

MONDAY 19	NOVEMBER 2012			
8.00am	Registration Opens			
8.30am	Venue: Lower NZI Foyer Housekeeping Venue: NZI 1&2			
8.40am	Venue: NZI 1&Z Welcome & Opening Venue: NZI 1&2			
9.20am	Keynote 1: Kevin Brown - SOME CURRENT CHALLENGES IN PRODUCTION GEOCHEMISTRY Venue: NZI 1&2			
10.00am	Morning tea Venue: Lower NZI Foyer			
	Technical Session 1: Stream A Geochemistry Venue: NZI 1&2	Technical Session 1: Stream B Structural Geology and Geomechanics Venue: NZI 3	Technical Session 1: Stream C Engineering - Production and Management Venue: NZI 5	
10.30am	87: THE SOLUBILITY OF AMORPHOUS ALUMINOUS SILICA: IMPLICATIONS FOR SCALING IN GEOTHERMAL POWER STATIONS Julia Bjorke	56: FORMATION ASSESSMENT IN GEOTHERMAL USING WIRELINE TOOLS – APPLICATION AND EARLY RESULTS FROM THE NGATAMARIKI GEOTHERMAL FIELD, NEW ZEALAND Irene Wallis	108: SALAK MASTER PLANNING Kevin de Groot	
10.50am	69: IN SITU INFRARED SPECTROSCOPY AS A TOOL TO DECIPHER MONOMER AND POLYMER DEPOSITION OF SILICA SCALE Peter James Swedlund	22: PHYSICAL AND MECHANICAL PROPERTIES OF THE ROTOKAWA ANDESITE FROM PRODUCTION WELLS RK 27_L2, RK 28 AND RK 30 Paul Siratovich	114: TE MIHI GEOTHERMAL POWER PROJECT – FROM INCEPTION TO EXECUTION Roger Hudson	
11.10am	23: THE THERMAL STABILITY OF THE NAPHTHALENE SULFONIC AND NAPHTHALENE DISULFONIC ACIDS UNDER GEOTHERMAL CONDITIONS: EXPERIMENTAL RESULTS AND A FIELD-BASED EXAMPLE Bruce Mountain	80: QUANTIFYING THE STRESS DISTRIBUTION AT THE ROTOKAWA GEOTHERMAL FIELD, NEW ZEALAND Jonathan Davidson	71: NEW FOCUS ON WELLHEAD POWER GENERATION David L. Mendive	
11.30am	45: EXPERIMENTAL STUDY OF STIBNITE SOLUBILITY IN AQUEOUS SULFIDE SOLUTIONS FROM 25 TO 90℃ Nellie Olsen	72: DEVELOPMENT OF THE WHAKATANE GRABEN WITH A FOCUS ON STRUCTURAL BLOCKS BETWEEN MAKETU AND WHAKATANE Christopher Scholz	15: CFD MODELLING OF TWO-PHASE FLOW INSIDE GEOTHERMAL STEAM WATER SEPARATORS Sadiq Zarrouk	



NZGW				
11.50am	90: THE PREDICTED FATE OF CO2 INJECTED INTO BASALTIC ROCK Helgi Arnar Alfredsson	118: THE EFFECTS OF HYDROTHERMAL ALTERATION ON MECHANICAL ROCK PROPERTIES OF THE ANDESITE BRECCIA AND TAHORAKURI FORMATION FROM THE NGATAMARIKI GEOTHERMAL FIELD, NEW ZEALAND AND EMPIRICAL RELATIONS BETWEEN ROCK STRENGTH AND PHYSICAL PROPERTIES Latasha Wyering	31: THE PLACE FOR COMPUTATIONAL FLUID DYNAMICS MODELS IN THE OPTIMISATION OF GEOTHERMAL CUTTINGS PONDS Adam Tokelove	
12.10pm	Lunch Venue: Lower NZI Foyer			
