



Friday, October 24

- 7:30 AM – 5:00 PM | GRC Workshop and Indigenous Geothermal Symposium Registration
- 8:00 AM – 5:00 PM | Indigenous Geothermal Symposium *
- 9:00 AM – 12:00 PM | Steamboat Hills Field Trip #1*
- 9:00 AM – 5:00 PM | Workshop 1: Digital Geothermal Modeling and Simulation with Utah FORGE*
- 9:00 AM – 5:00 PM | Workshop 2: Well Construction in Bits and Bytes (2-Day Workshop)*
- 1:00 PM – 4:00 PM | Steamboat Hills Field Trip #2*
- 6:30 PM – 8:30 PM | GR Board of Directors Dinner (By Invitation Only)

Saturday, October 25

- 8:00 AM – 5:00 PM | GRC Workshop and Indigenous Geothermal Symposium Registration
- 8:00 AM – 7:00 PM | Indigenous Geothermal Symposium*
- 8:00 AM – 12:30 PM | Cyrq Soda Lake Field Trip #1*
- 9:00 AM – 5:00 PM | Workshop 2: Well Construction in Bits and Bytes (2-Day Workshop)*
- 9:00 AM – 5:00 PM | Workshop 3: Integrated Geothermal Modeling: From Exploration to Optimization*
- 9:00 AM – 5:00 PM | Workshop 4: Seismic Risk and Reservoir Integrity in Enhanced Geothermal Systems: Mechanisms, Monitoring, and Mitigation*
- 12:45 PM – 5:00 PM | Cyrq Soda Lake Field Trip #2*
- 1:00 PM - 5:00 PM | Exhibitor Setup
- 7:00 PM – 9:00 PM | President's Reception (By Invitation Only)

Sunday, October 26

- 7:15 AM – 3:45 PM | Golf Tournament
- 9:00 AM – 12:00 PM | Steamboat Hills Field Trip #3: NextGen Participants Only**

- 10:00 AM – 4:00 PM | Exhibitor Setup
- 11:00 AM – 5:00 PM | Geothermal Discovery Day
- 12:00 PM – 8:00 PM | Registration
- 1:00 PM – 2:00 PM | Peppermill Direct Use Tour**
- 1:00 PM – 4:00 PM | Steamboat Hills Field Trip #4: Indigenous Community Only*
- 2:00 PM – 6:00 PM | Speaker Ready Room
- 3:00 PM – 4:00 PM | Peppermill Direct Use Tour**
- 4:00 PM – 6:00 PM | Geothermal 101
- 4:00 PM - 6:00 PM | Alaska RIG Meeting
- 6:00 PM – 6:30 PM | GR Student Members Icebreaker
- 6:30 PM – 8:30 PM | Technical Poster Hub
- 6:30 PM – 8:30 PM | Opening Reception and Exhibit

Monday, October 27

- 6:00 AM – 7:00 AM | WING Yoga
- 6:30 AM – 7:30 PM | Registration
- 6:45 AM - 7: 45 AM | Networking Breakfast
- 7:00 AM – 5:00 PM | Exhibit Hall Open
- 7:00 AM – 6:00 PM | Speaker Ready Room
- 8:00 AM – 10:00 AM | Opening Plenary Session: Leaders and Innovation in Today's Geothermal Industry
- 10:00 AM – 10:30 AM | Networking Break
- 10:00 AM – 11:00 AM | Peppermill Direct Use Tour**
- 10:30 AM – 12:30 PM | Plenary Session II: The Geothermal Decade is Now
- 12:30 PM – 2:30 PM | Networking Lunch
- 12:30 PM – 2:30 PM | Technical Poster Hub
- 1:00 PM – 2:00 PM | GR Mentor-Mentee Meetup
- 2:00 PM – 3:00 PM | Peppermill Resort Direct Use Tour**
- 3:00 PM – 5:00 PM | Concurrent Technical Sessions 1
- 7:00 PM – 9:00 PM | Monday Night Mixer
- 7:00 PM - 9:00 PM | Mentor's Lounge: Strength in Connection, Power in Sharing (part of the Monday Night Mixer)

Tuesday, October 28

- 6:30 AM – 6:30 PM | Registration
- 6:30 AM – 8:00 AM | Networking Breakfast
- 7:00 AM – 6:00 PM | Speaker Ready Room
- 7:00 AM – 8:30 PM | Exhibit Hall Open
- 7:30 AM – 9:30 AM | Concurrent Technical Sessions 2
- 9:30 AM – 10:00 AM | Networking Break
- 10:00 AM – 11:00 AM | Peppermill Direct Use Tour**
- 10:00 AM – 12:00 PM | Concurrent Technical Sessions 3

