



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

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

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

<b>Time</b>	<b>Location: Ballroom</b>						
8:45am	<b>NDNC 2017 Opening remarks – Brant Gibson and Igor Aharonovich</b>						
<b>Session Chair – Brant Gibson</b>							
9:00am	ID 301	<b>Plenary Speaker</b> - Mark Newton, University of Warwick, UK - <i>“New defects in diamond”</i>					
9:45am	ID 304	<b>Invited Speaker</b> - Mutsuko Hatano, Tokyo Institute of Technology, Japan - <i>“Diamond device technologies for quantum sensors”</i>					
10:15am	ID 216	<b>Keynote Speaker</b> – David Garret, The University of Melbourne, Australia - <i>“Carbon based technologies for Electric Medicine”</i>					
10:35am	<b>COFFEE BREAK</b>						
<b>Location: Trinity Room</b>				<b>Location: Marlin Room</b>			
<b>Diamond Sensing 1</b>				<b>Diamond Power Electronics 1</b>			
<b>Session Chair – Petr Cigler</b>				<b>Session Chair – Hiromitsu Kato</b>			
<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Presenter</b>	<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Presenter</b>
11:00am	305	<i>Invited Speaker – The Clinical Translation of Nanodiamonds</i>	Dean Ho, UCLA, USA	11:00am	306	<i>Invited Speaker – Diamond devices for power electronics</i>	Nikola Rouger, University of Toulouse, France
11:30am	157	<i>Contributed Speaker – Ambient high resolution electron spin imaging and spectroscopy with spins in diamond</i>	David Simpson, University of Melbourne, Australia	11:30am	167	<i>Contributed Speaker – The interface of polycrystalline diamond films on AlGaN/GaN heterostructures</i>	Ken Haenen, Hasselt University, Belgium
11:50am	076	<i>Contributed Speaker – Hyperpolarized Nanodiamond Surfaces</i>	Ewa Rej, University of Sydney, Australia	11:50am	188	<i>Contributed Speaker- High power beam combination and beam transformation using synthetic single crystal diamond</i>	Rich Mildren, Macquarie University, Australia