1.10pm	Keynote 2: Joe Moore – THE EVOLUTION OF A PARTIALLY VAPOR-DOMINATED GEOTHERMAL SYSTEM AT KARAHA-TELAGA BODAS, INDONESIA: INSIGHTS FROM MINERAL DISTRIBUTIONS AND FLUID INCLUSION MEASUREMENTS Venue: NZI 1&2			
	Technical Session 2: Stream A	Technical Session 2: Stream B	Technical Session 2: Stream C	
	Geology Venue: NZI 1&2	Structural Geology and Geomechanics Venue: NZI 3	Engineering - Production and Management Venue: NZI 5	
	30: U-PB DATING OF ZIRCON IN	68: STRUCTURAL AND TECTONIC CONTROLS OF	97: EFFICIENCY OF GEOTHERMAL POWER	
	HYDROTHERMALLY ALTERED ROCKS AS A	GEOTHERMAL ACTIVITY IN THE BASIN AND	PLANTS: A WORLDWIDE REVIEW	
1.50pm	CORRELATION TOOL: A CASE STUDY FROM THE	RANGE PROVINCE, WESTERN USA	Sadiq Zarrouk	
1.50р	KAWERAU GEOTHERMAL FIELD, NEW ZEALAND Sarah Milicich	James Faulds		
	89: PETROLOGY AND HYDROTHERMAL	55: TECTONIC CONTROLS ON HYDROTHERMAL	42: BIOLOGICAL CONTROL OF COOLING WATER	
	ALTERATION OF THE SPA ANDESITE FROM THE	FLUID FLOW IN A RIFTING AND MIGRATING	IN GEOTHERMAL POWER GENERATION	
2.10pm	WAIRAKEI-TAUHARA GEOTHERMAL SYSTEM,	ARC, TAUPO VOLCANIC ZONE, NEW ZEALAND	Ian Richardson	
•	TAUPO VOLCANIC ZONE, NEW ZEALAND	Julie Rowland		
	Fabian Sepulveda			
	16: A COMPARISON OF THE MINERALOGY AND	73: STATISTICAL CORRECTIONS OF FRACTURE	112: CHEMICAL REACTIONS IN GEOTHERMAL	
2.30pm	MORPHOLOGY OF TRAVERTINE FROM THE USA	SAMPLING BIAS IN BOREHOLES FROM	CEMENTS	
	AND NEW ZEALAND	ACOUSTIC TELEVIEWER LOGS	Neil Milestone	
	Bridget Lynne	Cecile Massiot		
2.50pm	Afternoon tea Venue: Lower NZI Foyer			
3.20pm	Keynote 3: Ian Johnston – GEOTHERMAL ENERGY USING GROUND SOURCE HEAT PUMPS			



	Venue: NZI 1&2		
	Technical Session 3: Stream A	Technical Session 3: Stream B	Technical Session 3: Stream C
	Direct Use	Geochemistry	Engineering - Production and Management
	Venue: NZI 1&2	Venue: NZI 3	Venue: NZI 5
	96: THE RISE AND RISE OF GEOTHERMAL HEAT	10: SOIL CO2 EMISSIONS: A PROXY FOR HEAT	76: VISUALISATION OF CHANGING RESERVOIR
	PUMPS IN NEW ZEALAND	AND MASS FLOW ASSESSMENT, ROTOKAWA,	CONDITIONS AT WAIRAKEI
4.00pm	Brian Carey	NEW ZEALAND	Abbie Dean
		Simon Bloomberg	
	54: MODELLING THERMAL INTERFERENCE AND	7: GEOCHEMISTRY MONITORING DURING	77: WAIRAKEI-TAUHARA PRESSURE REGIME
	IMPACTS FOR GROUND SOURCE HEATING AND	DRILLING IN WAYANG WINDU FIELD,	UPDATE
4.20pm	COOLING SYSTEMS	INDONESIA	Sophie Milloy
	Zeb Etheridge	Dwiyogarani Malik	
