

## Conference Program

### 10 July, Sunday

16:00 – 19:00	Registration	Foyer, Bonython Hall
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### July 11, Monday

8:00 – 9:00	Registration		Foyer, Bonython Hall
9:00 – 10:00	Opening ceremony		Bonython Hall
	Chairs: <i>Dr Jordan Parham, The University of Adelaide</i>		
10:00 – 10:45	PL1	<b>Nanotechnologies in Energy and Environmental Applications</b> <i>Professor Max Lu, The University of Queensland, Australia</i>	
10:45 – 11:00	Morning tea		Bonython Hall
	Chairs: <i>Dr Eric Hu, The University of Adelaide</i>		
11:00 – 11:45	PL2	<b>New directions in Desalination R&amp;D – Are we on the right track?</b> <i>Professor Raphael Semiat, Technion University, Israel</i>	
11:45 – 12:30	PL3	<b>Carbon Sequestration by Arid Land Afforestation</b> <i>Professor Toshinori Kojima, Seikei University, Japan</i>	
12:30 – 14:00	Lunch		Union House

**July 11, Monday**

	Napier Building					
	Room 102 (Energy Efficiency)		Room G03 (Catalysis)		Room G04 (Water Treatment)	
Session Chairs:	<b>Professor Toshinori Kojima</b> Seikei University, Japan		<b>Dr. Akira Nishimura</b> Mie University, Japan		<b>Professor Raphael Semiat</b> Technion University, Israel	
<b>14:00 – 14:20</b>	A-281	The effects of visualization associated with household energy consumption, <b>Yoshie Yagita</b> - <i>The University of Tokyo, Japan</i>	A-185	Enhanced visible-light-driven photocatalytic activity of nanocrystalline Fe/Bi <sub>2</sub> WO <sub>6</sub> photocatalyst with mesoporous structure, <b>Sen Guo</b> - <i>Zhejiang University, China</i>	A-108	Recent development of porous carbon electrodes for capacitive brackish water desalination, <b>Linda Zou</b> - <i>University of South Australia, Australia</i>
<b>14:20 – 14:33</b>	A-145	Salting effect on HCFC-22 decomposition in Methanol-NaOH solution <b>Hideo Nishiumi</b> - <i>Hosei University, Japan</i>	A-104	PROX reaction of CO in H <sub>2</sub> on supported Au/ $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> and Pt/SiO <sub>2</sub> catalysts: approaches to the enhancement of the catalytic performances, <b>Ziyi Zhong</b> - <i>Institute of Chemical and Engineering Sciences, A-Star, Singapore</i>	A-174	Comparison the treatment of silk handicraft textile wastewater among chemical coagulation method, fenton oxidation method and combination of both <b>Khanittha Charoenlarp</b> - <i>Rajamangala University of Technology, Thailand</i>
<b>14:33 – 14:46</b>	A-147	Climate data for building optimisation and energy management <b>Trevor Lee</b> - <i>Energy Partners, Australia</i>	A-119	Ni catalysts supported on commercial Al <sub>2</sub> O <sub>3</sub> for production of synthetic nature gas <b>Fangna Gu</b> - <i>Chinese Academy of Sciences, China</i>	A-177	Utilizing visible-light TiO <sub>2</sub> /adsorbent composite for humic acids removal in wastewater <b>Wei Zhang</b> - <i>University of South Australia, Australia</i>
<b>14:46 – 14:59</b>	A-150	Case studies - post occupancy evaluation of Adelaide's commercial buildings <b>Vanessa Menadue</b> - <i>The University of Adelaide, Australia</i>	A-172	Fe <sub>3</sub> O <sub>4</sub> /carbon macro-spheres for heterogeneous oxidation of phenol with sulphate radicals <b>Shaobin Wang</b> - <i>Curtin University, Australia</i>	A-182	Detection of trace organic compounds and environmental stresses of a dairy factory in South-Eastern Victoria, Australia <b>Michael W. Heaven</b> - <i>Department of Primary Industries, Australia</i>