12:10pm	054	<i>Contributed Speaker – Multi-functional polymer-nanodiamond hybrid material for anti-helmintic drug delivery</i>	Olga Shimoni, UTS, Australia	12:10pm	030	<i>Contributed Speaker – XAFS study of heavily P doped (111) and (001) diamond</i>	Shinichi Shikata, Kwansei Gakuin University, Japan
12:30pm	079	<i>Contributed Speaker – Applications of fluorescent nanodiamonds in cellular molecular tracing</i>	Lindsay Parker, Macquarie University, Australia	12:30pm	164	<i>Contributed Speaker – Precise Control of Threshold Voltage by Electrochemical Oxygen termination of Boron-doped Diamond Solution- Gate Field Effect transistor (SGFET) for PH sensor</i>	M.S Shaili, Waseda University, Japan
12:50pm	<b>LUNCH</b>						
<b>Diamond Growth 1 Session Chair – David Garrett</b>				<b>Diamond Photonics 1 Session Chair – Carlo Bradac</b>			
13:50pm	126	<i>Contributed Speaker – Homoepitaxial chemical vapor deposition of diamond film for ultra-light doping</i>	Tokuyuki Teraji, National Institute of Materials, Japan	13:50pm	025	<i>Contributed Speaker – Towards a spin quantum bus for large-scale diamond quantum computing</i>	Marcus W. Doherty, Australian National University, Australia
14:10pm	172	<i>Contributed Speaker – Growth Parameter Optimisation for Improved Electronic and Crystalline Quality n-type Diamond</i>	Shannon Nicley, Hasselt University, Belgium	14:10pm	183	<i>Contributed Speaker – Spontaneous Superradiance from Single Diamond Nanocrystals</i>	Sarah Kaiser, Macquarie University, Australia
14:30pm	175	<i>Contributed Speaker – Microstructure evolution and its significance on the characteristics of diamond films</i>	I-Nan Lin, Tamkang University, Taiwan	14:30pm	182	<i>Contributed Speaker – Optimization of annealing temperature and time for creation of NV centers with milisecond coherence times</i>	Shinobu Onoda, National Institutes for Quantum and Radiological Science and Technology, Japan
14:50pm	198	<i>Contributed Speaker – A novel hot anode for stable operation of DC Arc Plasma Jet with smaller exit nozzle optimized for growth of single crystal diamond</i>	Fanxiu Lu, University of Science and Technology, China	14:50pm	184	<i>Contributed Speaker – Decoration of growth sector boundaries with single nitrogen vacancy centres in as-grown single crystal HPHT synthetic diamond</i>	Phil Diggie, University of Warwick, UK
15:10pm	050	<i>Contributed Speaker – Improving CVD diamond deposition on carbon fibre composites by a surface treatment with polysilazane</i>	Roland Haubner, Technische University Wien, Austria	15:10pm	204	<i>Contributed Speaker – Realizing diamond subwavelength gratings working in the near infrared wavelength region</i>	Ernesto Vargas, Uppsala University, Sweden
15:30pm	<b>COFFEE BREAK</b>						
<b>Carbon Nanotubes Session Chair - Anyuan Cao</b>				<b>Diamond Surfaces and Interfaces Session Chair – Shery Chang</b>			
16:00pm	307	<i>Invited Speaker – Carbon nanotube yarns and their potential applications</i>	Weya Zhou, Chinese Academy of Sciences, China	16:00pm	308	<i>Invited Speaker – Carbon Defects at the Diamond Surface: Implications for Quantum Devices</i>	Alastair Stacey, University of Melbourne, Australia
16:30pm	129	<i>Contributed Speaker – Flexible and porous 3D carbon nanotube electrodes: controllable preparation and stable electrochemical properties</i>	Mingchu Zou, Peking University, China	16:30pm	066	<i>Contributed Speaker – Phase coherent transport in two-dimensional surface-doped diamond</i>	Golrokh Akhgar, La Trobe University, Australia

16:50pm	082	<i>Contributed Speaker – The influence of the inner structure of CNT forest on the IR properties</i>	Adam Pander, Kochi University of Technology, Japan	16:50pm	005	<i>Contributed Speaker – Nuclear Magnetic Resonance Study of Nanodiamond Surface Modification</i>	Alexander Panich, Ben'Gurion University of the Negev, Israel
17:10pm	206	<i>Contributed Speaker – Electrically Conductive Transparent Films from Polyacrylonitrile (PAN) and Molecular – Level Dispersion of Carbon Nanotubes</i>	Yanqing Wang, University of Tokyo, Japan	17:10pm	220	<i>Contributed Speaker – Controlling the stability of Diamond's surface conductivity</i>	Travis Wade, MIT, USA
17:30pm	062	<i>Contributed Speaker – Blown Bubble Assembly of Nanomaterials and Graphene- Hybridized Structures for Advanced Electronic Nanodevices</i>	Shi-ting Wu, Peking University, China	17:30pm	016	<i>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</i>	T. A. Scherer, Karlsruhe Institute of Technology, Germany
17:50pm - 19:00pm	<b>POSTER SESSION 1</b>						

