

	Naples 6	Naples 7	Capri 1
	GEOLOGY 1 Chair: Steve Bjornstad	EXPLORATION 1 Chair: Andy Sabin	HEAT PUMPS Chair: Andrew Chiasson
1:30	<i>Implications of Thrust and Detachment Faulting For the Structural Geology of Thermo Hot Springs KGRA Region, Beaver County, Utah</i> , Anderson, Warren & Bruhn, Ronald & Moore, Joseph	<i>A Geothermal Data System for Exploration and Development</i> , Allison, M. Lee & Richard, Stephen M. & Clark, Ryan C. & Patten, Kim J. & Love, Diane S. & Coleman, Celia & Chen, Genhan & Matti, Jordan & Day, Janel & Pape, Esty & Musil, Leah & Caudill, Christy	<i>Measuring the Costs and Benefits of Nationwide Geothermal Heat Pump Deployment - A Progress Report</i> , Battocletti, Elizabeth & Glassley, William E.
1:50	<i>Preliminary Assessment of the Structural Controls of Neal Hot Springs Geothermal Field, Malheur County, OR</i> , Edwards, Joel & Faulds, James	<i>National Geothermal Data System, DOE Geothermal Data Repository</i> , Anderson, Arlene & Bandy, Phil & Weers, Jon	<i>Performance of a Small-Scale Direct-Expansion GSHP System During the Winter Operation</i> , Gu, Jihao & Zhao, Qian & Wang, Huajun & Zhu, Junhui & Liu, Shuqi
2:10	<i>Life At High Altitude: A Comparative Study of High Versus Low Altitude Hot Spring Settings And Associated Sinter Textures From El Tatio, Chile And The Taupo Volcanic Zone, New Zealand.</i> , Lynne, Bridget Y. & Morata, Diego & Reich, Martin	<i>Use of GIS Geoprocessing to Select Favorable Sites for Geothermal Exploration in Oregon</i> , Poux, Bastien & Suemnicht, Gene	<i>Field Tests of The Thermal Performance of Two Borehole Heat Exchangers in Different Sand Aquifers</i> , Wang, Huajun & Cui, Yahui & Yang, Bin & Qi, Chengying
2:30	<i>Comparison of Geothermal Wells in Continental and Oceanic Plate Boundaries: A Case Study of Menengai Well MW-02 and Hellisheidi Well HE37</i> , Njue, Lucy	<i>New Developments in Colorado Geothermal Energy Projects</i> , Held, John "Hank" & Henderson, Frederick B. III	<i>Performance Test of a GSHP System With Centrifugal Compressors and Variable Frequency Pumps During the Heating Period</i> , Xue, Guixiang & Sun, Xuemei & Lu, Junchao & Zhou, Yun & Wei, Li
2:50	<i>Volcanic Hazards And Geothermal Development</i> , Witter, Jeff	<i>Do Magmatic-related Geothermal Energy Resources Exist in Southeast Idaho?</i> , McCurry, Michael & Welhan, John A.	
3:10	– Break – (3:10-3:40)		
	GEOLOGY 2 Chair: Stu Johnson	EXPLORATION 2 Chair: Jim Combs	RESOURCE ASSESSMENT 1 Chair: John Shervais
3:40	<i>Regional Patterns of Geothermal Activity in the Great Basin Region, Western USA: Correlation With Strain Rates</i> , Faulds, James E. & Hinz, Nicholas & Kreemer, Corne & Coolbaugh, Mark	<i>GeoVision Technology Applied to Geothermal Exploration</i> , Combs, Jim & Drizin, Jeffery	<i>Output Prediction of a Step-Out Well Through Wellbore Simulation</i> , Mansing, Caryl Joyce & Omagbon, Jericho & Emoricha, Edson & Austria, Jaime Jemuel & Yglapaz, David
4:00	<i>Geothermal Resources in the Black Rock Desert, Utah: MT and Gravity</i> , Hardwick, Christian L. & Chapman, David S.	<i>Integrated 3D Geophysical Inversion and Geological Modelling for Improved Geothermal Exploration and Drillhole Targeting</i> , Witter, Jeffrey B. & Philips, Nigel	<i>Characterization of Tracer Responses Using Fractional Derivative - Based Mathematical Model and Its Application to Prediction of Mass Transport in Fractured Reservoirs</i> , Suzuki, Anna & Makita, Hiroshi & Niibori, Yuichi & Fomin, Sergei A. & Chugunov, Vladimir A. & Hashida, Toshiyuki
4:20	<i>Raft River EGS Project - A GIS Centric Review of Geology</i> , Nash, Gregoy & Moore, Joseph	<i>Advanced 3D Geophysical Imaging Technologies for Geothermal Resource Characterization</i> , Zhang, Haijiang & Gasperikova, Erika & Parker, Beatrice & Tryggvason, Ari & Gudmundsson, Olafur & Seher, Tim & Newman, Gregory & Fehler, Michael & Arnason, Knutur	<i>Mapping Temperature and Radiant Geothermal Heat Flux Anomalies in the Yellowstone Geothermal System Using ASTER Thermal Infrared Data</i> , Vaughan, R. Greg & Lowenstern, Jacob B. & Keszthelyi, Laszlo P. & Jaworowski, Cheryl & Heasler, Henry
4:40	<i>New Insights Into the High-Temperature Reservoir, Northwest Geysers</i> , Lutz, Susan Juch & Walters, Mark & Moore, Joseph N. & Pistone, Sarah	<i>3-Dimensional Geologic Characterization of Geothermal Systems: Astor Pass, Nevada, USA</i> , Siler, Drew L. & Mayhew, Brett & Faulds, James	<i>Hydrochemical Properties Thermal Water of Mahalat Abgarm, Iran</i> , Ghadimi, Feridon & Mirzaei, Mahmoud & Mina, Majid