- 10:00 AM - 12:00 PM | Geothermal Pathways Program
- 12:00 PM – 1:30 PM | Networking Lunch
- 12:00 PM – 1:30 PM | Women in Geothermal (WING) Core Value Awards & Membership Meeting
- 2:00 PM – 3:00 PM | Peppermill Resort Direct Use Tour**
- 2:00 PM – 4:00 PM | Plenary Session: Clearing Geothermal Policy Hurdles
- 4:00 PM – 4:30 PM | Networking Break
- 4:30 PM - 6:30 PM | Geothermal Hall of Fame and Awards Ceremony
- 4:30 PM – 6:30 PM | Concurrent Technical Sessions 4
- 6:30 PM – 8:30 PM | Technical Poster Hub
- 6:30 PM – 8:30 PM | Networking Reception in the Exhibit Hall
- 7:00 PM – 8:00 PM | GR Trivia Night

Wednesday, October 29

- 6:00 AM – 7:00 AM | Women in Geothermal (WING) Fun Run/Walk
- 7:00 AM – 12:00 PM | Registration & Information
- 7:00 AM – 2:00 PM | Speaker Ready Room
- 7:00 AM – 3:30 PM | Exhibit Hall Open
- 7:30 AM – 9:30 AM | Concurrent Technical Sessions 5
- 9:30 AM – 10:00 AM | Networking Break
- 10:00 AM – 11:00 AM | Peppermill Direct Use Tour**
- 10:00 AM – 12:00 PM | Concurrent Technical Sessions 6
- 12:00 PM – 1:30 PM | Networking Lunch
- 1:30 PM – 3:30 PM | Concurrent Technical Sessions 7
- 3:30 PM – 4:30 PM | Closing Networking Break
- 3:30 PM – 6:00 PM | Exhibitor Tear Down

Thursday, October 30

- 9:00 AM – 5:00 PM | Workshop 5: Pathways to Trust: A Learning Journey Towards Equitable Tribal Partnership | Presented by the Alliance for Tribal Clean Energy*

[Click here to learn more and register today!](#)



*Additional registration fees apply. Pre-registration recommended.

**Although there are no additional fees, pre-registration is required.

Plenary Sessions – Monday, October 27

Capri Ballroom

7:30 AM – 9:30 AM | Opening Plenary Session: Opening Plenary Session: Leaders and Innovation in Today's Geothermal Industry

Welcome Remarks | Jericho Reyes, GR Board of Directors

State of the Geothermal Industry | Dr. Bryant Jones, Geothermal Rising

Leaders Shaping the Geothermal Landscape: Largest Investment | Tim Latimer, Fervo

Leaders Shaping the Geothermal Landscape: The Biggest Strides in Geothermal Technology Innovation | Matthew Houde, Quaise Energy

2025 Geothermal Rising Achievements | Jericho Reyes, GR Board of Directors and Dr. Bryant Jones, Geothermal Rising

Leaders Shaping the Geothermal Landscape: Momentum in Closed-Loop and Cool Heat Advancements from District Systems | Robert Winsloe, Eavor Technologies, Inc.

SLB-Ormat Announcement | Irian Amir, SLB and Daniel Moelk, Ormat Technologies, Inc.

Opening Plenary Session Emcees:

- Gabrielle Skog, Baseload Capital
- Monte Morrison, Hot H2O Engineering

10:00 AM - 12: 00 PM Plenary Session II: The Geothermal Decade is Now

Keynote Guest Speaker, Lucia Tian, Google

Leaders Shaping the Geothermal Landscape: Strides in Partnership

Leaders Shaping the Geothermal Landscape: The importance of collaboration for delivering rapid growth in geothermal energy production | Gavin Rennick, SLB New Energies

Membership Meeting

- Earth Energy Visionaries
- Launch of Major Gifts Initiative

- Introduction: GR Tech Awards
- Geothermal Champions
- GR Elections

So You Want to Lead Geothermal Rising? (GR Board Candidates Forum)

Geothermal: Exploring Gateways to New Frontiers, Andrés Ruzo, Boiling River Project – SMU

Plenary Session Emcees:

- Gabrielle Skog, Baseload Capital
- Monte Morrison, Hot H2O Engineering

Plenary Sessions – Tuesday, October 28

Capri Ballroom

2:00 PM - 4:00 PM | Plenary Session III: Clearing Geothermal Policy Hurdles

12 Years of WING USA: Promoting Women AND Geothermal | Karen Christopherson, Chinook Geoconsulting, Inc. and Emilie Gentry, Teverra LLC

Advancing the Next-Generation Geothermal Economy in Utah | Clean Air Task Force

Panel: Non-technical Barriers to Geothermal Development in the US. Policy and Education Hurdles

- Moderator: Caity Smith, Policy Chair of GRPC
- Panelist: Travis Annatoyn, Arnold Porter LLP
- Panelist: Laura Chiamonte, EPRI
- Panelist: Katerina McLaughlin, WRI
- Panelist: Michael O'Connor, CPE
- Panelist: Terra Rogers, Clean Air Task Force

GRPC US and Canada Update | Vanessa Robertson, Geothermal Rising

Unlocking Public Lands for Geothermal Energy and Changes at BLM | Paul Thomsen, Ormat Technologies, Inc.