	86: SOCIETIAL ACCEPTANCE OF GROUND-	57: NGATAMARIKI TEST RIG	21: HEAT LOSS FROM HIGH TEMPERATURE
	SOURCE HEAT INNOVATIONS FOR RURAL	Simon Addison	PONDS
4.40pm	MĀORI COMMUNITIES WITH THE EXAMPLE OF		Andy Bloomer
•	NGATI RANGIWEWEHI		
	Dianne Bradshaw		
5.00pm - 7.00pm	NZTE Workshop Reception and Student Posters Venue: Lower NZI Foyer		



TUESDAY 20 NOVEMBER 2012					
8.50am	Housekeeping Venue: NZI 1&2				
9.00am	Keynote 4: Guðmundur Ómar Friðleifsson - IDDP – APPROACHING THE SUPERCRITICAL Venue: NZI 1&2				
	Technical Session 4: Stream A Technical Session 4: S			ream B	
	Drilling and Exploration Venue: NZI 1&2		Resources and Environ Venue: NZI 3	s and Environmental Issues	
	58: SUCCESS OF MULTIPLE-LEG WELL COMPLETIONS AT THE SAN JACINTO-		9: GEOTHERMAL INDUCED SEISMICITY - RISKS AND REWARDS		
9.40am	TIZATE GEOTHERMAL FIELD, NICARAGUA		Chris Bromley		
	Ken Mackenzie				
	62: DRILLING CONFIRMATION OF THE CASITA IND	ICATED GEOTHERMAL	75: THE ROLE OF PEER	REVIEW PANELS IN THE MANAGEMENT OF THE	
10.00am	RESOURCE, NICARAGUA		WAIKATO GEOTHERM	MAL RESOURCE	
	Phil White		Jim McLeod	McLeod	
10.20am	Morning Tea Venue: Lower NZI Foyer				
	Technical Session 5: Stream A	Technical Session 5: Stream	m B	Technical Session 5: Stream C	
	Engineering - Production and Management Venue: NZI 1&2	TVZ Venue: NZI 3		Resources and Environmental Issues Venue: NZI 5	
	48: SCALE AND CORROSION OF A KALINA	6: IMAGING UPPER-CRUSTAL CONVECTION		33: LOW ENTHALPY GEOTHERMAL RESOURCES -	
10.50am	POWER GENERATION SYSTEM USING HOT	PLUMES BENEATH THE TA	UPO VOLCANIC ZONE,	MIRANDA KAIAUA, NEW ZEALAND	
10.30aiii	SPRING WATER	NEW ZEALAND		Katherine Luketina	
	Norio Yanagisawa	Edward Bertrand			
	13: HYDRODYNAMICS AND ELECTROCHEMISTRY	32: GROUNDWATER RECH	ARGE TO	92: EARTH ENERGY SYSTEMS: ENVIRONMENTAL	
	OF SILICA SCALING	GEOTHERMAL SYSTEMS IN THE TAUPO		EFFECTS OF DIRECT USE OF GEOTHERMAL	
11.10am	Mark Jermy	VOLCANIC ZONE ASSESSED WITH WATER		ENERGY RESOURCES	
11.104111		BUDGETS AND THREE-DIMENSIONAL		lan Boothroyd	
		GEOLOGICAL MODELS			
		Paul White			
	63: BINARY PLANT CAUSTIC DOSING TEST RIG	19: MANGATETE: EVOLUTION OF A PALEO-		119: DEVELOPING A GUIDELINE TO MAP,	
11.30am	DEVELOPMENT	HYDROTHERMAL SYSTEM, TAUPO VOLCANIC		DESCRIBE AND CATALOGUE SURFACE	
11.5Uaiii	Evan Erstich	ZONE (TVZ)		GEOTHERMAL FEATURES	
		Bryan Drake		Brad Scott	



NZGW			