	Capri 2	Capri 3	Capri 4
	EGS 1 Chair: Ann Robertson-Tait	RESERVOIR MANAGEMENT 1 Chair: John Pritchett	POWER OPERATIONS 1 Chair: Mike Rogers
1:30	<i>Estimating “Technical Capacity” for Geothermal Electricity Generation in the United States</i> , Pritchett, John	<i>Coupled Temperature and Tracer Data Analysis Using a Uniform Porous Channel Model</i> , Co, Carla Kathryn D. & Horne, Roland N.	<i>Ormat Plants: From Remote Monitoring to Remote Operation</i> , Reshef, Ran & Fever, Tomas
1:50	<i>Engineered Geothermal Systems Energy Return on Energy Investment</i> , Mansure, A.J. (Chip)	<i>Analytical Model for Thermal Response in a Fracture Due to a Change in Flow Rate</i> , Juliusson, Egill & Horne, Roland	<i>Air-Cooled Binary Rankine Cycle Performance With Varying Ambient Temperature</i> , Varney, Josephine & Bean, Nigel
2:10	<i>Supply Chain Challenges in Commercial Deployment of EGS</i> , Turaga, Uday & Shembekar, Vishakha & Carlton, Chris & Goodspeed, Kevin & Schumaker, Jessica & Adrichem, Max Van	<i>Improved Visualisation of Reservoir Simulations: Geological and Fluid Flow Modelling of the Tauranga Low-enthalpy Geothermal System, New Zealand</i> , Pearson, Sophie C.P. & Alcaraz, Samantha A. & White, Paul A. & Tschritter, Constanze	<i>Flash Cycle and Binary Geothermal Power Plant Optimization</i> , Jalilinasrabad, Saeid & Itoi, Ryuichi
2:30	<i>Stratigraphic Reservoirs in the Great Basin - The Bridge to Development of Enhanced Geothermal Systems</i> , Allis, Rick & Blackett, Bob & Gwynn, Mark & Hardwick, Christian & Moore, Joe & Morgan, Craig & Schelling, Dan & Sprinkel, Douglas	<i>TOUGH2 Flow Simulator Used To Simulate an Electric Field of a Reservoir With a Conductive Tracer for Fracture Characterization</i> , Magnusdottir, Lilja & Horne, Roland	<i>Geothermal Power Generation in China: Past and Future</i> , Zheng, Keyan
2:50	<i>The concept of Japan Beyond-Brittle Project (JBBP) to develop EGS reservoirs in ductile zones</i> , Asanuma, Hiroshi & Muraoka, Hirofumi & Tsuchiya, Noriyoshi & Ito, Hisao	<i>Viscosity Models and Effects of Dissolved CO₂</i> , Islam, Akand W. & Carlson, Eric S.	<i>Pamukuren Geothermal ORC Power Plant in Turkey</i> , Celik, Tahir & Spadachini, Claudio & Agahi, Reza
3:10	– Break – (3:10-3:40)		
	EGS 2 Chair: Mack Kennedy	RESERVOIR MANAGEMENT 2 Chair: Sabodh Garg	POWER OPERATIONS 2 Chair: Mike Rogers
3:40	<i>Impact of Uncertainty on Thermal & Chemical Tracers for EGS Characterization: A Framework for Thermo-chemical Smart Tracers</i> , Ezzedine, Souheil M. & Bourcier, William & Glascoe, Lee G. & Ryerson, Fredrick & Antoun, Tarabay H. & Roberts, Jeffery	<i>Sensitivity Analysis of Low-Temperature Geothermal Reservoirs: Effect of Reservoir Parameters on the Direct Use of Geothermal Energy</i> , Bedre, Madhur & Anderson, Brian	<i>Estimation of the Heat Losses of the Cerro Prieto Geothermal Field Steam Transportation Network Based on the Pipeline Thermal Insulation Condition</i> , Ovando-Castelar, Rosember & Martinez-Estrella, Juan I. & Garcia-Gutierrez, Alfonso & Canchola-Felix, Ismael & Miranda-Herrera, Carlos A. & Jacobo-Galvan, Vicente P.
4:00	<i>Enhancing the Sustainability of EGS Using Colloidal Silica Gel</i> , Ezzedine, Souheil & Bourcier, William & Hunt, Jonathan & Roberts, Sarah & Roberts, Jeffery	<i>Integrated Services Achieves Multi-String Casing Exit and Re-Drill in Geothermal Well</i> , Abraham, Samuel & Rickard, Bill & Spielman, Paul & Otto, Michael & Pahler, Mark & Phillips, Ronald & Guidry, Christopher	<i>Improved Energy Utilization in the Cerro Prieto Geothermal Field Fluid Transportation Network</i> , Garcia-Gutierrez, Alfonso & Martinez-Estrella, Juan I. & Ovando-Castelar, Rosember & Canchola-Felix, Ismael & Mora-Perez, Othon & Gutierrez-Espericueta, Sergio A.
4:20	<i>Kinetics of Colloidal Silica Gelation at EGS Conditions and Implications for Reservoir Modification</i> , Hunt, Jonathan & Ezzedine, Souheil & Bourcier, William & Roberts, Sarah	<i>Reflectance Spectroscopy as a Drill Core Logging Technique: An Example Using Core From the Akutan Geothermal Exploration Project</i> , Littlefield, Elizabeth & Calvin, Wendy & Stelling, Pete & Kent, Tyler	<i>Hybrid Geothermal and Solar Thermal Power Plant Case Study: Gumuskoy GEPP</i> , Kuyumcu, Ozgur Caglan & Solaroglu, Umut Z.D. & Akar, Sertac & Serin, Onur
4:40	<i>Thermal Shock-Resistant Cement</i> , Sugama, Toshifumi & Pyatina, Tatiana & Gill, Simerjeet		<i>Concentrated Solar and Geothermal Hybrid Power Project</i> , Nelson, Guy & Larsen, Garth

	Naples 6	Naples 7	Capri 1
	ENVIRONMENTAL/ REGULATORY ISSUES 1 Chair: Sheila Mallory	EXPLORATION 3 Chair: Marcelo Lippmann	PRODUCTION TECHNOLOGY Chair: Patrick Hanson
8:00	<i>Geothermal Regional Water Resource Assessment</i> , Harto, Christopher & Clark, Corrie	<i>Update of the Geothermal Electric Potential in Mexico</i> , Gutierrez-Negrin, Luis C.A.	<i>Calpine Geysers Achieves Accurate Steam Flow Measurement With Top-Mounted Annubar</i> , Balzer, Alan & Verhaagen, Don & Ershen, Cathy
8:20	<i>Water Use in Geopressured Geothermal Systems</i> , Clark, Corrie & Harto, Chris	<i>Geothermal Energy Development in Canada - Country Update 2012</i> , Richter, Alexander & Ko, Miriel & Thompson, Alison	<i>Silica Scaling Mechanism in Cerro Prieto</i> , Miranda-Herrera, Carlos A.
8:40	<i>Policies and Procedures Developed by BLM to Improve Permitting of Geothermal Exploration and Development Projects in Nevada</i> , Mallory, Sheila & Thomsen, Paul	<i>Northern Thailand Geothermal Resources and Development- A Review and 2012 Update</i> , Singharajwarapan, Fongsaward Suvagondha & Wood, Spencer H. & Prommakorn, Natthaporn & Owens, Lara	<i>Production Test of Kalina System Using Hot Spring Fluid at Geopressure Field in Japan</i> , Yanagisawa, Norio & Muraoka, Hirofumi & Sasaki, Munetake & Sugita, Hajime & Ioka, Sei-ichiro & Sato, Masatake & Osato, Kazumi
9:00	<i>Lessons Learnt on the Road to Regulatory Nirvana for Geothermal Resource Development</i> , Goldstein, Barry & Bendall, Betina & Webb, Mieka & Malavozos, Michael	<i>Why Are The Only Volcano-Hosted Vapor-Dominated Geothermal Systems in West Java, Indonesia?</i> , Raharjo, Imam & Allis, Rick & Chapman, David	<i>Technical Assessment of the Combined Heat and Power Plant at the Oregon Institute of Technology, Klamath Falls, Oregon</i> , Boyd, Toni & DiPippo, Ronald
9:20	<i>Geothermal Regulations in Colorado - Land Ownership is the Key</i> , Morgan, Paul	<i>Geothermal Exploration in Montserrat, Caribbean</i> , Poux, Bastien & Brophy, Paul	<i>Las Pailas 35MW (net) binary power plant, Rincon de la Vieja, Guanacaste, Costa Rica</i> , Moya, Paul & DiPippo, Ronald
9:40	– Break – (9:40-10:10) Sponsored by Schlumberger		
	POWER OPERATIONS 3 Chair: Chris Ellis	EXPLORATION 4 Chair: Jim Faulds	DIRECT USE Chair: Toni Boyd
10:10	<i>The Geothermal Power Plant at Hellisheidi, Iceland</i> , Hallgrimsdottir, Elin & Ballzus, Claus & Hrolfsson, Ingolfur	<i>Effectiveness of 2-Meter and Geoprobe Shallow Temperature Surveys in Early Stage Geothermal Exploration</i> , Zehner, Richard & Tullar, Kenneth N. & Rutledge, Edward	<i>Online Monitoring of Corrosion in Slightly Saline Geothermal Water in Iceland</i> , Kristmannsdottir, Hrefna & Thorarinsdottir, Ragnheidur & Sveinbjornsson, Atli & Jonsdottir, Fjola
10:30	<i>Review of The Bottle Rock Stretford Unit to Prepare For Future Increasewases in Power Plant Throughput</i> , Kendrick, Cheri & McIntush, Ken & Beitler, Carrie & Mamrosh, Darryl & Hileman, O.E	<i>The Influences of Thermal Diffusivity and Weather on Shallow (2-meter) Temperature Measurements</i> , Sladek, Chris & Coolbaugh, Mark F. & Penfield, Robin & Skord, Justin & Williamson, Lucas	<i>Direct Use of Boiling Saline Water in the Oxafjordur Heating System in NE Iceland - Production Problems and Solutions</i> , Kristmannsdottir, Hrefna & Bjornsson, Axel
10:50	<i>Laboratory and In-Situ Corrosion Studies in Geothermal Environments</i> , Mundhenk, Niklas & Huttenloch, Petra & Kohl, Thomas & Steger, Hagen & Zorn, Roman	<i>Diffuse Degassing Measurements As A Geochemical Exploration Tool: A Case Study From The Brady's Geothermal System (Nevada, USA)</i> , Jolie, Egbert & Klinkmueller, Matthias & Moeck, Inga	<i>Use of Geothermal Energy in Dairy Processing</i> , Kiruja, Jack
11:10	<i>Heat-To-Electricity With High-Speed Magnetic Bearing/Generator System</i> , Hawkins, Lawrence & Zhu, Lei & Blumber, Eric, Mirmobin, Parsa & Erdlac, Richard Jr.	<i>Early Geothermal Exploration of Southern Dixie Valley: A Case Study</i> , Williams, Mitchell & Blackwell, David	<i>The Canby Geothermal Project, A Community-Based Geothermal Development</i> , Merrick, Dale
11:30		<i>Geothermal Exploration at Newberry Volcano, Central Oregon</i> , Waibel, Albert & Frone, Zachory & Jaffe, Tod	<i>Direct Use of Geothermal Water at the Solage Calistoga Resort, Napa County, California</i> , Poux, Bastien & Serrano, Vito & Brophy, Paul
11:50	– Lunch – (11:50-1:30)		