Updates from EGEC and Europe | Sylvain Broglè, Exergy International SRL

Geothermal Venture Capital: Who is Getting Funded | Torsten Kolind, Underground Ventures UGV

Plenary Session Emcees:

- Gabrielle Skog, Baseload Capital
- Monte Morrison, Hot H2O Engineering

4:30 PM - 6:30 PM | Geothermal Hall of Fame and Awards Ceremony

The Geothermal Hall of Fame and Awards Ceremony isn't just any gathering—it's a chance for YOU to recognize the driving force of our dynamic association – the GR community members that are making a positive difference, conducting cutting-edge research, and leading the charge in the advancement of geothermal energy! Join fellow members from across the globe as we recognize these individuals' accomplishments.

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Concurrent Sessions – Monday, October 27

3:00 PM – 5:00 PM | Concurrent Sessions 1

Session 1A: Critical Minerals | Tuscany 1

- 3:00 PM - 3:20 PM | Solid Waste Considerations for Lithium Extracted from Geothermal Brines | Presenting Author: Mary Kay Camarillo
- 3:20 PM - 3:40 PM | Pretreatment of Salton Sea Geothermal Brine for Lithium Recovery | Presenting Author: Lauren MacDonald
- 3:40 PM - 4:00 PM | Advancing Geothermal Energy Supply Chains for a Resilient and Abundant Energy Future | Presenting Author: J Michael Grappone
- 4:00 PM - 4:20 PM | A Process-Based Tool for Estimating Water Use in Geothermal-Lithium Co-Production Systems | Presenting Author: Lakshani Gunawardhana

Session 1B: Drilling | Tuscany 2

- 3:00 PM - 3:20 PM | An Innovative Continuous Circulation System (CCS) for Enhanced Drilling Efficiency | Presenting Author: Elvin Allahverdiyev
- 3:20 PM - 3:40 PM | The Sequel to: Collaboration and Continuous Improvement Makes Utah Geothermal Project Economic and Successful | Presenting Author: Roger Lee
- 3:40 PM - 4:00 PM | Development of a Downhole Piston Motor Power Section for Improved Directional Drilling: Part II – Motor Development and Testing | Presenting Author: David Raymond
- 4:00 PM - 4:20 PM | PDC Bit Technology Shears Fractured Granite To Access Geothermal Power | Presenting Author: Jordan Self
- 4:20 PM - 4:40 PM | Enhancing Drilling Efficiency: PDC Bit Selection and Operation in Geothermal Applications | Presenting Author: Anil Tokcan
- 4:40 PM - 5:00 PM | Exploring the Use of Bullheading for Steam Kick Management in Super-Hot Geothermal Drilling: Numerical and Full-Scale Experimental Investigation | Presenting Author: Yuanhang Chen

Session 1C: Tribal Communities | Tuscany 3

- 3:00 PM - 3:20 PM | Evaluation of a geothermal seasonal storage system for district heating with integrated solar energy in Tribal communities: A case study of the Pawnee Nation | Presenting Author: Jose Aramendiz
- 3:20 PM - 3:40 PM | Sovereign Systems: Tribal-Driven Geothermal Solutions for Data Centers and Distributed Energy | Presenting Author: Saxon Metzger
- 3:40 PM - 4:00 PM | Ormat's Strategic Tribal Engagement in Geothermal Development | Presenting Author: Alissa Sanchez
- 4:00 PM - 4:20 PM | Geothermal Energy and Community Engagement: Lessons from Kamojang's Local Acceptance | Presenting Author: Erwandi Yanto

- 4:20 PM - 4:40 PM | Negotiating Effective Tribal Sovereign Immunity Waivers | Presenting Author: Daniel Rey-Bear
- 4:40 PM - 5:00 PM | Landowner, Community, and Stakeholder Impacts and Opportunities with the growth of Geothermal Energy in New Mexico | Presenting Author: Travis Broadhurst

Session 1D: Leveraging Oil & Gas | Tuscany 4

- 3:00 PM - 3:20 PM | From Liability to Asset: Modeling and Deployment of Borehole Batteries™ for Long-Duration Energy Storage in California | Presenting Author: Moones Alamooti
- 3:20 PM - 3:40 PM | Evaluating Geothermal Resource Potential in Idle Petroleum Wells through Thermal and Economic Analysis | Presenting Author: Roman Shor
- 3:40 PM - 4:00 PM | Repurposing Orphan Oil and Gas wells for Geothermal | Presenting Author: Rand Gardner
- 4:00 PM - 4:20 PM | Finding Heat in the Newport Inglewood Fault System: Implications for Geothermal Resources in Oilfields of the Los Angeles Basin | Presenting Author: Bradley Ring
- 4:20 PM - 4:40 PM | Advanced Polyetheretherketone (PEEK XT) - Expanding Material Limits for Geothermal Energy | Presenting Author: Nikhil Pimpalkar
- 4:40 PM - 5:00 PM | Geologic Thermal Energy Storage (GeoTES) for Grid Stability, Seasonal Storage, and Low Carbon Intensity Oil Production | Presenting Author: Michael Umbro