<b>15:00 – 15:13</b>	A-168	A mixed-methods approach in developing sustainable office building assessment framework for developing countries – case of Malaysia <b>Zalina Shari</b> - <i>The University of Adelaide, Australia</i>	A-260	Simultaneous catalytic removal of NO <sub>x</sub> and diesel soot over Spinel-type Mn <sub>1-x</sub> Ag <sub>x</sub> Co <sub>2</sub> O <sub>4</sub> oxides <b>Ke Qiao</b> - <i>China University of Petroleum, China</i>	A-235	Solubility and electrical conductivity of common sodium salts in selected ionic liquids <b>Fetemeh Bagh</b> - <i>University of Malaya, Malaysia</i>
<b>15:13 – 15:26</b>	A-180	Energy efficient building design using the overall thermal resistance <b>Martin Belusko</b> - <i>University of South Australia, Australia</i>	A- 289	Photoluminescent Carbon Nanodots for Solar Cell Technology <b>Qin Li</b> - <i>Curtin University, Australia</i>	A-240	Aluminium sulphate and polyamines for the treatment of magnesium bisulfite (magnefite) pulp mill wastewater, <b>Steven Nothrop</b> - <i>University of South Australia, Australia</i>
<b>15:26 – 15:39</b>	A-204	New hydrogen production by mechano-chemical reaction of aluminum with water <b>Masatoshi Sugioka</b> - <i>Muroran Institute of Technology, Japan</i>	A-225	Re-configuring energy for a modern Australian winery, <b>Russell Johnstone</b> - <i>Orlando Wines, Australia</i>	A-307	IPOS code of practice, innovative water management <b>Tom Plant</b> - <i>SA Water, Australia</i>
<b>15:40 – 16:00</b>	Afternoon tea					

**July 11, Monday**

	Napier Building					
	Room 102 (Energy Efficiency-2)		Room G03 (Catalysis-2)		Room G04 (Renewable Energy)	
Session Chairs:	<b>Dr. Richard A. Craig</b> The University of Adelaide, Australia		<b>Dr. Ho Kyong Shon</b> University of Technology, Sydney, Australia		<b>Prof. Linda Zou</b> University of South Australia, Australia	
<b>16:00 – 16:20</b>	A-154	Specific consumption sensitivity analysis for the parameters of large scale power plants <b>Yang Yongping</b> - North China Electric Power University, China	A-173	Photocatalytic decomposition of organic contaminants with InTaO <sub>4</sub> synthesized with wet-chemical techniques <b>Shaobin Wang</b> - Curtin University, Australia	A-311	Aluminum and its alloy: is it a sustainable and feasible energy carrier? <b>Dennis Y.C. Leung</b> - University of Hong Kong, China
<b>16:20 – 16:33</b>	A-102	Australian requests on heat pump water heaters and the characteristics of quantum heat pump water Heaters, <b>Ying You</b> - Quantum Energy Technologies Pty Ltd, Australia	A-103	High quality fuel distillates produced from oligomerization of light olefin over supported phosphoric acid on zeolite, <b>M.C. Al-Kinany</b> - King Abdulaziz City for Science and Technology, Saudi Arabia	A-136	Enhancement of electro-oxidation of carbon fuels for direct carbon-electricity conversion <b>Weimin Gao</b> - Deakin University, Australia
<b>16:33 – 16:46</b>	A-153	Performance analysis and entropy generation for multi-beds adsorption cooling system <b>Aung Myat</b> - National University of Singapor, Singapore	A-105	Removal of formaldehyde with a reduced Au/TiO <sub>2</sub> catalyst at ambient temperature <b>Haibo Huang</b> - University of Hong Kong, China	A-143	Effect of dynamic behaviour on the electrochemical reaction of direct carbon fuel cell <b>Xiaowei Dong</b> - Deakin University, Australia
<b>16:46 – 16:59</b>	A-167	Dynamic determination of target values for the energy-saving decision system of large coal-fired power units: a data mining approach <b>Ningling Wang</b> - North China Electric Power University, China	A-120	Preparation and characterization of Ni catalysts via Sol-Gel method for production of synthetic nature gas <b>Fangna Gu</b> - Chinese Academy of Sciences, China	A-176	Combined energy recovery from coal seam gas reservoirs and geothermal resources (Simulation Study) <b>A. Salmachi</b> - The University of Adelaide, Australia
<b>17:00 – 17:13</b>	A-273	The benefits of embedded storage within a localised distribution network <b>Craig Froome</b> - The University of Queensland, Australia	A-197	Preparation and evaluation of magnetically separable composite photocatalyst <b>Takashi Kusaba</b> - Seikei University, Japan	A-179	Responding to peak electricity loads using renewable fuel <b>Robert R. Dickinson</b> - The University of Adelaide, Australia