11.50am	49: PREVENTIVE METHODS FOR SCALING AND CORROSION IN GEOTHERMAL FIELDS Baran Kaypakoglu	8: VOLATILE TRANSFER FROM MAGMA SOURCES IN THE TAUPO VOLCANIC ZONE: A QUARTZ- HOSTED MELT INCLUSION STUDY IN RHYOLITES Florence Bégué	104: GEOTHERMAL ROYALTIES: AN ECONOMIC SOLUTION (WORKING PAPER) Sam Malafeh
12.10pm	Lunch Venue: Lower NZI Foyer		
1.10pm	Keynote 5: Brian Carey - WATT? A GEOHEAT STRATEGY FOR NEW ZEALAND Venue: NZI 1&2		
	Technical Session 6: Stream A Direct Use Venue: NZI 1&2		Technical Session 6: Stream C Environmental Issues Venue: NZI 5
1.50pm	111: DIRECT GEOTHERMAL ENERGY DEMONSTRATION PROJECTS FOR VICTORIA, AUSTRALIA lan Johnston		52: ECOLOGICAL ASSESSMENT AND SUSTAINABLE MANAGEMENT OF GEOTHERMAL VEGETATION IN THE WAIKATO REGION, NEW ZEALAND Sarah Beadel
2.10pm	36: LOW ENTHALPY ABOVE-GROUND GEOTHERMAL & ALLIED TECHNOLOGIES (AGGAT) – A RESEARCH AGENDA Boaz Habib		121: THE 1000 PROJECT: A WORLD-FIRST MICROBIAL BIOINVENTORY OF NEW ZEALAND'S GEOTHERMAL ECOSYSTEMS Matthew Stott
2.30pm	74: STUDY OF THE UTILIZATION OF FLUID FROM A CONDENSATE POT FOR ESSENTIAL OIL EXTRACTION Dewi Permatasari		93: SUSTAINING GEOTHERMAL ECOSYSTEMS: THRESHOLDS OF CHANGE IN GEOTHERMAL ECOSYSTEMS Ian Boothroyd
2.50pm	Afternoon Tea Venue: Lower NZI Foyer Technical Session 7: Stream A Geology	Technical Session 7: Stream B Reservoir Modelling	Geothermal New Zealand Meeting Venue: NZI 5
3.20pm	Venue: NZI 1&2 50: STRATIGRAPHY AND HYDROTHERMAL ALTERATION ENCOUNTERED BY MONITOR WELLS COMPLETED AT NGATAMARIKI AND ORAKEI KORAKO IN 2011 Catherine Boseley	Venue: NZI 3 61: FUTURE DIRECTIONS IN GEOTHERMAL MODELLING Michael O'Sullivan	



	11: INFRARED IMAGING IN GEOTHERMAL	102: MODELLING PRODUCTION FROM
3.40pm	ENVIRONMENTS IN NEW ZEALAND	SUPERCRITICAL GEOTHERMAL RESERVOIRS
	Ruben Yague Jaen	Sadiq Zarrouk
	12: GROUND PENETRATING RADAR AND ITS	59: MODELLING DEEP PRODUCTION AND
4.00pm	SUCCESSFUL APPLICATION IN IMAGING USA	INJECTION USING A REGIONAL SCALE MODEL OF
4.00pm	AND NEW ZEALAND SILICEOUS SINTERS	A TVZ-LIKE GEOTHERMAL FIELD
	Cheng Sim	Warwick Kissling
	35: THE GEOTHERMAL WORLD VIDEOGAME: AN	37: AN EMPIRICAL BASIS FOR EGS FLOW
	AUTHENTIC, IMMERSIVE VIDEOGAME USED TO	SIMULATION MECHANICS
4.20pm	TEACH OBSERVATION SKILLS NEEDED FOR	Peter Leary
	EXPLORATION	
	Jacqueline Dohaney	
	26: GEOLOGICAL EVALUATION OF THE	39: DUAL POROSITY MODELS OF NEAR-WELL
	WARINGIN FORMATION AS THE HOST OF A	BEHAVIOUR OF A DISCHARGING WELL