Day 3 – Tuesday 30th May 2017

Time	Location: Ballroom						
<b>Session Chair – Mark Newton</b>							
9:00am	ID 302	<b>Plenary Speaker</b> – K.P. Loh, National University of Singapore, Singapore - <i>“The chemist view on synthesis of carbon nanomaterials”</i>					
9:45am	ID 318	<b>Invited Speaker</b> – Li-Chyong Chen, National Taiwan University, Taiwan - <i>“Highly efficient photocatalytic CO2 conversion to selective hydrocarbons using graphene oxides and related 2D hybrids”</i>					
10:15am	ID 131	<b>Keynote Speaker</b> – U.F.S. D'Haenens-Johansson, Gemological institute of America, USA - <i>“Photoluminescence defect mapping of NV centers in “Golconda” pink and colorless type IIa natural diamonds and CVD synthetics”</i>					
10:35am	<b>COFFEE BREAK</b>						
<b>Location: Trinity Room</b>				<b>Location: Marlin Room</b>			
<b>Graphene and other 2D materials 1</b>				<b>Characterization and Modelling</b>			
<b>Session Chair – Li-Chyong Chen</b>				<b>Session Chair – Marcus Doherty</b>			
Time	Paper ID	Title	Presenter	Time	Paper ID	Title	Presenter
11:00am	118	<i>Invited Speaker – Laser reduction of graphene oxide film for optoelectronic devices</i>	Baohua Jia, Swinburne University, Australia	11:00am	311	<i>Invited Speaker – Surface structure, defect and chemistry of nanodiamond particles measured using advanced (scanning) transmission electron microscopy</i>	Shery Chang, Arizona State University, USA
11:30am	128	<i>Contributed Speaker – Influence of impurity-rich domain in h-BN on optical and electrical properties of 2D materials above</i>	Miyako Isayama, University of Tokyo, Japan	11:30am	019	<i>Contributed Speaker – Thermal properties of carbon allotropic nanostructures</i>	Liu Xiangjun, Institute of High Performance Computing, Singapore
11:50am	085	<i>Contributed Speaker – Facile large-scale synthesis of zeolite-templated microporous carbons with 3D graphene-like frameworks through calcium-catalyzed ethylene carbonization</i>	Yonghyun Kwon, KAIST, Korea	11:50am	098	<i>Contributed Speaker – First-principles simulation of carbon based 2D materials for energy applications</i>	Xiaojun Wu, University of Science and Technology of China, China
12:10pm	107	<i>Contributed Speaker – Properties and Applications of “White Graphene”</i>	Luhua Li, Deakin University, Australia	12:10pm	095	<i>Contributed Speaker – Bright and photostable nitrogen-vacancy fluorescence from unprocessed detonation nanodiamond</i>	Philipp Reineck, RMIT University, Australia
12:30pm	106	<i>Contributed Speaker – STM Studies on 2D materials</i>	Yi Du, University of Wollongong, Australia	12:30pm	027	<i>Contributed Speaker – Electronic-mechanical-magnetic coupling in 2D materials</i>	Liangzhi Kou, Queensland University of Technology, Australia
12:50pm	<b>LUNCH</b>						