<b>17:13 – 17:26</b>	A-305	Inspection of air-conditioning system and evaluation of energy efficiency in a commercial building <i>Xiaohua Li - Hunan Institute of Engineering, China</i>	A-203	Treatment of Carbamazepine in membrane bioreactors integrated with a photo-catalytic treatment <i>G. Laera - Istituto di Ricerca Sulle Acque, Italy</i>	A-218	Renewable energy for desalination on a floating platform <i>Brian Kirke - University of South Australia, Australia</i>
<b>17:26 – 17:39</b>	A-328	Modelling of Pre-dried Brown Coal Combustion in a Tangentially-fire Furnace Designed for Wet Brown Coal, <i>ZF Tian - The University of Adelaide, Australia</i>	A-261	NF <sub>3</sub> thermal decomposition over [Fe <sub>2</sub> O <sub>3</sub> ]MgO reagents without water <i>Xiufeng Xu - Yantai University, China</i>	A-224	Electrolytic hydrogen production for fuel cell vehicle <i>Mohan Kolhe - University College London, Australia/UK</i>
<b>18:00 – 19:00</b>	<b>Welcome reception</b>				<b>Foyer, Innova21</b>	

**12 July, Tuesday**

	Chairs: <i>Prof Gus Nathan</i> , The University of Adelaide		Room 102, Napier Building
9:00 – 9:45	PL4	<b>Fuels from Water, CO<sub>2</sub>, and Solar Energy</b> <i>Profesor Aldo Steinfeld, ETH Zurich, Switzerland</i>	
9:45 – 10:30	PL5	<b>Fibre Materials in Energy Related Applications</b> <i>Professor Xungai Wang, Deakin University, Australia</i>	
10:30 – 10:45	Morning tea		

	Napier Building					
	Room 102 (Solar Energy)		Room G03 (Nano-structure Materials)		Room G04 (Separation & Resources Recovery)	
Session Chairs:	<b>Dr. Mohan Kolhe</b> University College London Australia/UK		<b>Prof. Xungai Wang</b> Deakin University, Australia		<b>Prof. Wiwut Tanthapanichakoon</b> Tokyo Institute of Technology, Japan	
10:45 – 11:05	A-216	Solar powered desalination using thermoelectric power generation, <i>Yoshiharu Horita - Tokyo Institute of Technology, Japan</i>	A-139	TiO <sub>2</sub> nanoparticles and H-titanate nanofibres from TiCl <sub>4</sub> flocculated sludge: characterisation and photocatalytic activity, <i>Ho Kyong Shon - University of Technology, Sydney, Australia</i>	A-188	Synthesis and applications of mesoporous hollow, core-shell and yolk-shell structured materials, <i>Shi Zhang Qiao - The University of Queensland, Australia</i>
11:05 – 11:18	A-101	Development of the automatic malfunction warning system for grid-connected PV system, <i>Napat Watjanatepin - Rajamangala University of Technology, Thailand</i>	A-129	Functional green nanomaterials produced from natural fibres, <i>Takuya Tsuzuki - Deakin University, Australia</i>	A-121	CO <sub>2</sub> mineralization via a bipolar membrane electro dialysis approach, <i>Peng Bai - ASTAR, Institute of Chemical and Engineering Sciences, Singapore</i>
11:18 – 11:31	A-140	Co-doped photocatalyst nanomaterials for effective utilisation of solar radiation, <i>Ibrahim El Saliby - University of Technology Sydney, Australia</i>	A-133	Polymer nanocomposites as flow improver for waxy oil, <i>Xiaodong Dai - PetroChina Pipeline Company, China</i>	A-130	Adsorptive recovery of precious metals by using waste of microalgae after extracting biofuel, <i>Katsutoshi Inoue - Saga University, Japan</i>