	Capri 2	Capri 3	Capri 4
	EGS 3 Chair: Satish Pullammanappallil	DRILLING 1 Chair: Bill Rickard	BUSINESS DEVELOPMENT 1 Chair: Halley Dickey
8:00	<i>Preliminary Workflow For Subsurface Fracture Mapping Using 3D Seismic Surveys, Case Study From The Copper Basin , South Australia, Abul Khair, Hani & Cooke, Dennis & King, Rosalind & Hand, Martin & Tingay, Mark</i>	<i>Three-Dimensional Drilling Simulation of Geothermal Drilling, Shiratani, Hidehiro & Nakagawa, Masami</i>	<i>The AUC/KFW Geothermal Risk Mitigation Facility (GRMF) – A Catalyst for East African Geothermal Development, Bloomquist, R. Gordon & Niyongabo, Philippe & El-Halabi, Raed & Loschau, Margit</i>
8:20	<i>Ogachi EGS Reservoir Analysis, Kaieda, Hideshi</i>	<i>Multiple Leg Completions Improve Drilling Performance at the San Jacinto Field, Steffen, Marc & Mackenzie, Ken & Phillips, Ron</i>	<i>Risk Management for Recoverable Thermal Energy Using a Probabilistic Decision Analysis Approach, Black, Paul & Fitzgerald, Mark & Sully, Mike & Klingel, Eric</i>
8:40	<i>Correlation Between the Coulomb Stress and Occurrence of the Large Induced Seismicity at Basel, Switzerland in 2006, Mukuhira, Yusuke & Asanuma, Hiroshi & Haring, Markus</i>	<i>A Directional Geothermal Well in Turkey: GK-4 Case Study, Kuyumcu, Ozgur Caglan & Solaroglu, Umur Z.D. & Akar, Sertac & Ipek, Bahadir</i>	<i>Assessing Innovation in Geothermal Energy Using Patent Quality Indicators, Kacham, Anil Kumar & Vemula, Laxminarayana & Uppala, Balakrishna & Achanta, Harita & Turaga, Uday</i>
9:00	<i>Fracture Network Interpretation Through High Resolution Velocity Models: Application to the Geysers Geothermal Field, Tafti, Tayeb A. & Aminzadeh, Fred</i>	<i>Simulation Tools for Modeling Thermal Spallation Drilling on Multiple Scales, Walsh, Stuart D.C. & Lomov, Ilya & Kanarska, Yuliya & Roberts, Jeffery J.</i>	<i>Feed in Tariffs: Blessing or Curse for Geothermal Energy? Worldwide Background and Overview, Buscher, Eckehard</i>
9:20	<i>Calpine Geothermal Visitor Center Upgrade Project - An Interactive Approach to Geothermal Outreach and Education at The Geysers, Dobson, Patrick & Matthews Seperas, Danielle & Walters, Mark & Howarth, Chuck & Moulton, Scott</i>	<i>Cross-Functional Teams for Planning and Monitoring Drilling Projects, Bailey, Alan & Ohren, Mary & Balamir Ozgur & Hernandez, Jonathan</i>	<i>Economic and Performance Benefits Resulting From the Use of Large Diameter Fans on Air Cooled Heat Exchangers (A Case Study in the Use of Large Fan Air Cooled Condensers at the Neal Hot Springs Geothermal Power Plant), Kitz, Kevin & Elliott, Ryan & Spanswick, Ian</i>
9:40	– Break – (9:40-10:10)		
	EGS 4 Chair: Ted DeRocher	DRILLING 2 Chair: Barry Goldstein	BUSINESS DEVELOPMENT 2 Chair: Sandra Anderson
10:10	<i>Integrated, Geothermal-CO2 Storage Reservoirs: Adaptable, Multi-Stage, Sustainable, Energy-Recovery Strategies That Reduce Carbon Intensity and Environmental Risk, Buscheck, Thomas A. & Elliot, Thomas R. & Celia, Michael A. & Chen, Mingjie & Hao, Yue & Lu, Chuanhe & Sun, Yunwei</i>	<i>Effects of CO2 on Geothermal Cements, Milestone, Neil B. & Bigley, Carl H. & Durant, Andrew T. & Sharp, Matt D.W.</i>	<i>The Rate of Success of Geothermal Wells Drilled in Nevada, Shevenell, Lisa</i>
10:30	<i>Toward Affordable Low-Carbon Power: Economic and Environmental Analyses of Integrating CO2-EGS With IGCC, Turaga, Uday & Shembekar, Vishakha & Viswanathan, Subbaraman & Mohan, Arun Ram & Pisupati, Sarama & Elsworth, Derek</i>	<i>Drifting Cement Plugs For Geothermal Wells, Rickard, William & Hernandez, Jonathan & Bailey, Alan</i>	<i>Estimated Well Costs as a Function of Depth of Geothermal Wells Drilled in Nevada, Shevenell, Lisa</i>
10:50	<i>The Solubility and Kinetics of Minerals Under CO2-EGS Geothermal Conditions: Comparison of Experimental and Modeling Results, Xu, Tianfu & Dobson, Patrick & Petro, Miroslav</i>	<i>The Effect of Drilling Fluid and Temperature on the Cement-Rock Interaction in Geothermal Wells, Silva, Joao & Milestone, Neil & Johnston, James</i>	<i>Development Barriers vs. Policy Incentives in Geothermal Power, Richard, Christopher</i>
11:10	<i>Wellbore Heat Transfer in CO2-based Geothermal Systems, Randolph, Jimmy & Adams, Benjamin & Kuehn, Thomas & Saar, Martin</i>	<i>Laser-Enhanced Drilling for Subsurface EGS Applications, Ezzedine, Souheil & Rubenchik, Alexander & Yamamoto, Robert & Vorobiev, Oleg</i>	<i>Utility Geothermal Working Group 2012 Update, Nelson, Guy & Johnson, Steve & Farrer, Roger</i>
11:30	<i>CO2-Based Geothermal Energy at the St. Johns Dome - A Status Report, Eastman, Alan D. & Muir, Mark P.</i>	<i>PDC Bits Outperform Conventional Bit in Geothermal Drilling Project, Raymond, David & Knudsen, Steven & Blankenship, Doug & Bjornstad, Steve & Barbour, Joel & Schen, Aaron</i>	
11:50	– Lunch – (11:50-1:30)		