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, Stanford University, USA	13:50pm	017	<i>Contributed Speaker – Germanium-vacancy centres and the quest for “perfect” diamond qubits</i>	Lachlan J Rogers, Macquarie University, Australia
14:10pm	226	<i>Contributed Speaker – Breaking Advanced Fiber Development Paradigm: Continuous Supernanofibers with Low Crystallinity</i>	Yuris Dzenis, University of Nebraska-Lincoln, USA	14:10pm	119	<i>Contributed Speaker – Ultrafast Photo-Excitation Dynamics of Nitrogen-Vacancy Defects in Diamond</i>	Ronald Ulbricht, Nanyang Technological University, Singapore
14:30pm	031	<i>Contributed Speaker – Polymer dehalogenation for room-temperature rapid synthesis of doped carbon materials</i>	Xiaoming Sun, Beijing University of Chemical Technology, China	14:30pm	201	<i>Contributed Speaker – Stimulated emission from nitrogen-vacancy centres in diamond</i>	Jan Jeske, RMIT University, Australia
14:50pm	191	<i>Contributed Speaker – Oriented-attachment growth of diamond single crystal from detonation nanodiamonds</i>	Sergey Kidalov, Ioffe Institute, Russia	14:50pm	160	<i>Contributed Speaker – Highly Confined and Tunable Optical Addressing in Metal-Diamond Nanostructures</i>	Tzach Jaffe, Technion Israel Institute of Technology, Israel
15:10pm	018	<i>Contributed Speaker – The progress on the investigations of Transferred-Electron Oscillations in diamond</i>	Nattakarn Suntornwipat, Uppsala University, Sweden	15:10pm	187	<i>Contributed Speaker – Nitrogen-vacancy centres as model systems for Quantum Hamiltonian Learning</i>	Sebastian Knauer, University of Bristol, UK
15:30pm	<b>COFFEE BREAK</b>						
New Carbon Materials for Energy 1 Session Chair - Bingqing Wei				Diamond Sensing 2 Session Chair - Christian Degen			
16:00pm	312	<i>Invited Speaker – Carbon Nanotube Sponges and Energy Storage Applications</i>	Anyuan Cao, Peking University, China	16:00pm	313	<i>Invited Speaker – Nanoscale monitoring of chemical processes using nanodiamonds with nitrogen-vacancy centers</i>	Petr Cigler, Institute of Organic Chemistry and Bio Chemistry, Czech Republic
16:30pm	059	<i>Contributed Speaker – A Soft ZIF-8 Nanoparticle @ CNT Sponge Composite for High Performance of Lithium-Sulfur Batteries</i>	Hui Zhang, Peking University, China	16:30pm	146	<i>Contributed Speaker- Graphene yarn neural interface electrodes delivered via water soluble microneedles</i>	Nick Apollo, University of Melbourne, Australia
16:50pm	115	<i>Contributed Speaker – Towards Tuneable Lignin-Derived Activated Carbons for Water Filtration Applications</i>	Jemma Rowlandson, University of Bristol, UK	16:50pm	100	<i>Contributed Speaker – A Nanodiamond Platform for Stimuli-Responsive Detection and Treatment of Hepatic Cancer</i>	Edward Kai-Hua Chow, National University of Singapore, Singapore
17:10pm	205	<i>Contributed Speaker – Nitrogen-Doped Carbon Quantum Dots Modified Ag<sub>3</sub>PO<sub>4</sub> with Enhanced Photocatalytic Performance for Organic Dyes Degradation and Mechanism Insight</i>	Chaosheng Zhu, China University of Petroleum, Qingdao, China	17:10pm	010	<i>Contributed Speaker – Nanodiamond-polycaprolactone composites for sub-dermal imaging</i>	Kate Fox RMIT University, Australia

17:30pm	224	<i>Contributed Speaker – Engineering the Surface States of Carbon Dots for Tuning Their Properties and Functionalities</i>	Qin Li, Griffith University, Australia	17:30pm	039	<i>Contributed Speaker – Cooperatively-Enhanced (Superradiance) Atomic Dipole Forces in Optically Trapped Nanodiamonds Containing NV Centres, in Liquid</i>	Carlo Bradac University of Technology, Sydney, Australia
17:50pm - 19:00pm	<b>POSTER SESSION 2</b>						