<b>11:31 – 11:44</b>	A-156	Conceptual design of a solar furnace to thermally decompose limestone, <b>Richard A. Craig</b> - <i>The University of Adelaide, Australia</i>	A-137	Eco-friendly fabrication of carbon nanofiber from plant-based nanofibers, <b>Ehsan Jazaeri</b> - <i>Deakin University, Australia</i>	A-149	Separation of lactic acid through supported ionic liquid membrane, <b>Michiaki Matsumoto</b> - <i>Doshisha University, Japan</i>
<b>11:44 – 11:57</b>	A-193	Solar eclipse - the design, manufacture and testing of an autonomous, solar powered unmanned aerial vehicle, <b>Bradley Hocking</b> - <i>The University of Adelaide, Australia</i>	A-189	Photoelectrochemical hydrogen evolution from water using TiO <sub>2</sub> Nanotube Arrays photoanode, <b>Lixia Sang</b> – <i>Beijing University of Technology, China</i>	A-184	Preparation and adsorption properties of spherical mesoporous silica particles modified with functional group, <b>Yoshikazu Miyake</b> - <i>Kansai University, Japan</i>
<b>11:57 – 12:10</b>	A-217	Thickener-free electrospinning of TiO <sub>2</sub> nanofibres for dye-sensitized solar cells, <b>Xueyang Liu</b> - <i>Deakin University, Australia</i>	A-220	Carbon nanofibers with inter-bonded fibrous structure for supercapacitance application, <b>Haitao Niu</b> - <i>Deakin University, Australia</i>	A-251	Isolation and characterization of lecithin from mackerel viscera residues extracted by supercritical carbon dioxide, <b>Abdelkader Ali-Nehari</b> - <i>Pukyong National University, Korea</i>
<b>12:10 - 12:23</b>	A-315	The application of solar energy for real-time operations of micro-satellite on space, <b>Lize Zhang</b> - <i>The University of Adelaide, Australia</i>	A-246	Development of nanostructure materials for methanol steam reforming, <b>Chanatip Samart</b> - <i>Thammasat University, Thailand</i>	A-142	How to remove CO <sub>2</sub> from flue gases & make a profit, <b>David Proctor</b> - <i>Docklands Science Park, Australia</i>
<b>12:30 – 13:30</b>	<b>Lunch</b>				<b>Bonython Hall</b>	

**12 July, Tuesday**

	Napier Building					
	Room 102 (Solar Energy-2)		Room G03 (Pollution & Carbon Control)		Room G04 (Biomass Energy)	
Session Chairs:	<b>Associate Professor Qin Li</b> Curtin University, Australia		<b>Prof. Dennis Y.C. Leung</b> University of Hong Kong, China		<b>Dr. Philip Kwong</b> The University of Adelaide, Australia	
<b>14:00 – 14:20</b>	A-109	Vacuum distillation of aluminum via carbothermal reduction of Al <sub>2</sub> O <sub>3</sub> with concentrated solar energy, <b>Aldo Steinfeld</b> - <i>ETH Zurich, Switzerland</i>	A-249	Reducing the cost of Post-Combustion Capture Processes, <b>Leigh T. Wardhaugh</b> - <i>CSIRO Energy Technology, Australia</i>	A-201	Planning and assessment of sustainable utilization pathways for biogenic raw materials, <b>Frank Schultmann</b> - <i>Karlsruhe Institute of Technology (KIT), Germany</i>
<b>14:20 – 14:33</b>	A-117	CO <sub>2</sub> reforming under visible light response of Cr- or Ag-Doped TiO <sub>2</sub> prepared by Sol-gel and Dip-coating method, <b>Akira Nishimura-Mie</b> <i>University, Japan</i>	A-152	A parametric study of a fluidized bed carbonator to remove CO <sub>2</sub> , <b>Zhai Rongrong</b> - <i>North China Electric Power University, China</i>	A-191	Bioethanol production from starch industrial waste in Thailand, <b>Chompunuch Virunanon</b> - <i>Chulalongkorn University, Thailand</i>
<b>14:33 – 14:46</b>	A-146	An efficient way to use solar energy aiding convention coal-fired power system, <b>Hongjuan Hou</b> - <i>North China Electric Power University, Beijing China</i>	A-158	Modelling of a bacterial bioreactor for nitric oxide abatement, <b>Niu He jingying</b> - <i>The University of Hong Kong, HongKong</i>	A-195	Development of adhesive property of tar produced from woody biomass under rapid heating condition and its elimination by catalytic effects of minerals in ash, <b>Toshiyuki Iwasaki</b> - <i>Seikei University Japan</i>
<b>14:46 – 14:59</b>	A-288	Development and evaluation of simple solar water heater, <b>Masaya Kai</b> - <i>Nippon Institute of Technology, Japan</i>	A-161	Preparation of silica xerogel with high silanol content from water glass via sol-gel process and its application as CO <sub>2</sub> sorbent, <b>Thongthai Witoon</b> - <i>Kasetsart University, Thailand</i>	A-258	Measurement on total sugar content of residue from bioenergy pig excreta in marsh-gas tank, <b>Ge Peng -Ningbo</b> <i>University of Technology, China</i>

