	ON 2		1

Day 4 – Wednesday 31st May 2017

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

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

Time	Location: Shangri-La Hotel
7pm –	Conference Dinner
10 pm	

Day 5 - Thursday 1st June 2017

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

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