	Naples 6	Naples 7	Capri 1
	BASIN & RANGE Chair: Nick Hinz	EXPLORATION 5 Chair: Joe Moore	COPRODUCTION Chair: Maria Richards
1:30	<i>Regional Variations in Structural Controls on Geothermal Systems in the Great Basin</i> , Cashman, Patricia & Faulds, James & Hinz, Nicholas	<i>Geothermal Systems in the Snake River Plain Idaho Characterized by The Hotspot Project</i> , Nielson, Dennis L. & Delahunty, Chris & Shervais, John	<i>An Estimate of the Near-Term Electricity Generation Potential of Co-Produced Water From Active Oil and Gas Wells</i> , Augustine, Chad & Falkenstern, Dave
1:50	<i>The Regional Thermal Regime in Dixie Valley, Nevada, USA</i> , Thakur, Mahesh & Blackwell, David D. & Erkan, Kamil	<i>Hotspot: The Snake River Geothermal Drilling Project - Initial Report</i> , Shervais, John W. & Nielson, Dennis & Evans, James P. & Lachmar, Thomas & Christiansen, Eric H. & Morgan, Lisa & Shanks, W.C. Pat & Delahunty, Christopher & Schmitt, Douglas R. & Liberty, Lee M. & Blackwell, David D. & Glen, Jonathan M. & Kessler, James E.	<i>Proposed Reliability Code for Heat Flow Sites</i> , Richards, Maria C. & Blackwell, David & Williams, Mitchell & Frone, Zachary & Dingwall, Ryan & Batir, Joseph
2:10	<i>Reservoir Testing and Analysis at the Patua Geothermal Federal Unit, Northwestern Nevada</i> , Combs, Jim & Peterson, Neil & Garg, Sabodh K. & Goranson, Colin	<i>Deep Core Drilling of Three Slim Geothermal Holes, Snake River Plains, Idaho</i> , Delahunty, Chris & Nielson, Dennis L. & Shervais, John	<i>Correcting Bottom-Hole Temperatures in the Denver Basin: Colorado and Nebraska</i> , Crowell, Anna & Ochsner, Aaron & Gosnold, Will
2:30	– Break – (2:30-2:50)		
2:50	<i>A Preliminary Geochemical Description of the Geothermal Reservoir at Astor Pass, Northern Pyramid Lake, Nevada</i> , Cooper, Clay & Thomas, James & Lyles, Brad & Reeves, Donald & Pohll, Greg & Parashar, Rishi	<i>Exploration and Resource Assessment at Mountain Home Air Force Base, Idaho Using an Integrated Team Approach</i> , Breckenridge, Robert P. & Nielson, Dennis L. & Shervais, John W. & Wood, Thomas R.	<i>Production of Power From the Co-Produced Water of Oil Wells, 3.5 years of Operation</i> , Nordquist, Josh & Johnson, Lyle
3:10	<i>Structural Controls of the Tuscarora Geothermal Field, Elko County, Nevada</i> , Dering, Gregory & Faulds, James	<i>Chemistry and Thermometry of Geothermal Water From Mountain Home Test Well MH-2B S Preliminary Results</i> , Lachmar, Thomas & Freeman, Thomas G. & Wood, Thomas R. & Shervais, John W. & Nielson, Dennis L.	<i>A 400 Kw Geothermal Power Generator Using Co-Produced Fluids From Huabei Oilfield</i> , Xin, Shouliang & Liang, Hongbin & Hu, Bing & Li, Kewen
3:30	<i>Structural Interpretation and Modeling of the Dixie Meadow Geothermal Prospect Using Gravity and Magnetic Data</i> , Schwering, Paul & Karlin, Robert	<i>Assessment of the Geothermal System Near Stanley, Idaho for Direct-Use Development</i> , Welhan, John & Autenrieth, Kathleen & Ginsbach, Michael & Ohly, Rebecca & Koster, Adam & Armstrong, Trent & Heath, Gail & McCurry, Michael & Mink, Leland (Roy) & Beckwith, Robert & Aumeler, Steven E.	
4:00	– Poster Session – (4:00-6:00)		

	Capri 2	Capri 3	Capri 4
	EGS 5 Chair: Ahmad Ghassemi	AFRICAN RIFT Chair: Steve Hirsch	GEOCHEMISTRY Chair: Will Osborn
1:30	<i>Incorporating Complex Three-Dimensional Fracture Networks into Geothermal Reservoir Simulation</i> , Kalinina, Elena & McKenna, Sean A. & Klise, Katherine A. & Hadgu, Teklu & Lowry, Thomas Stephen	<i>Magnetotelluric Exploration at Tendaho High Temperature Geothermal Field in North East Ethiopia</i> , Lemma, Yohannes & Kalberkamp, Ulrich & Abera, Fisum & Dendere, Kassahun & Kebede, Yiheyis	<i>Laboratory Experiments on Inhibition of Silica Particulate Deposition in a Porous Column by Dosing of Chemical Regents into Reinjection Water (2): Prevention and Dissolution of Silica Deposits By Alkali Dosing</i> , Fukuda, Daisuke & Kawahara, Yoshitaka & Osada, Kazuyoshi & Maetou, Kotaro & Hishi, Yasuyuki & Kato, Osamu & Yokoyama, Takushi & Itoi, Ryuichi & Myogan, Ichiro
1:50	<i>Relative Permeability Measurement and Numerical Modeling of Two-Phase Flow Through Variable Aperture Fracture in Granite Under Confining Pressure</i> , Watanabe, Noriaki & Sakurai, Keisuke & Ishibashi, Takuya & Tsuchiya, Noriyoshi	<i>Geochemistry of Fumarole Discharges and Borehole Waters of Korosi-Chepchuk Geothermal Prospect, Kenya</i> , Ochieng, Leakey & Kipngok, Jeremiah & Kanda, Isaac & Igunza, George & Wanjie, Charles	<i>Laboratory Experiments on Prevention And Dissolution of Silica Deposits in a Porous Column by Dosing of Chemical Reagents into Reinjection Water (1): Solid Deposition Due to Silica Particle Aggregation and Inhibition of it by Acid Dosing</i> , Kawahara, Yoshitaka & Fukuda, Daisuke & Togoh, Fumiaki & Osada, Kazuyoshi & Maetou, Kotaro & Kato, Osamu & Yokoyama, Takushi & Itoi, Ryuichi & Myougan, Ichiro
2:10	<i>A Three-Dimensional Poroelastic Model for Natural Fractured Geothermal Reservoir Stimulation</i> , Wang, Xiaonan & Ghassemi, Ahmad	<i>Wellhead Geothermal Power Plant at Eburru, Kenya</i> , Mendive, David L. & Green, Lawrence H.	<i>Effect of Geothermal Brine Properties on Silica Scaling in Enhanced Geothermal Systems</i> , Ngothai, Yung
2:30	– Break – (2:30-2:50)		
2:50	<i>Modeling 3D Hydraulic Fracture Propagation and Thermal Fracturing Using Virtual Multidimensional Internal Bonds</i> , Huang, Kai & Ghassemi, Ahmad	<i>Real Time Reservoir Data Transmission From the Menengai Field to Nakuru and Nairobi Office by Use Fiber Optic and Radio Link</i> , Kimani, H.M	<i>Activity Coefficient Models For Calculations of Supercritical CO₂ and H₂O at High Temperatures and Pressures</i> , Islam, Akand W. & Carlson, Eric S.
3:10	<i>A New T-H-M-C Model Development for Discrete-Fracture EGS Studies</i> , Danko, George & Bahrami, Davood	<i>Static Deformation Monitoring of Menengai Geothermal Field</i> , Ndongoli, Calistus & Noor, Yusuf & Kangogo, Deflorah	<i>Chemistry of Major Reactive Gases in Wells MW-01 and MW-04 Fluids at Menengai, Kenya</i> , Kipng'ok, Jeremiah & Igunza, George & Ochieng, Leakey & Wanjie, Charles & Kanda, Isaac
3:30			<i>Chemical and Mineralogical Characterization of Sulfide Scales in Well 624 From Cerro Prieto Geothermal Field and its Reactivity in HCl</i> , Izquierdo, Georgina & Aragon, Alfonso & Portugal, Enrique & Porcayo, Jesus & Diaz, Daniel & Alvarez, Julio
4:00	– Poster Session – (4:00-6:00)		

Tuscany Ballroom Session Chair: Neil Peterson

AFRICAN RIFT

- *Automation of Deformation Monitoring Stations Within Kenya Geothermal Fields*, Mudibo, Beatrice & Siele, Davis
- *Magnetotelluric Exploration at Tendaho High Temperature Geothermal Field in North East Ethiopia*, Lemma, Yohannes & Kalberkamp, Ulrich & Abera, Fisum & Dendere, Kassahun & Kebede, Yiheyis*

BASIN & RANGE

- *Regional Variations in Structural Controls on Geothermal Systems in the Great Basin*, Cashman, Patricia & Faulds, James & Hinz, Nicholas*
- *The Regional Thermal Regime in Dixie Valley, Nevada, USA*, Thakur, Mahesh & Blackwell, David D. & Erkan, Kamil*
- *Using Hydrogeologic Data to Evaluate Geothermal Potential in the Eastern Great Basin*, Masbruch, Melissa D. & Heilweil, Victor M. & Brooks, Lynette E.