Session 1E: Energy Conversion/Utilization | Enhanced Geothermal Systems | Tuscany 5

- 3:00 PM - 3:20 PM | Innovative GeoController® surface package provides energy savings in high-flow geothermal wells | Presenting Author: Wesley Nowitzki
- 3:20 PM - 3:40 PM | Harnessing ORC Technology for Waste Heat Recovery and Geothermal Energy: Advancing Decarbonization and Sustainable Power Generation | Presenting Author: Kayla Dowty
- 3:40 PM - 4:00 PM | Novel Rotary Pressure Exchanger for Increasing Efficiency & Net Power Output of Geo-Pressured Geothermal Power Plants | Presenting Author: Azam Thatte
- 4:00 PM - 4:20 PM | Role of NonDarcy Flow in Maintaining Uniform Flow among Parallel Propped Hydraulic Fractures in an Engineered Heat Exchanger | Presenting Author: Christine Ehlig-Economides
- 4:20 PM - 4:40 PM | Mitigating post-injection induced seismicity in Enhanced Geothermal Systems (EGS): Influence of pressure-dependent hydraulic diffusivity in stimulated fractures | Presenting Author: Yuan Tian
- 4:40 PM - 5:00 PM | Water requirements for next generation geothermal systems: The need for increased reporting and sharing of lessons learned in early projects | Presenting Author: Angela Seligman

Session 1F: Geophysics | Downhole Logging | Tuscany 6

- 3:00 PM - 3:20 PM | Perforation Imaging in EGS (*): Small Window - Bigger Insight! (*Enhanced Geothermal Systems) | Presenting Author: Souvick Saha
- 3:20 PM - 3:40 PM | Gap Analysis of Well Integrity Evaluation Tools for Deep Geothermal Wells: Challenges and Emerging Solutions | Presenting Author: Yuxing Wu
- 3:40 PM - 4:00 PM | 3D Subsurface Modeling and Drill Site Selection at Fort Wainwright, Alaska | Presenting Author: Emilie Gentry
- 4:00 PM - 4:20 PM | Historical Seismic Monitoring of EGS and Conventional Geothermal Fields: LBNL Efforts and Lessons Learned | Presenting Author: Nori Nakata
- 4:20 PM - 4:40 PM | The Geothermal System of Vulcano Island, Italy: New Insights from Integrated Geophysical Methods and Laboratory Data | Presenting Author: Princewill Okechukwu
- 4:40 PM - 5:00 PM | Applications and limitations of drone-based thermography in geothermal exploration, characterization, and monitoring | Presenting Author: Owen Callahan

Session 1G: Panel - Catalysts of Innovation: The Role of Test Centers for Advancing Technology | Naples 1-2

Test centers play a vital role in fostering innovation by providing environments where new technologies can be tested and improved. This panel emphasizes their significance, highlighting FORGE test center as a relevant example. These centers offer a collaborative space for startups, researchers, academic institutions, and industry professionals to drive innovation. They contribute to economic growth, generate jobs, and bolster local economies, making them essential for technological progress. Nonetheless, challenges such as securing funding and keeping up with rapid technological advancements persist. This panel will delve into these issues, stressing the importance of continued support and investment in test centers to maintain the momentum of innovation.

- Moderator: Eva Schill, PhD, Lawrence Berkeley National Laboratory
- Panelist: Laura Chiaramonte, Electric Power Research Institute
- Panelist: Sigurdur Markusson, Reykjavik Energy
- Panelist: Joseph Moore, Professor, University of Utah

Session 1I: Panel - Geothermal Heat for Industrial and Direct-to-Consumer Applications | Naples 3-4

This panel session deliberately excludes geothermal electricity production; instead, it highlights the many and diverse uses of geothermal heat, without producing CO₂ emissions. Think about

this question: Why are we burning fossil fuels at temperatures as high as 2,000°C to generate heat at temperatures that often range from 20°C to 150° or a bit higher? Leaving overkill, wastefulness and CO2 emissions aside, this panel has answers to that question and will discuss real solutions that can be implemented today - at scale. The panel will include experts in district heating and cooling solutions for communities, and heat applications for specific industries, such as agriculture (greenhouses, food processing), wood drying, paper and pulp manufacturing, and chemical processes (including pharmaceuticals and brine-hosted minerals). The panelists will discuss the benefits of local geothermal heat projects and their financial and health impact for communities, and their reliability. Through this lens, the panel will not only underscore the flexibility and scalability of geothermal energy, but will also explore how cross-sector deployment, modular infrastructure, financing models, and market incentives can accelerate the deployment of clean geothermal heat.