<b>15:00 – 15:13</b>	A-296	Cost and performance modelling of the integration of solar thermal energy into an existing Australian coal fired power generator, <b>R. McNaughton</b> – <i>CSIRO, Australia</i>	A-200	Evaluation of a novel absorbent for CO <sub>2</sub> capture in a pilot plant with coal combustion gas containing high concentration Of SO <sub>2</sub> , <b>K. Goto</b> - <i>Research Institute of Innovative Technology for the Earth (RITE), Japan</i>	A-293	Autoignition delay of biodiesel, <b>Marcus Boyd</b> - <i>The University of Adelaide, Australia</i>
<b>15:13 – 15:26</b>	A-306	Use of carbon nanotubes in novel solar cells, <b>J. G. Shapter</b> - <i>Flinders University, Australia</i>	A-205	Carcinogenic risk assessment of polycyclic aromatic hydrocarbons in size-resolved particulate matter from an urban residential area in the largest industrial city of Korea, <b>Byeong-Kyu Lee</b> - <i>University of Ulsan, Korea</i>	A-294	Hydrodynamics of F-T synthesis reactor: the role of vertical pipe internals, <b>Li Xi</b> - <i>Zhejiang University, China</i>
<b>15:26 – 15:39</b>	A-310	Economic assessment of the use of concentrated solar thermal energy for steam gasification of coal to service the energy needs of stranded communities, <b>Ashok A. Kaniyal</b> - <i>The University of Adelaide, Australia</i>	A-271	Adsorption of Benzene in Aqueous Solution in Slit Shape Graphitic Pore: A Monte Carlo Simulation <b>Phuong T.M. Nguyena</b> - <i>University of Queensland, Australia</i>	A-299	Bio oil from fast pyrolysis of biomass in a fluidized bed: Effect of swirl-cooked dirty oil spray, <b>Wenchao Ma</b> - <i>Chinese Academy of Sciences, China</i>
<b>15:40 – 16:00</b>	Afternoon tea					

**12 July, Tuesday**

	Napier Building					
	Room 102 (Sustainable Development)		Room G03 (Heat Transfer)		Room G04 (Thermal-chemical Energy Conversion)	
Session Chairs:	<b>Prof. Sirikalaya Suvachittanont</b> Kasetsart University, Thailand		<b>Dr. Leigh T. Wardhaugh</b> CSIRO Energy Technology, Australia		<b>Prof. Shi Zhang Qiao</b> The University of Queensland, Australia	
<b>16:00 – 16:20</b>	A-144	Thai environmental issues, corporate social responsibility and unexpected severe constitution-induced impact, <b>Wiwut Tanthapanichakoon</b> – Tokyo Institute of Technology, Japan	A-297	Thermal-fluid Study on heat transfer performance of solar flat-plate collector with integrated metal fins filled with paraffin, <b>Zhenqian Chen</b> - Southeast University, China	A-165	Formation of ash cenosphere during the pyrolysis and combustion of pyrite in a laboratory-scale drop-tube furnace, <b>Hongwei Wu</b> - Curtin University of Technology, Australia
<b>16:20 – 16:33</b>	A-128	Can regional councils be energy producers? <b>Roy Ramage</b> - City of Victor Harbor, Australia	A-123	A theoretical analysis of a subterranean soil conduction augmentation system on ground coupled heat exchangers, <b>Arnold Platts</b> - University of South Australia, Australia	A-187	Understanding of cellulose degradation of plant cell walls by ab initio molecular dynamics, <b>Weimin Gao</b> - Deakin University, Australia
<b>16:33 – 16:46</b>	A-134	Accountable carbon amount by large scale afforestation in arid area of western Australia, <b>Hideki Suganuma</b> - Seikei University, Japan	A-181	Analysis on flow and heat transfer characteristics of helical baffled EGR cooler with spirally corrugated tubes, <b>Lin Liu</b> - Nanjing University of Technology, China	A-236	Fundamental study on the effect of gasification temperature on coke quality for Blast Furnace Operation, <b>Khairil</b> - Universitas Syiah Kuala, Indonesia
<b>16:46 – 16:59</b>	A-196	Numerical parameter determination of large scale runoff model for arid land afforestation, <b>Osamu Yokohagi</b> - Seikei University, Japan	A-194	Lateral forces in gases at nano scale, <b>Coskun Firat</b> - Istanbul Technical University, Turkey	A-303	Partial premixing degree effects on turbulent flame structure and stabilization in a conical burner, <b>B.B. Yan</b> , Tianjin University, China