BUSINESS DEVELOPMENT

- *Assessing Innovation in Geothermal Energy Using Patent Quality Indicators*, Kacham, Anil Kumar & Vemula, Laxminarayana & Uppala, Balakrishna & Achanta, Harita & Turaga, Uday*
- *Feed in Tariffs: Blessing or Curse for Geothermal Energy? Worldwide Background and Overview*, Buscher, Eckehard*
- *Risk Management for Recoverable Thermal Energy Using a Probabilistic Decision Analysis Approach*, Black, Paul & Fitzgerald, Mark & Sully, Mike & Klingel, Eric*
- *The AUC/KFW Geothermal Risk Mitigation Facility (GRMF) – A Catalyst for East African Geothermal Development*, Bloomquist, R. Gordon & Niyongabo, Philippe & El-Halabi, Raed & Loschau, Margit*
- *The Rate of Success of Geothermal Wells Drilled in Nevada*, Shevenell, Lisa*

CASE STUDIES

- *Controlled Directional Drilling in Kenya And Iceland (Time Analysis)*, Miyora, Thomas

COPRODUCTION

- *An Estimate of the Near-Term Electricity Generation Potential of Co-Produced Water From Active Oil and Gas Wells*, Augustine, Chad & Falkenstern, Dave*
- *Correcting Bottom-hole Temperatures in the Denver Basin: Colorado and Nebraska*, Crowell, Anna & Ochsner, Aaron & Gosnold, Will*
- *Proposed Reliability Code for Heat Flow Sites*, Richards, Maria C. & Blackwell, David & Williams, Mitchell & Frone, Zachary & Dingwall, Ryan & Batir, Joseph*

DIRECT USE

- *Direct Use of Geothermal Water at the Solage Calistoga Resort, Napa County, California*, Poux, Bastien & Serrano, Vito & Brophy, Paul*
- *Experiment of Heat Transfer in Downhole Heat Exchangers With a Promoter Pipe*, Lei, Haiyan & Liu, Xuezhong & Dai, Chuanshan
- *The Canby Geothermal Project, A Community-Based Geothermal Development*, Merrick, Dale*

DRILLING

- *A Directional Geothermal Well in Turkey: GK-4 Case Study*, Kuyumcu, Ozgur Caglan & Solaroglu, Umut Z.D. & Akar, Sertac & Ipek, Bahadir*
- *An Innovative Method for Drilling Well-Bores “Apparatus for Drilling Faster, Deeper and Wider Well-Bore”*, Lalic, Nikola
- *Simulation Tools for Modeling Thermal Spallation Drilling on Multiple Scales*, Walsh, Stuart D.C. & Lomov, Ilya & Kanarska, Yuliya & Roberts, Jeffery J.*
- *Three-Dimensional Drilling Simulation of Geothermal Drilling*, Shiratani, Hidehiro & Nakagawa, Masami*
- *Top Squeeze or Top Fill: Secondary Cementing To Reduce Cost and Improve Results*, Rickard, William M. & Hernandez, Jonathan & Bailey, Alan

EGS

- *Advanced Horizontal Well Recirculation Systems for Geothermal Energy Recovery in Sedimentary Formations*, Bruno, Michael S. & Serajian, Vahid & Lao, Kang & White, Adriana & Elkhoury, Jean E. & Detwiler, Russell L.*
- *Calpine Geothermal Visitor Center Upgrade Project – An Interactive Approach to Geothermal Outreach and Education at The Geysers*, Dobson, Patrick & Matthews Seperas, Danielle & Walters, Mark & Howarth, Chuck & Moulton, Scott*
- *Computational Framework For EGS Fracture Stimulation*, Pogacnik, Justin & Leary, Peter & Malin, Peter
- *Designing a Deep Hole in Crystalline Rock*, Pye, D. Stephen & Bauer, Stephen J. & Finger, John T.*
- *Engineered Geothermal Systems Energy Return on Energy Investment*, Mansure, A.J. (Chip)*
- *Fracture Network Interpretation Through High Resolution Velocity Models: Application to the Geysers Geothermal Field*, Tafti, Tayeb A. & Aminzadeh, Fred*
- *Hydraulic Fracturing Scenarios for Low Temperature Hot-Dry-Rock Heat Generation From the Precambrian Basement in Northern Alberta*, Hofmann, Hannes & Babadagli, Tayfun & Zimmermann, Gunter
- *Numerical Studies of Coupled Flow and Heat Transfer Processes in Hydraulically Fractured Geothermal Reservoirs*, Hao, Yue & Fu, Pengcheng & Johnson, Scott M. & Carrigan, Charles R.

Papers with an asterisk (*) indicates which papers will also be presented in an oral presentation.

Tuscany Ballroom Session Chair: Neil Peterson

- *Supply Chain Challenges in Commercial Deployment of EGS*, Turaga, Uday & Shembekar, Vishakha & Carlton, Chris & Goodspeed, Kevin & Schumaker, Jessica & Adrichem, Max Van*
- *Toward Affordable Low-Carbon Power: Economic and Environmental Analyses of Integrating CO₂-EGS With IGCC*, Turaga, Uday & Shembekar, Vishakha & Viswanathan, Subbaraman & Mohan, Arun Ram & Pisupati, Sarama & Elsworth, Derek*
- *Upgrading of Aperture Model Based on Surface Geometry of Natural Fracture for Evaluating Channeling Flow*, Ishibashi, Takuya & Watanabe, Noriaki & Hirano, Nobuo & Okamoto, Atsushi & Tsuchiya, Noriyoshi
- *Wellbore Heat Transfer in CO₂-based Geothermal Systems*, Randolph, Jimmy & Adams, Benjamin & Kuehn, Thomas & Saar, Martin*

ENVIRONMENTAL/REGULATORY ISSUES

- *Geothermal Regulations in Colorado - Land Ownership is the Key*, Morgan, Paul*
- *Image Classification of Individual Trees: Case Study of Wanjohi Area, Re-Charge Source of Menengai Geothermal Field, Kenya*, Chepkochei, Lucy
- *Towards a Framework For Understanding Knowledge and Support For The Use of Geothermal Energy in Australia*, Carr-Cornish, Simone & Ashworth, Peta & Romanach, Lygia & Huddleston-Holmes, Cameron & Hobman, Elizabeth & Dowd, Anne-Maree*

EXPLORATION

- *Analysis About Low Performance in Some Zones of Los Humeros, Mexico, Geothermal Field*, Aragon-Aguilar, Alfonso & Izquierdo-Montalvo, Georgina & Arellano-Gomez, Victor
- *Analysis of Land Use/Cover Change in Menengai Landscape, Geothermal Project Field Using Landsat TM*, Chepkochei, Lucy & Njoroge, Frashia
- *Assessment of the Geothermal System Near Stanley, Idaho for Direct-Use Development*, Welhan, John & Autenrieth, Kathleen & Ginsbach, Michael & Ohly, Rebecca & Koster, Adam & Armstrong, Trent & Heath, Gail & McCurry, Michael & Mink, Leland (Roy) & Beckwith, Robert & Aumeler, Steven E.*
- *Do Magmatic-related Geothermal Energy Resources Exist in Southeast Idaho?*, McCurry, Michael & Welhan, John A.*
- *Evaluation of Geothermal Potential of Lightning Dock KGRA, New Mexico*, Dahal, Samir & McDonald, Mark R. & Bubach, Bailey & Crowell, Anna M.
- *Geochemistry of a Volcanic Hydrothermal System at Mount Spurr, Alaska*, Garchar, Laura & Wendlandt, Ric*
- *Geo-Scientific Data Integration to Evaluate Geothermal Potential Using GIS (A Case for Korosi/Chepchuk Geothermal Prospect, Kenya)*, Shako, Levi & Mutua, Joseph
- *Geothermal Energy Potential in Oktibbeha County: Is Mississippi Really Hot?*, Lindsey, Cary*