- Moderator: Shari A. Kelley, New Mexico Bureau of Geology and Minerals Resources
- Panelist: Isaac Aviles, SLB
- Panelist: Brittany Hollon, Energy, Minerals, and Natural Resources
- Panelist: Zeyneb Magavi, HEET
- Panelist: Lisa Mueller, FutEra Power
- Panelist: Mette S. Munkholm, Green Therma

Sponsored Satellite Sessions | Naples 6-7

- 3:00 PM - 3:20 PM | Ormat Technologies Inc. Company Update | Simon Webbison, Ormat Technologies Inc.
- 3:30 PM - 3:50 PM | Understanding Your Subsurface | Robert Gales, Halliburton
- 4:00 PM - 4:20 PM | The Power of Experience, Innovation, and Partnership in Geothermal Drilling | Collin Crist, Kenai Energy Services

Monday Night Mixer

7:00 PM – 9:00 PM | The Discovery

Join us for the Monday Night Mixer at **The Discovery**, a regional hub for hands-on STEAM (Science, Technology, Engineering, Art, and Math) learning for all ages. With the entire museum reserved exclusively for our event, you'll have full access to interactive galleries and exhibits designed to spark curiosity and exploration.



Tickets included in full conference registration.

CARBO



Thank you to our sponsors.

Concurrent Sessions – Tuesday, October 28

7:30 AM – 9:30 AM | Concurrent Sessions 2

Session 2A: Critical Minerals | Tuscany 1

- 7:30 AM - 7:50 AM | Comparing the productivity and lithium concentration of geothermal and oil field brine projects in the US and Europe | Presenting Author: Martin Pujol (ID: 2129668)
- 7:50 AM - 8:10 AM | Potential for Co-production of Lithium and Geothermal Resources in the U.S. Gulf Coast | Presenting Author: Rand Gardner
- 8:10 AM - 8:30 AM | Lithium in the Smackover Formation: Distribution, Source, and Concentration in Produced Waters | Presenting Author: Eva Schill
- 8:30 AM - 8:50 AM | New Scale Dissolver for the Removal of Elemental Metal Deposits | Presenting Author: Oluchukwu Alope
- 8:50 AM - 9:10 AM | Mineral-Scale Interactions Between Supercritical CO₂ and Granite Under Enhanced Geothermal Conditions | Presenting Author: Loic Bethel Dje
- 9:10 AM - 9:30 AM | Predicting Calcite Scale in the Geothermal Industry: Recent Insights and Application to Single and Two-Phase Fluid Modeling at Several Ormat Facilities | Presenting Author: Adam Johnson

Session 2B: Drilling | Tuscany 2

- 7:30 AM - 7:50 AM | Modeling Circulating Mud Temperature After Warmback in a Geothermal Research Test Well Using the FEFLOW Borehole Heat Exchangers | Presenting Author: Guizhong Chen
- 7:50 AM - 8:10 AM | Breaking the 200C Barrier: Testing to Prove Functionality of a Measurement While Drilling System Above 210C | Presenting Author: John Clegg
- 8:10 AM - 8:30 AM | Impact of Water-Based Geothermal Drilling Fluids on the Integrity of Deadwood Sandstone for Repurposed Wells | Presenting Author: Opeyemi Oni
- 8:30 AM - 8:50 AM | Thermal Cycling-Induced Wellbore Integrity Risks in Super-Hot Geothermal Drilling: Identifying Hazardous Operational Scenarios | Presenting Author: Yuanhang Chen
- 8:50 AM - 9:10 AM | Autonomous Coiled Tubing Drilling System for Cost Effective Drilling of Large Diameter, Long Geothermal Wells in Hard, Hot Rock. | Presenting Author: Tomas Kristofic
- 9:10 AM - 9:30 AM | Multi-Lateral Drilling Learning Curve at Eavor's Geretsried Project | Presenting Author: Mark Hodder

Session 2C: Regional Updates | Tuscany 3

- 7:30 AM - 7:50 AM | Estimation of the Accessible and Useful Resource Base for Electric-Grade EGS Resources of the Great Basin, USA | Presenting Author: Erick Burns

- 7:50 AM - 8:10 AM | The Future of Geothermal in Indonesia: Collaboration Between the US and Indonesia to Create a Technical Geothermal Roadmap | Presenting Author: Patrick Dobson
- 8:10 AM - 8:30 AM | INGENIOUS Update: Drilling, Data, and Discovery | Presenting Author: Cary Lindsey
- 8:30 AM - 8:50 AM | A Planning Roadmap for High Megawatt Geothermal Scenarios in the Western United States | Presenting Author: Kayla Dowty
- 8:50 AM - 9:10 AM | Improving Geothermal Representation in Energy Models to Quantify the Role of Geothermal Technologies in Securing Abundant, Domestic Energy | Presenting Author: Whitney Trainor-Guitton
- 9:10 AM - 9:30 AM | Geothermal Energy Atlas: Democratizing Geothermal Data | Presenting Author: Jon Weers