**Day 4 – Wednesday 31st May 2017**

Time		Location: Ballroom					
<b>Session Chair – Igor Aharonovich</b>							
9:00am	ID 303	<b>Plenary Speaker</b> – Amir Yacoby, Harvard University, USA “Exploring Condensed Matter Physics Using Nitrogen Vacancy Magnetometers”					
9:45am	ID 314	<b>Invited Speaker</b> – Ryong Ryoo, KAIST, Korea “Zeolite-templated facile synthesis of 3D graphenic carbons for electrical energy storage”					
10:15am	ID 155	<b>Keynote Speaker</b> – Yonhua Tzeng, National Cheng Kung University, Taiwan “Diamond and graphene related nanocarbons for optoelectronics and energy storage applications”					
10:35am	<b>COFFEE BREAK</b>						
<b>Location: Trinity Room</b>				<b>Location: Marlin Room</b>			
<b>Diamond Power Electronics 2 Session Chair - Nikola Rouger</b>				<b>Graphene and other 2D Materials 2 Session Chair – Zaiquan Xu</b>			
Time	Paper ID	Title	Presenter	Time	Paper ID	Title	Presenter
11:00am	315	<i>Invited Speaker – n-type doping and interface control for inversion p-channel diamond MOSFET</i>	Hiroimitsu Kato, AIST Information Technology Research Institute, Japan	11:00am	316	<i>Invited Speaker – Towards wafer –level graphene on silicon</i>	Francesca Iacopi, University of Technology, Sydney, Australia
11:30am	166	<i>Contributed Speaker – High-current triple-gate H-diamond MOSFET</i>	Y. Koide, National Institute for Materials, Japan	11:30am	222	<i>Contributed Speaker – Carbon-sphere-intercalated holey graphene electrode for high energy density electrochemical capacitors</i>	Kwun Nam Hui, University of Macau, China
11:50am	117	<i>Contributed Speaker – High Power Diamond Schottky Diodes</i>	Timothy Grotjohn, Michigan State University, USA	11:50am	174	<i>Contributed Speaker – Mid-infrared photoresponse in monolayer and bilayer graphene quantum Hall systems</i>	Tomoki Machida, University of Tokyo, Japan
12:10pm	138	<i>Contributed Speaker – Phosphorus doped diamond homoepitaxy for work function controlled surfaces - thermionic energy conversion</i>	Franz A. Koeck, Arizona State University, USA	12:10pm	058	<i>Contributed Speaker – Tuning the electronic and magnetic properties of nitrogen functionalized few layered graphene nanoflakes</i>	Sekhar Chandra Ray, University of South Africa, South Africa
12:30pm	165	<i>Contributed Speaker – Heteroepitaxial diamond FET for power electronics application</i>	M. Syamsul, Waseda University, Japan	12:30pm	071	<i>Contributed Speaker- Decoupling Of Zero Layer Graphene On 6H-SiC(0001) By Si Intercalation : Graphene Based Metal-Semiconducting Heterostructure Formation</i>	Mathieu Silly, Synchrotron SOLEIL, France
12:50pm	<b>LUNCH</b>						

Diamond Growth 2 Session Chair - Chris Pakes				Graphene and other 2D Materials 3 Session Chair – Qin Li			
13:50pm	022	<i>Contributed Speaker – Growth of the High Quality Single Crystalline Diamond and Research on H-terminated Diamond MOSFETs with MoO<sub>3</sub> Dielectric</i>	Zeyang Ren, Xidian University, China	13:50pm	001	<i>Contributed Speaker – Formation of hexagonal-diamond from glassy carbon at megabar pressures</i>	Dougal McCulloch, RMIT University, Australia
14:10pm	070	<i>Contributed Speaker – Nanocrystalline diamond film growth by MPCVD on single crystal diamond: effect of substrate orientation</i>	Vadim Sedov, Russian Academy of Sciences, Russia	14:10pm	135	<i>Contributed Speaker – Magnetic properties of graphene oxide</i>	Maria A. Augustyniak-Jablokow, Polish Academy of Science, Poland
14:30pm	114	<i>Contributed Speaker – Effect of phosphorous incorporation on the crystalline quality of (100)-oriented homoepitaxial diamond layers</i>	Verena Zuerbig, Fraunhofer IAF, Germany	14:30pm	009	<i>Contributed Speaker – Graphene-Nanodiamond Hybrid Materials: Microstructure and Hierarchical Defects Evolution with Electron Beam Irradiation</i>	Sanju Gupta, Western Kentucky University, USA
14:50pm	156	<i>Contributed Speaker – Relationship between dislocations and etch pits on the (111) CVD diamond single crystal</i>	Satoshi Masuya, Saga University, Japan	14:50pm	116	<i>Contributed Speaker – Impurity control of hexagonal Boron Nitride to realize their potentials as a 2D wide-bandgap material</i>	Takashi Taniguchi, National Institute for Materials, Japan
15:10pm	210	<i>Contributed Speaker – Superconducting Single Crystal Diamond SQUID</i>	Taisuke Kageura, Waseda University, Japan	15:10pm	137	<i>Contributed Speaker – Mechanically-assisted Electrochemical Production of Graphene Oxide</i>	Yu Lin Zhong, Griffith University, Australia
15:30pm	<b>COFFEE BREAK</b>						
Diamond Photonics 3 Session Chair - Mutsuko Hatano				Nanocarbons for Energy and Beyond Session Chair - Ryong Ryoo			
16:00pm	320	<i>Invited Speaker – Nanoscale sensors made from diamond</i>	Christian Degen, ETH Zurich University, Switzerland	16:00pm	200	<i>Invited Speaker – Two Dimensional Layers Hybridizing with Nanocarbons</i>	Li Song, University of Science and Technology of China, China
16:30pm	101	<i>Contributed Speaker – Fabrication of single crystal diamond microfluidic for microelectromechanical systems</i>	Jiao Fu, Jiao Tong University, China	16:30pm	213	<i>Contributed Speaker – Nanocrystalline diamond produced by direct-current micro-plasma: dynamics of the early stages of growth</i>	Federica Inzoli, Polytechnic University of Milan, Italy
16:50pm	159	<i>Contributed Speaker – Fabrication of single crystal diamond membrane for nanophotonics and nanomechanics</i>	Afaq Habib Piracha, University of Melbourne, Australia	16:50pm	152	<i>Contributed Speaker – Diamond based adsorbents in liquid chromatography</i>	Anton Peristy, University of Tasmania, Australia
17:10pm	073	<i>Contributed Speaker – Protection of silicon photoelectrodes by nanocrystalline diamond</i>	Petr Ashcheulov, Czech Academy of Sciences, Czech Republic	17:10pm	040	<i>Contributed Speaker – High shear thin film fabrication of nanocarbon</i>	Colin Raston, Flinders University, Australia