- *Geothermal Exploration at Newberry Volcano, Central Oregon*, Waibel, Albert & Frone, Zachory & Jaffe, Tod*
- *Geothermal Potential is Still Hot in the Western US*, Nelson, Guy
- *Geothermal Potential Map of the Menengai Geothermal Field Using GIS, and Results of New Wells*, Mlawasi, Zablun & Odhiambo, Paul
- *Heat Loss Assessment of Selected Kenyan Geothermal Prospects*, Mwawasi, Hilary M.*
- *Hotspot: The Snake River Geothermal Drilling Project - Initial Report*, Shervais, John W. & Nielson, Dennis & Evans, James P. & Lachmar, Thomas & Christiansen, Eric H. & Morgan, Lisa & Shanks, W.C. Pat & Delahunty, Christopher & Schmitt, Douglas R. & Liberty, Lee M. & Blackwell, David D. & Glen, Jonathan M. & Kessler, James E.*
- *Implications of Post-Glacial Warming For Northern Alberta Heat Flow - Correcting For the Underestimate of the Geothermal Potential*, Majorowicz, Jacek & Gosnold, Will & Gray, Allan & Safanda, Jan & Klenner, Rob & Unsworth, Martyn*
- *National Geothermal Data System Geochemical Data for Exploration*, Shevenell, Lisa & Penfield, Robin & Zehner, Richard & Johnson, Gary & Coolbaugh, Mark
- *Northern Thailand Geothermal Resources and Development - A Review and 2012 Update*, Singharajwarapan, Fongsaward Suvagondha & Wood, Spencer H. & Prommakorn, Natthaporn & Owens, Lara*
- *Preliminary Assessment of Deep Geothermal Resources in Trois-Rivieres Area, Quebec*, Minea, Vasile & Majorowicz, Jacek
- *Thermostrography of the Williston Basin*, Gosnold, Will & McDonald, Mark & Klenner, Robert & Merriam, Daniel*
- *Update of the Geothermal Electric Potential in Mexico*, Gutierrez-Negrin, Luis C.A.*

GEOCHEMISTRY

- *Chemical and Mineralogical Characterization of Sulfide Scales in Well 624 From Cerro Prieto Geothermal Field and its Reactivity in HCl*, Izquierdo, Georgina & Aragon, Alfonso & Portugal, Enrique & Porcayo, Jesus & Diaz, Daniel & Alvarez, Julio*
- *Laboratory Experiments on Prevention And Dissolution of Silica Deposits in a Porous Column by Dosing of Chemical Reagents into Reinjection Water (1): Solid Deposition Due to Silica Particle Aggregation and Inhibition of it by Acid Dosing*, Kawahara, Yoshitaka & Fukuda, Daisuke & Togoh, Fumiaki & Osada, Kazuyoshi & Maetou, Kotaro & Kato, Osamu & Yokoyama, Takushi & Itoi, Ryuichi & Myougan, Ichiro*
- *Preliminary Investigations of Calcite Scaling in High Enthalpy Geothermal Well at Menengai Geothermal Field, Kenya*, Kanda, Isaac & Suwai, Janet & Ochieng, Leakey & Kipngok, Jeremiah & Wambugu, James

Tuscany Ballroom Session Chair: Neil Peterson

GEOLOGY

- *3-D Inversion of MT Data From the Raft River Geothermal Field — Preliminary Results*, Maris, V. & Wannamaker, P.E. & Moore, J.
- *Geothermal Geology of Silali Volcano in Kenya*, Mutonga, Marietta
- *Infrared Imaging of Thermal Areas*, Lynne, Bridget & Yague, Ruben
- *Life At High Altitude: A Comparative Study of High Versus Low Altitude Hot Spring Settings And Associated Sinter Textures From El Tatio, Chile And The Taupo Volcanic Zone, New Zealand.*, Lynne, Bridget Y. & Morata, Diego & Reich, Martin*
- *Preliminary Assessment of the Structural Controls of Neal Hot Springs Geothermal Field, Malheur County, OR*, Edwards, Joel & Faults, James*
- *Regional Patterns of Geothermal Activity in the Great Basin Region, Western USA: Correlation With Strain Rates*, Faults, James E. & Hinz, Nicholas & Kreemer, Corne & Coolbaugh, Mark*
- *The Successful Application of Ground Penetrating Radar to Image the Opal-A to Quartz Diagenetic Sequence in Trace Element-Rich and Trace Element-Poor Siliceous Sinters*, Lynne, Bridget Y. & Sim, Cheng Yii

GEOPHYSICS

- *Adding to the Geophysical Tool Box For Geothermal Exploration: Use of Seismic and Magnetic Surveys in a Regional Geophysical Study for Geothermal Exploration in NE Alberta, Canada*, Poureslami Ardakani, Elahe & Schmitt, Douglas R.
- *Application of Transient Electromagnetics in Static Shift Correction For Magnetotellurics Data Case Study: Paka Geothermal Prospect in Kenya*, Mwakirani, Raymond & Gichira, Joseph & Simiyu, Cleophas*
- *Development of a Low Cost Method to Estimate the Seismic Signature of a Geothermal Field From Ambient Seismic Noise Analysis*, Tibuleac, Ileana M. & Pullammanappallil, Satish & Faults, James & McLachlan, Holly
- *The ICDP Snake River Geothermal Drilling Project: Preliminary Overview of Borehole Geophysics*, Schmitt, Douglas & Liberty, Lee & Kessler, James & Kueck, Jochem & Kofman, Randolph & Bishop, Ross & Shervais, John & Evans, James & Champion, Duane*
- *Three-Dimensional Inversion of ZTEM Data at the Elevenmile Canyon Geothermal System, Nevada*, Devriese, Sarah G.R. & Oldenburg, Douglas W. & Shoffner, Jeffrey

HEAT PUMP

- *Numerical Simulations For The Optimized Design of Geothermal Heat Pump Systems*, Kim, Seong-Kyun & Bae, Gwang-Ok & Park, Dong-Kyu & Song, Yoonho & Lee, Kang-Kun
- *Measuring the Costs and Benefits of Nationwide Geothermal Heat Pump Deployment – A Progress Report*, Battocletti, Elizabeth & Glassley, William E. *

POWER OPERATIONS

- *Flash Cycle and Binary Geothermal Power Plant Optimization*, Jalilinasrabady, Saeid & Itoi, Ryuichi*
- *Heat-To-Electricity With High-Speed Magnetic Bearing/Generator System*, Hawkins, Lawrence & Zhu, Lei & Blumber, Eric, Mirmobin, Parsa & Erdlac, Richard Jr. *
- *The Geothermal Power Plant at Hellisheidi, Iceland*, Hallgrimsdottir, Elin & Ballzus, Claus & Hrolfsson, Ingolfur*
- *Proposal For Harnessing Self Sustaining Geothermal Energy For Producing Electricity. "Self Contained In-Ground Geothermal Generator"*, Lacic, Nikola

PRODUCTION TECHNOLOGIES

- *Production Test of Kalina System Using Hot Spring Fluid at Geopressure Field in Japan*, Yanagisawa, Norio & Muraoka, Hirofumi & Sasaki, Munetake & Sugita, Hajime & Ioka, Sei-ichiro & Sato, Masatake & Osato, Kazumi*
- *Silica Scaling Mechanism in Cerro Prieto*, Miranda-Herrera, Carlos A. *

RESERVOIR MANAGEMENT

- *Improved Visualisation of Reservoir Simulations: Geological and Fluid Flow Modelling of the Tauranga Low-enthalpy Geothermal System, New Zealand*, Pearson, Sophie C.P. & Alcaraz, Samantha A. & White, Paul A. & Tschritter, Constanze*
- *Natural State Model of the Kotamobagu Geothermal System, North Sulawesi Indonesia*, Riogilang, Hendra & Itoi, Ryuichi & Tanaka, Toshiaki & Jalilinasrabady, Saeid

RESOURCE ASSESSMENT

- *An Integrated Multidisciplinary Re-Evaluation of the Geothermal System at Valles Caldera, New Mexico, Using an Immersive Three-Dimensional (3D) Visualization Environment*, Fowler, Andrew & Bennett, Scott & Wildgoose, Maya & Cantwell, Carolyn*
- *Characterization of Tracer Responses Using Fractional Derivative-Based Mathematical Model and Its Application to Prediction of Mass Transport in Fractured Reservoirs*, Suzuki, Anna & Makita, Hiroshi & Niibori, Yuichi & Fomin, Sergei A. & Chugunov, Vladimir A. & Hashida, Toshiyuki*
- *Evaluation of Geothermal Potential in the Rio Grande Rift: Truth or Consequences, New Mexico*, Barse, Kirtipal & McDonald, Mark & Crowell, Anna*
- *Geothermal Resource Characterization and Evaluation at Astor Pass, Nevada*, Reeves, Donald M. & Phll, Greg & Lyles, Brad & Faults, Jim & Louie, John & Ehni, Bill & Kratt, Christopher & Cooper, Clay & Parashar, Rishi & Pullammanappallil, Satish, & Noel, Donna Marie*
- *Hydrochemical Properties Thermal Water of Mahalat Abgarm, Iran*, Ghadimi, Feridon & Mirzaei, Mahmoud & Mina, Majid*

Papers with an asterisk (*) indicates which papers will also be presented in an oral presentation.