Session 2D: Workforce Success | Tuscany 4

- 7:30 AM - 7:50 AM | Developing the IADC Geothermal Drilling & Workover Well Integrity Training Framework | Presenting Author: Toney Deer
- 7:50 AM - 8:10 AM | Developing a Thermal Energy Network in Rural Rico, Colorado: A Pre-Feasibility Study on Technical Potential, Community Engagement, and Workforce Development | Presenting Author: Emilie Gentry
- 8:10 AM - 8:30 AM | National Geothermal Workforce Assessment | Presenting Author: Amanda Kolker
- 8:30 AM - 8:50 AM | Expanding GeoBridge Content to Empower the Geothermal Industry | Presenting Author: Jon Weers

Session 2E: Energy Conversion/Utilization | Tuscany 5

- 7:30 AM - 7:50 AM | Choice of the Design Ambient Temperature for Geothermal Organic Rankine Cycle Power Plant | Presenting Author: Reza Agahi
- 7:50 AM - 8:10 AM | Innovations in large scale ORC geothermal power generation: the Gemini Radial Outflow Turbine | Presenting Author: Giorgia Ruffato
- 8:10 AM - 8:30 AM | Enhanced Geothermal System (EGS) Power for Clean Data Center Energy | Presenting Author: Andy Solberg
- 8:30 AM - 8:50 AM | Advanced Technology to Improve Total Geothermal Efficiency | Gad SHOSHAN
- 8:50 AM - 9:10 AM | Combined Heat and Power Designs for Enhanced Geothermal Systems | Presenting Author: Josh McTigue
- 9:10 AM - 9:30 AM | The Integration of Organic Rankine Cycle (ORC) Technology with innovative EGS systems for Large Scale Power Production – an update on the Cape Station project | Presenting Author: Joseph Bonafin

Session 2F: Well Construction & Completion | Tuscany 6

- 7:50 AM - 8:10 AM | Post-Well Construction Service-Life Model Design of Utah FORGE Enhanced Geothermal Systems | Presenting Author: Elvin Allahverdiyev

- 8:10 AM - 8:30 AM | Quantitative Risk Assessment Framework for Evaluating Hydrocarbon Wells Integrity | Presenting Author: Mohamed Khaled
- 8:30 AM - 8:50 AM | Corrosion of High Performance Stainless Steel Grades in Sodium Chloride Brine | Presenting Author: Daniel Svedberg
- 8:50 AM - 9:10 AM | Materials for High-Heat-Content Geothermal Wells – Challenges and Advancements | Presenting Author: Tatiana Pyatina
- 9:10 AM - 9:30 AM | A Comparative Evaluation of Cemented and Openhole Multistage Completion Designs for EGS | Presenting Author: Abdul Muqtadir Khan

Session 2G: Panel - ROI for Geothermal Projects: Aligning Geothermal Risks and Financial Expectations and Maintaining Energy Independence | Naples 1-2

This panel session tackles the common investor myth that geothermal projects take too long to deliver returns by reframing geothermal as a high-stability, multi-billion-dollar opportunity—similar to offshore ventures—with unlevered returns on investment typically ranging between 8% and 16%. Panelists will address the misconceptions shaped by shale-era quick-payback mindsets and highlight the differing risk-return profiles of EGS, closed-loop, and hydrothermal systems. Critical topics include overcoming early-stage risks via robust feasibility studies, financial modeling (including IRR, NPV, and hurdle rate adjustments), and case studies showcasing how long-term investor alignment enables geothermal’s strategic stability.

Simultaneously, the panel explores how co-located geothermal applications—such as those powering data centers and other energy-intensive industries—can deliver pure, baseload energy and on-site cooling, unlocking energy independence while providing compelling commercial value. By integrating engineering expertise from oil & gas, innovative subsurface approaches, and evolving economic models, these on-site geothermal systems are proving viable investment vehicles that reduce grid dependency and enhance sustainability, even in high-demand markets.

- Moderator: Laura Singer, Baseload Group
- Panelist: Forrest Carroll, Crusoe
- Panelist: Derek Dixon, GreenFire Energy
- Panelist: Torsten Kolind, Underground Ventures UGV
- Panelist: Jonathan Sisto, RBC Capital Markets
- Panelist: Nash Stapleton, X-Caliber Rural Capital

10:00 AM - 12:00 PM | Concurrent Sessions 3

Session 3A: Geochemistry | Closed Loop Geothermal Systems | Tuscany 1

- 10:00 AM - 10:20 AM | Cracking the Granite Code at Utah FORGE EGS: Insights into Salt Mobilization, Acidification, and Fluid-Induced Geochemical Alteration | Presenting Author: Ali Ettehad
- 10:20 AM - 10:40 AM | Resource assessment of the Picard River geothermal prospect in northern Dominica | Presenting Author: Kenneth Alexander
- 10:40 AM - 11:00 AM | Fluid chemistry and assessing the geothermal potential of Taranaki hydrocarbon systems, New Zealand | Presenting Author: Agnes Reyes
- 11:00 AM - 11:20 AM | Optimizing Borehole Thermal Energy Storage Systems in Heterogeneous Soil Conditions | Presenting Author: Shams Jerin Khan Sharna
- 11:20 AM - 11:40 AM | Application of modular Borehole Thermal Energy Storage in a Large-scale Real Case Study | Presenting Author: Haiyan Zhou