17:30pm	091	<i>Contributed Speaker – UV-photodetector based on NiO/diamond film</i>	Xiaohui Chang, Xiang Jiaotong University, China	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 , National Taiwan University, Taiwan
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<b>Time</b>	<b>Location: Shangri-La Hotel - Poolside Terrace</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, University of Delaware, USA	9:00am	317	<i>Invited Speaker – Diamond nanophotonic circuits</i>	Wladick Hartmann, Centech-Centre for Nanotechnology, Germany
9:30am	218	<i>Contributed Speaker – Capacitance of Carbon Based Electrical Double-Layer Capacitors</i>	Hengxing Ji, University of Science and Technology of China, China	9:30am	186	<i>Contributed Speaker – Microwave engineering, magnetic sensing technique, and materials science for nitrogen-vacancy centers in diamond</i>	Eisuke Abe, Keio University, Japan
9:50am	048	<i>Contributed Speaker – Core-Shell Carbon@MoS2 Nanotube Sponges as High Performance Battery Electrodes</i>	Yunsong Wang, Peking University, China	9:50am	197	<i>Contributed Speaker – Scalable Technology Development for single crystalline Diamond NV-Magnetometers</i>	Christian Giese, Fraunhofer Institute for Applied Solid State Physics IAF, Germany
10:10am	023	<i>Contributed Speaker – Nanomaterials Embedded Chemically-doped Graphene for Electrocatalytical Energy Conversion and Sensing Applications</i>	Shaikh Nayeem Faisal, University of Sydney, Australia	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, University of Queensland, Australia
10:30am	037	<i>Contributed Speaker – The Energizing carbon dots</i>	Zhenhui Kang, Soochow University, China	10:30am	096	<i>Contributed Speaker – Diamond nanopillars and photonic crystals for integration of color centers</i>	Cyril Popov, University of Kassel, Germany
<b>Location: Marlin Room</b>							
10:50am	<b>NDNC 2017 Closing remarks – Igor Aharonovich and Brant Gibson</b>						
	<b>NDNC 2018 Presentation – Robert Nemanich</b>						
11:20am -12pm	<b>MORNING TEA / LIGHT Lunch</b>						
12:30- 5pm	<b>Green Island Tour (optional)</b>						