U.S. Department of Energy Office of Energy Efficiency and Renewable Energy National Geothermal Student Competition

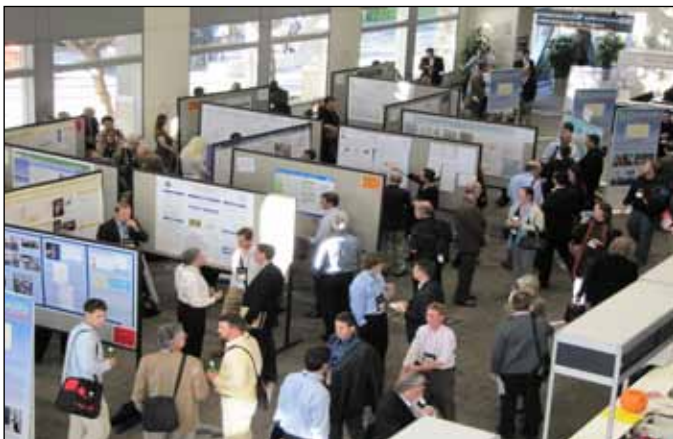
Eight university teams were selected to compete in the 2012 National Geothermal Student Competition. Students developed professional-quality research reports using exploration technologies to investigate further geothermal power development of the Snake River Plain in Idaho. The findings of the final three teams, including posters, will be presented at the Annual Meeting Poster Session on Tuesday, October 2.

The National Geothermal Academy

The National Geothermal Academy is an 8-week intensive summer course in all aspects of geothermal energy development and utilization held at the University of Nevada, Reno.

These are the entries submitted by the National Geothermal Academy students:

- *The View of Geothermal by Society*, Gabriel Allen
- *Geothermal Development Roadmap for The Kingdom of Saudi Arabia*, Basheer Hashem, Thamr Alhamoudi
- *Geothermal Hydrocarbon Co-Production (GHCP)*, Steven Erdahl
- *Development Overview of Geothermal Resources in Kilauea East Rift Zone*, Robert Kinslow, Piyush Bakane, Phillip Maddi, Bridget Hass
- *Reactwell™'s Underground Geothermal Biomass-to-Oil and Bioproduct Platform vs. Geothermal Power Production*, Brandon Iglesias
- *Application of Reactwell™'s Patent-Pending Underground Geothermal Bioreactor Technology to Desert and Tropical Climates including Specific Site Studies*, Dustin Thelen
- *Potential Development Zones for Geothermal Direct Uses in Mexico with a Specific Site Recommendation*, Manuel Arrubarrena, Leslie Pelayo
- *Future Geothermal Development Potential in Dominica*, Dalton Eloi, Jason Timothy, Mandela Christian, Nicole Seaman Tyson
- *Utilizing Direct Use Geothermal for Industrial Thermal Needs in Mississippi*, Cary Lindsey
- *Geothermal Energy Prospecting for The Caribbean Islands of Nevis and Montserrat*, Randy Koon Koon
- *A Summary of Structural Settings Related to Known Geothermal Systems in The Basin and Range Province: Emphasis on Geothermal Potential of the Southern Black Rock Desert, NV*, Mitchell Allen, Corina Forson
- *Envisioning A Model for innovative EGS Development in The San Francisco Bay Area*, Rachel Silverman



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	Naples 6	Naples 7	Capri 1
	RESOURCE ASSESSMENT 2 Chair: Lisa Shevenell	EXPLORATION 6 Chair: Pat Dobson	GEOPHYSICS 1 Chair: Mariana Eneva
8:00	<i>Why Basin and Range Systems are Hard to Find: The Moral of the Story is They Get Smaller With Depth!</i> , Blackwell, David & Waibel, Al & Richards, Maria	<i>Geochemistry of a Volcanic Hydrothermal System at Mount Spurr, Alaska</i> , Garchar, Laura & Wendlandt, Ric	<i>ZTEM Airborne AFMAG EM and Ground Geophysical Survey Comparisons Over the Pampa Lirima Geothermal Field in Northern Chile</i> , Legault, Jean & Lombardo, Silvia & Zhao, Shengkai & Clavero, Jorge & Aguirre, Igor & Arcos, Rodrigo & Lira, Elias
8:20	<i>Geothermal Resource Characterization and Evaluation at Astor Pass, Nevada</i> , Reeves, Donald M. & Phil, Greg & Lyles, Brad & Faulds, Jim & Louie, John & Ehni, Bill & Kratt, Christopher & Cooper, Clay & Parashar, Rishi & Pullammanappallil, Satish, & Noel, Donna Marie	<i>Reconnaissance of Low Temperature Geothermal Resource, Tenakee Inlet, Alaska</i> , Dilley, Lorie & Crosby, Trevor & Norkoli, Ryan	<i>Application of Transient Electromagnetics in Static Shift Correction For Magnetotellurics Data Case Study: Paka Geothermal Prospect in Kenya</i> , Mwakirani, Raymond & Gichira, Joseph & Simiyu, Cleophas
8:40	<i>Bradys (Nevada) InSAR Anomaly Evaluated With Historical Well Temperature and Pressure Data</i> , Shevenell, Lisa & Oppliger, Gary & Coolbaugh, Mark & Faulds, James	<i>Use of COMSOL Multiphysics to Develop a Shallow Preliminary Conceptual Model For Geothermal Exploration at Pilgrim Hot Springs, Alaska</i> , Daanen, Ronald P. & Chittambakkam, Arvind & Haselwimmer, Christian & Prakash, Anupma & Mager, Markus & Holdmann, Gwen	<i>Three-Dimensional Inversion of ZTEM Data at the Elevenmile Canyon Geothermal System, Nevada</i> , Devriese, Sarah G.R. & Oldenburg, Douglas W. & Shoffner, Jeffrey
9:00	<i>An Integrated Multidisciplinary Re-Evaluation of the Geothermal System at Valles Caldera, New Mexico, Using an Immersive Three-Dimensional (3D) Visualization Environment</i> , Fowler, Andrew & Bennett, Scott & Wildgoose, Maya & Cantwell, Carolyn	<i>Implications of Post-Glacial Warming For Northern Alberta Heat Flow- Correcting For the Underestimate of the Geothermal Potential</i> , Majorowicz, Jacek & Gosnold, Will & Gray, Allan & Safanda, Jan & Klenner, Rob & Unsworth, Martyn	<i>Exploring For Gold and Geothermal Systems in the Great Basin Using Full Tensor Gravity Gradiometry</i> , Mataragio, James
9:20	<i>Evaluation of Geothermal Potential in the Rio Grande Rift: Truth or Consequences, New Mexico</i> , Barse, Kirtipal & McDonald, Mark & Crowell, Anna	<i>Thermostratigraphy of the Williston Basin</i> , Gosnold, Will & McDonald, Mark & Klenner, Robert & Merriam, Daniel	<i>Solution of MT Processing Due to Layout Errors, With Examples From Menengai Geothermal Field, Kenya</i> , Waswa, Martin & Mwakirani, Raymond & Ongwae, Samson
9:40	- Break - (9:40-10:10)		