Session 3C: Regional Updates | Reservoir/Production | Tuscany 3

- 10:00 AM - 10:20 AM | Geothermal Energy Opportunities in the Pacific Northwest | Presenting Author: Edmund Butler
- 10:20 AM - 10:40 AM | Modeling the Potential Impacts of Deep Geothermal Development on Water Rights and Hydrothermal Resources in a Rocky Mountain Rift Valley | Presenting Author: Michael Rush
- 10:40 AM - 11:00 AM | Investigating the Geothermal Resource Potential of Lewis County, Washington | Presenting Author: Paul Schwering
- 11:00 AM - 11:20 AM | Preliminary Techno-Economic Assessment of Geothermal Potential in South-Central South Dakota | Presenting Author: Zhi Ye
- 11:20 AM - 11:40 AM | Furthering Understanding of The Role of Uncertainty for Adsorptive Tracer Tests | Presenting Author: Elvar Bjarkason
- 11:40 AM - 12:00 PM | Support Vector Machine Optimization for Predicting Bio Polymer Gel Effectiveness in Fracture-Dominated High Temperature Reservoirs | Presenting Author: Farhad Bina

Session 3D: Enhanced Geothermal Systems | Tuscany 4

- 10:00 AM - 10:20 AM | Fracture Characterization and Stress Communication Revealed by Induced Seismicity at the Cape Modern Geothermal Field, Utah | Presenting Author: Nori Nakata
- 10:20 AM - 10:40 AM | Development of a Next Generation EGS Fracturing and Conformance Control System | Presenting Author: William Fleckenstein
- 10:40 AM - 11:00 AM | Hydromechanical Performance of Multiple Pressure-Propped Fractures During Huff-n-Puff Operations | Presenting Author: Mauricio Rivas
- 11:00 AM - 11:20 AM | Development of Chemical-based Sensor for Quantifying Fracture Inflow in Enhanced Geothermal Systems (EGS) Wells | Presenting Author: Sarah Sausan
- 11:20 AM - 11:40 AM | Unlocking Higher Efficiency in CO₂-EGS: The Role of Fluid Flow Control | Presenting Author: Arash Dahi Taleghani

- 11:40 AM - 12:00 PM | Flow Control Devices for Improved Enhanced Geothermal Systems | Presenting Author: Blake Wood

Session 3E: Energy Conversion/Utilization | Tuscany 5

- 10:00 AM - 10:20 AM | The opportunity for direct use of geothermal heat from closed loop well solutions in industrial processes, a North America perspective | Presenting Author: Mette Munkholm
- 10:20 AM - 10:40 AM | Phase 2 Thermal Energy Network Configuration at Joint Base Andrews Using a Replicable Design Process | Presenting Author: Matt Minnick
- 10:40 AM - 11:00 AM | Analogue-supported Power Density Methods for Assessing Conductively Heated Geothermal Resources | Presenting Author: Carmen Winn
- 11:00 AM - 11:20 AM | Using Cold Underground Thermal Energy Storage to Manage Data Center Cooling Loads | Presenting Author: Josh McTigue
- 11:20 AM - 11:40 AM | Performance Evaluation of Geothermal Hybrid Systems Under Grid-connected Operation Scenarios | Presenting Author: Josh McTigue
- 11:40 AM - 12:00 PM | Progress on Geological Thermal Energy Storage Analysis | Presenting Author: Josh McTigue

Session 3F: NextGen Geo Session: The Importance of Education in Geothermal Energy | Tuscany 6

Join us before lunch for an engaging panel hosted by NextGen Geo on “The Importance of Education in Geothermal Energy”. Aimed at empowering students and encouraging heightened focus from geothermal professionals, this session will explore the value of knowledge sharing, workforce training, and educational pathways in geothermal energy. Engage with panelists through thought-provoking discussions and interactive activities designed to inspire renewed awareness towards the significance of educating the next generation of geothermal professionals.