<b>17:00 – 17:13</b>	A-256	Tree growth analysis in saline affected farmland- species and planting method selection for agro-forestry, <b>Ken Koizumi</b> - Seikei University, Japan	A-232	Two dimensional modeling of Underground Heat Exchanger for Heat Pump and Air Conditioning Systems, <b>Sarwo Edhy Sofyan</b> -The University of Adelaide, Australia	A-309	Analysis of Energy Crises in Pakistan and Remedial Measures Proposed, <b>S. M. Bhutta</b> - International Islamic University, Pakistan
<b>17:13 – 17:26</b>	A-287	The structural analysis of environmental technology development and the process, <b>Sho Ueda</b> - Nippon Institute of Technology, Japan	A-313	Experimental study on molten salts heat transfer and thermal storage for solar thermal power system, <b>Yuting Wu</b> - Beijing University of Technology, China	A-324	Limitations and opportunities for sustainable technologies presented by the 2nd Law of Thermodynamics, <b>Martin Gellender</b> - Queensland Department of Environment & Resource Management, Australia
<b>17:26 – 17:39</b>	A-316	Preliminary study on regional SD model of low-carbon economy, <b>Yuanyuan He</b> - Tianjin University, China	A-330	Building Energy Simulation Models for JCVC, <b>Shouyang Lai</b> - The University of Adelaide, Australia		
<b>18:30 – 22:00</b>	<b>Conference Dinner</b>				<b>Bonython Hall</b>	

**13 July, Wednesday**

	Napier Building					
	Room 102 (Sustainable Development-2)		Room G03 (Sustainable Industrial Practices)		Room G04 (Biomass Resources / Wind Energy)	
Session Chairs:	<b>Prof. Aldo Steinfeld</b> ETH Zurich, Switzerland		<b>Dr. Wenchao Ma</b> Chinese Academy of Sciences, China		<b>Dr. Martin Gellender</b> Queensland Department of Environment & Resource Management, Australia	
<b>9:00 – 9:20</b>	A-227	Innovative production of micro crystalline cellulose from corn cob to form medicine tablets for pharmaceutical industry, <b>Sirikalaya Suvachittanont</b> - Kasetsart University, Thailand	A-302	Production of liquid fuel by high efficient hydrolysis and catalysis of biomass, <b>Longlong Ma</b> - Chinese Academy of Sciences, China	A-319	Microwave-assisted acid-catalyzed hydrolysis of hemicellulose in rice husk into xylose, <b>Philip Kwong</b> – The University of Adelaide, Australia
<b>9:20 – 9:33</b>	A-166	Biomass production and environmental restoration by eucalypt plantation in Western Australia, <b>Shin-ichi Aikawa</b> - Department of Forest Vegetation, Japan	A-114	Energy efficiency and environmental improvements for aluminum industry of Thailand, <b>S. Tanatvanit</b> - Ramkhamhaeng University, Thailand	A-252	Turbulence considerations in wind turbine design, <b>Dirk Lutschinger</b> - Curtin University, Australia
<b>9:33 – 9:46</b>	A-199	Walls of waste: building houses with scrap tyres, <b>Martin Freney</b> , University of South Australia, Australia	A-155	Production of incense from natural substances, <b>Tonthubthimthong P</b> - Rajamangala University of Technology, Thailand	A-283	An investigation on torque control methods of variable-speed wind turbines, <b>Chae-Wook Lim</b> - Hanbat National University, South Korea
<b>9:46 – 9:59</b>	A-255	Electrochemical degradation of wastewater containing trichloroethene by anodic oxidation using Ti/IrO <sub>2</sub> -Ta <sub>2</sub> O <sub>5</sub> electrode, <b>Pandian Lakshmipathiraj</b> -Seikei University, Japan	A-259	Sustainable colouration of cotton fabrics utilising chitosan and natural dyes, <b>Saniyat Islam</b> - RMIT University, Australia	A-298	Analysis of wind data for operational security, <b>Brian Webby</b> - University of South Australia, Australia