	Capri 2	Capri 3	Capri 4
	EGS 6 Chair: Joe Iovenitti	ENVIRONMENTAL/ REGULATORY ISSUES 2 Chair: Charlene Wardlow	CASE STUDIES Chair: Dave Meade
8:00	<i>An Innovative Stimulation Technology For Permeability Enhancement in Enhanced Geothermal System- Fully Coupled Thermo-poroelastic Numerical Approach</i> , Gholizadeh Doonechaly, Nima & Rahman, Sheik S. & Kotousov, Andrei	<i>Lessons Learnt From Geothermal-Friendly Regulatory Frameworks in Iceland, Kenya, New Zealand, Philippines and The United States of America</i> , Sander, Marietta	<i>Thermochemical Modeling of Cooled Brine Injection into Low Enthalpy Sedimentary Reservoir. Case Studies</i> , Borozdina, Olga & Ratouis, Thomas & Ungemach, Pierre & Antics, Miklos
8:20	<i>Fractures~Porosity--> Connectivity~Permeability --> EGS Flow Stimulation</i> , Leary, Peter & Pogacnik, Justin & Malin, Peter	<i>Environmental And Social Considerations in Geothermal Development: Case Study Menengai, Kenya</i> , Manyara, David & Mading, Peter	<i>Unit 14 / Sulphur Springs H2S Abatement Process Screening & Stretford Improvements Study - Part 3</i> , Benn, Brian & McIntush, Ken & Beitler, Carrie & Mamrosh, Darryl & Hileman, O.E.
8:40	<i>Modeling Responses of Naturally Fractured Geothermal Reservoir to Low-Pressure Stimulation</i> , Fu, Pengcheng & Carrigan, Charles	<i>Towards a Framework For Understanding Knowledge and Support For The Use of Geothermal Energy in Australia</i> , Carr-Cornish, Simone & Ashworth, Peta & Romanach, Lygia & Huddleston-Holmes, Cameron & Hobman, Elizabeth & Dowd, Anne-Maree	<i>An Overview on Geothermal Drilling and Projects in Turkey</i> , Kaya, Tevfik
9:00	<i>Opening Mode Stimulation or Shear Stimulation?</i> , McClure, Mark & Horne, Roland	<i>Recent RFP Experience and the Undervaluation of Geothermal Resources</i> , Linvill, Carl & Candelaria, John & Elder, Catherine & Thomsen, Paul	<i>Overcoming Drilling Challenges With Rotary Steerable Technology in Deep Geothermal Wells in the Molasse Basin of Southern Germany</i> , Lentsch, David & Schoebel, Wolfgang & Savvatis, Alexandros & Schubert, Achim
9:20	<i>Hydraulic Fracturing Scenarios for Low Temperature Hot-Dry-Rock Heat Generation From the Precambrian Basement in Northern Alberta</i> , Hofmann, Hannes & Babadagli, Tayfun & Zimmermann, Gunter	<i>Screening of H2S Abatement Options for Geothermal Power Noncondensable Gas at Bjarnarflag</i> , Mamrosh, Darryl & Beitler, Carrie & McIntush, Ken & Markusson, Sigurdur H. & Einarsson, Kristjan	<i>DEM Applications in Geothermal Projects, Case Study: Menengai Geothermal Field, Kenya</i> , Mboin, Irene & Yator, Esther
9:40	- Break - (9:40-10:10)		



	Naples 6	Naples 7	Capri 1
	RESOURCE ASSESSMENT 3 Chair: Christy Morris	EXPLORATION 7 Chair: Gene Suemnicht	GEOPHYSICS 2 Chair: Ileana Tibuleac
10:10	<i>The Use of Butanols as Tracers at the Coso Geothermal Field</i> , Rose, Peter & McCullugh, Jess & Buck, Cliff & Rambani, Mansi	<i>Zero Generation of Muara Laboh Numerical Model: Role of Heat Loss and Shallow Wells Data on Preliminary Natural State Modeling</i> , Wisnandary, Merry & Alamsyah, Ontowiryo	<i>Induced Seismicity in the Krafla High Temperature Field</i> , Agustsson, Kristjan & Flovenz, Olafur G. & Gudmundsson, Asgrimur & Arnadottir, Sigurveig
10:30	<i>Surface Deformation in Geothermal Areas of Imperial Valley, CA, From Satellite Radar Interferometry</i> , Eneva, Mariana & Adams, David & Falorni, Giacomo & Morgan, Jessica	<i>Heat Loss Assessment of Selected Kenyan Geothermal Prospects</i> , Mwawasi, Hilary M.	<i>Estimation of Stress State at Yanaizu-Nishiyama Geothermal Field Using Microseismic Multiplets</i> , Asanuma, Hiroshi & Mitsumori, Soichiro & Adachi, Masaho & Saeki, Kazuhiro & Aoyama, Kengo & Ozaki, Hitoshi
10:50	<i>An Estimate of the Geothermal Energy Resource in the Major Sedimentary Basins in the United States</i> , Porro, Colleen & Esposito, Ariel & Augustine, Chad	<i>Correlating Resistivity With Temperature and Alteration Mineralogy in Menengai Geothermal Field: Case Study of Menengai Exploration Wells</i> , Noor, Yusuf & Suwai, Janet & Kangogo, Deflorah	<i>The ICDP Snake River Geothermal Drilling Project: Preliminary Overview of Borehole Geophysics</i> , Schmitt, Douglas & Liberty, Lee & Kessler, James & Kueck, Jochem & Kofman, Randolph & Bishop, Ross & Shervais, John & Evans, James & Champion, Duan
11:10	<i>Preliminary Geothermal Resource Assessment for the Raton Basin, Colorado</i> , Bohlen, Karoline	<i>Geologic Setting of the Unkeshwar Thermal Springs, Eastern Deccan Volcanic Province, Maharashtra, India</i> , Chandrasekhar, V. & Chandrasekharam, D. & Singh, H.K & Das, S.	<i>Adaptation of Electronic Tools For Geothermal Logging at Geothermal Development Company (Kenya)</i> , Andgalwa, Arcadius & Kipyego, Ezekiel
11:30	<i>Assessment of Exploitable Geothermal Reserves Using Magmatic Heat Transfer Method; Maule Region, Southern Volcanic Zone, Chile</i> , Aravena, Diego & Lahsen, Alfredo		
11:50	– Adjournment & Lunch – (11:50-2:00)		



	Capri 2	Capri 3
	EGS 7 Chair: Michael Lazaro	EXPLORATION 8 Chair: Jeff Shoffner
10:10	<i>Designing a Deep Hole in Crystalline Rock</i> , Pye, D. Stephen & Bauer, Stephen J. & Finger, John T.	<i>Innovative Drilling and Completion Concept For Geothermal Applications</i> , Oppelt, Joachim & Lehr, Joerg
10:30	<i>A 300°C Directional Drilling System For EGS Well Installation</i> , Dick, Aaron & Otto, Mike & Taylor, Kyle & Macpherson, John	<i>Geothermal Energy Potential in Oktibbeha County: Is Mississippi Really Hot?</i> , Lindsey, Cary
10:50	<i>Advanced Horizontal Well Recirculation Systems for Geothermal Energy Recovery in Sedimentary Formations</i> , Bruno, Michael S. & Serajian, Vahid & Lao, Kang & White, Adriana & Elkhoury, Jean E. & Detwiler, Russell L.	<i>Review of Geothermal Tenements Held by Hot Rock in Peru and Early Exploration Results</i> , Urzua-Monsalve, Luis & Vargas, Victor & Barnett, Peter
11:10	<i>Experimental Approach for Decompression Drilling in High Temperature Geothermal Conditions</i> , Tsuchiya, Noriyoshi & Yamamoto, Keishi & Hirano, Nobuo	<i>Conceptualising Geothermal Exploration Models For Australia and the Development of Thermal Modelling</i> , Budd, Anthony R. & Gerner, Ed J. & Kirkby, Alison L. & Lescinsky, David T.
11:30	<i>Advanced Electric Submersible Pump Design Tool for Geothermal Applications</i> , Qi, Xuele & Turnquist, Norman & Ghasripoor, Farshad	
11:50	– Adjournment & Lunch – (11:50-2:00)	



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