4.40pm	VAPOR-DOMINATED GEOTHERMAL RESERVOIR	Jaime Jemuel Austria
	AT THE WAYANG WINDU GEOTHERMAL FIELD	
	Yuris Ramadhan	
5.00pm	NZGA Annual General Meeting	
	Venue: NZI 3	
7.00pm	Workshop Dinner – Viaduct Events Centre	



WEDNESD	DAY 21 NOVEMBER 2012		
8.50am	Housekeeping Venue: NZI 1&2		
9.00am	Keynote 6: Paul Atkinson – PROVED GEOTHERMAL RESERVES – FRAMEWORK AND METHODOLOGY Venue: NZI 1&2		
	Technical Session 8: Stream A	Technical Session 8: Stream B	
	Geothermal Resources Venue: NZI 1&2	Engineering - Production and Management Venue: NZI 3	
	94: RANKING OF INDONESIAN GEOTHERMAL PROSPECTS (KNOWN	105: MODELLING THE SURFACE PLANT: A USERS PERSEPCTIVE OF USING	
9.40am	RESERVES)	NUMBERS TO PREDICT GENERATION	
	Manfred Hochstein	Keith Wigram	
	65: GRAVITY MODELLING OF REPOROA BASIN, EASTERN TAUPO	83: CORRELATION OF RESERVOIR MONITORING AND CONTINUOUS	
10.00am	VOLCANIC ZONE (TVZ), NEW ZEALAND	PRODUCTION DATA TO INTERPRET UNEXPECTED WELL BEHAVIOR IN	
10.00aiii	Supri Soengkono	ROTOKAWA	
		Jaime Jose Quinao	
10.20am	Morning Tea Venue: Lower NZI Foyer		
	Technical Session 9: Stream A	Technical Session 9: Stream B	
	Resources and Environmental issues	Geology, Structural Geology and Geomechanics	
	Venue: NZI 1&2	Venue: NZI 3	
	GEOTHERMAL RESOURCES IN RWANDA	25: GEOSCIENTIFIC SURVEY RESULTS FROM THE JAILOLO GEOTHERMAL	
10.50am	Hon. Emma Francoise Isumbingabo (Rwanda's Minister of State in	FIELD, NORTHERN HALMAHERA, INDONESIA	
	charge of energy and water)	Yuris Ramadhan	
	29: GEOTHERMAL RESOURCES DEVELOPMENT IN TIBET, CHINA	40: PHYSICAL / COMPUTATIONAL FRAMEWORK FOR EGS IN SITU FRACTURE	
11.10am	Keyan Zheng	SIMULATION	
		Justin Pogacnik	
	78: A PRE-FEASIBILITY STUDY FOR ENERGY RECOVERY FROM	34: ON THE EXPERIMENTAL SIMULATION OF EGS RESERVOIRS USING A	
11.30am	GEOTHERMAL PROSPECTS IN SCOTLAND	HEATED TRUE-TRIAXIAL APPARATUS	
	Aaron Hochwimmer	Luke Frash	
	27: DEVELOPMENT IMPACT ANALYSIS OF JAILOLO GEOTHERMAL		
11.50am	FIELD, WEST HALMAHERA, INDONESIA		
	Rachma Nilamsuri		



12.10pm	Lunch Venue: Lower NZI Foyer
	NZGA Industry Updates Venue: NZI 1&2
1.10pm	Mighty River Power
1.30pm	Contact Energy
1.50pm	GNS Science
2.10pm	The University of Auckland
2.30pm	Geothermal New Zealand
2.50pm	Afternoon Tea Venue: Lower NZI Foyer
	NZGA Industry Updates Venue: NZI 1&2
3.20pm	Eastland Group
3.40pm	Waikato Regional Council
4.00pm	Bay of Plenty Regional Council
4.20pm	PB Power
4.40pm	SKM
5.00pm	Finish