<b>10:00 – 10:13</b>	A-314	Research and development of small communication satellite operations for ocean environmental robotic study, <i>Amirhossein Asadabadi - The University of Adelaide, Australia</i>	A-301	Fabrication and measurement of small composite desiccant wheel based on ceramic, <i>Jia Chunxia - North China University of Technology, China</i>	A-321	Next generation VAWT technologies, <i>Ricky Tso - The University of Adelaide, Australia</i>
<b>10:13 – 10:26</b>	A-329	Improving the Energy Efficiency of Adelaide Airport Terminal 1 Building Using a Dynamic Thermal Model, <i>Timothy C. W. Lau - The University of Adelaide, Australia</i>	A-318	An investigation of biochar-producing cooking stoves for use in developing countries, <i>Josh Wilkey - The University of Adelaide, Australia</i>	A-327	An investigation of drag of a Savonius wind turbine with helical blades, <i>Fang Yu - The University of Adelaide, Australia</i>
<b>10: 26 – 10:39</b>						
<b>10:40 – 11:00</b>	Morning tea					

<b>11:00 – 12:00</b>	<b>Closing ceremony</b>	<b>Room 102, Napier Building</b>
<b>12:00 – 13:15</b>	<b>Lunch</b>	<b>Bonython Hall</b>
<b>13:30 – 18:00</b>	<b>Wine tasting tour</b>	<b>Barossa valley, South Australia</b>

## Poster Presentation

### Session 1 (12 July, Tuesday 8:30—9:00am)

- A-148 Solar and coincident weather data for large scale solar deployment, **Trevor Lee**- *Energy Partners, Australia*
- A-159 A new control and design of PEM fuel cell system powered air diffused aeration system, **Doaa M. Atia**- *National Research Center Building, Egypt*
- A-164 Empirical electrical modelling for proton exchange membrane electrolyser, **Mohan Kolhe** - *University College London, Australia/UK*
- A-206 Carcinogenic risk assessment of heavy metals in fine particles from an urban residential area in a typical industrial city, Korea, **Byeong-Kyu Lee** - *University of Ulsan, Korea*
- A-219 Early steps in proof of concept of the ring drive variable pitch wind turbine, **Brian Kirke** - *University of South Australia, Australia*
- A-243 CO<sub>2</sub> capture by amine-modified cylindrical Al<sub>2</sub>O<sub>3</sub>, **Zi-Feng Yan** - *China University of Petroleum, China*
- A-248 Eco-friendly fabrication of carbon nanofiber from plant-based nanofibers, **Ehsan Jazaeri**-*Deakin University, Australia*
- A-251 Isolation and characterization of lecithin from mackerel viscera residues extracted by supercritical carbon dioxide, **Abdelkader Ali-Nehari** - *Pukyong National University, Korea*
- A-286 Evaluation of environmental protection visualization on companies, **Tatsuya Arai** - *Nippon Institute of Technology, Japan*
- A-292 Impact of climate change on dissolved organic matter and its treatability using alum for River Murray, South Australia, **Mohamad Fared Murshed** - *University of South Australia, Australia*
- A-300 Position of the food on sustainability-- Fairtrade on Food, **YongQin Yu** - *Nippon Institute of Technology, Japan*

### Session 2 (13 July, Wednesday 8:30—9:00am)

- A-115 Power development plan (PDP) of Thailand: the future challenge, **S. Tanatvanit** - *Ramkhamhaeng University, Thailand*
- A-119 Ni catalysts supported on commercial Al<sub>2</sub>O<sub>3</sub> for production of synthetic nature gas, **Fangna Gu** - *Chinese Academy of Sciences, China*
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