- Moderator: Sara Vashaghian, PhD, University of North Dakota
- Panelist: William B. Cumming, Cumming Geoscience
- Panelist: Shari A. Kelley, New Mexico Bureau of Geology and Minerals Resources
- Panelist: Monte C. Morrison, Hot H2O Engineering
- Panelist: Tule Horton, Fervo Energy

Session 3G: Invited Session - Exploring Geothermal Narratives and Market Opportunities | Naples 1-2

- Unlocking SuperHot Geothermal: Lessons from Newberry’s 331 °C EGS and Path to Terawatt Scale | Speaker: Gabrijel Grubac
- Technology Roadmap: A Pathway Forward for Superhot Rock Geothermal | Speaker: Jenna Hill
- Powering the Future: What 50 Years of Enhanced Geothermal Systems Teaches Us Today | Speaker: Angela Seligman

- Lithium Valley – A Geothermal, Critical Mineral, & Manufacturing Ecosystem | Speaker: Bari Bean
- Committing to the Drill Bit: Creative Interventions for De-Risking Geothermal Financing | Speaker: Michael O'Connor
- Next-Generation Geothermal: Considerations and Opportunities for Responsible Development | Katrina McLaughlin

4:30 PM - 6:30 PM | Concurrent Sessions 4

Session 4A: Closed Loop Geothermal Systems | Tuscany 1

- 4:30 PM - 4:50 PM | Assessing Impurity Impacts on Phase Stability in CO₂-based Closed-Loop Heat Exchangers for Super-Hot Geothermal Systems | Presenting Author: Saeed Beheshtian
- 4:50 PM - 5:10 PM | Closed Loop Geothermal Working Group – System Techno-economics across Basin and Range, Volcanic, and Sedimentary Resources | Presenting Author: Amanda Kolker
- 5:10 PM - 5:30 PM | Heat Extraction from Granites with Closed-loop Geothermal Systems and Sensitivity Studies | Presenting Author: Sai Liu

Session 4B: Panel - Mineral Recovery from Brines: Technology, Investment and Policy Pathways Tuscany 2

A sustainable and secure supply of critical minerals is a core component of the energy transition. Efficient and effective lithium and rare earth element extraction from geothermal brines provides an opportunity to stimulate economic growth and strengthen energy independence. These materials have the potential to further enable the large-scale deployment of batteries for electric vehicles and energy storage and are necessary components in our modern technology. With demand surging, there are complex dynamics at play, including sudden supply expansions, the slow pace of developing new projects, and the rapidly changing geopolitics of critical minerals. Consequently, many governments classify critical minerals, such as lithium, as “critical”, pushing for innovative extraction methods to enhance supply diversity and energy security. The supply-demand gap may be bridged by conventional supply increases from new or expanded mines. However, concerns about traditional methods, like hard rock mining and evaporation ponds, focus on environmental impacts and can cause supply delays. Recovery of lithium using direct lithium extraction (DLE) from geothermal brines provides a less impactful alternative.

While some companies have successfully demonstrated lithium recovery from geothermal brines, scaling up these technologies to full production remains complex and capital-intensive. This raises concerns about bankability, as investors seek proven, de-risked technologies before committing substantial capital. This panel delves into the latest advancements in DLE

technologies and projects, as well as the role of strategic investments, R&D, and policy levers to bring DLE up to speed and establish it as a cornerstone of future lithium supply.

- Moderator: Ajit Menon, Baker Hughes
- Panelist: Isabelle Chambefort, GNS Science
- Panelist: Will Pettitt, Baker Hughes
- Panelist: Vasudhaven Sudhakar, SLB

Session 4C: Reservoir/Production | Tuscany 3

- 4:30 PM - 4:50 PM | A Coupled Thermal-Hydro-Geomechanical Modeling of Enhanced Geothermal Systems in Fenton Hill, New Mexico | Presenting Author: Dung Bui
- 4:50 PM - 5:10 PM | Injection Well Caustic Treatments at Zunil, Guatemala: Learnings and Lessons from Multiple Chemical Cleanouts of Injection Wells R3 and R5 | Presenting Author: Adam Johnson
- 5:10 PM - 5:30 PM | Conceptual and Numerical Model for the Thermo Hot Springs Geothermal Area | Presenting Author: Santiago Rocha Montoya
- 5:50 PM - 6:10 PM | Updated Conceptual Model and Reservoir Assessment of the Tuscarora Geothermal Field: Over a Decade of Renewable Power Generation | Presenting Author: Emma-Katherine Kluge
- 6:10 PM - 6:30 PM | Tu Deh-Kah Geothermal Reservoir Simulation: Reservoir Modeling and Geothermal Prediction | Presenting Author: Evan Renaud

Session 4D: Enhanced Geothermal Systems | Tuscany 4

- 4:30 PM - 4:50 PM | New Insights into Flow Path Characteristics at Utah FORGE Unlock Opportunities for Optimizing Enhanced Geothermal Systems | Presenting Author: Christopher Fredd
- 4:50 PM - 5:10 PM | Numerical Modeling of Extended Circulation Test in Utah FORGE Wells | Presenting Author: Ahmad Ghassemi
- 5:10 PM - 5:30 PM | Impact of thermo-hydro-elastic responses on long-term heat production in the UtahForge EGS concept | Presenting Author: Jonny Rutqvist
- 5:30 PM - 5:50 PM | The Role of Fluid Circulation in Heat Extraction for Enhanced Geothermal Systems in Crystalline Basement Rocks: Insights from Soultz, New Mexico, and UTAH FORGE | Presenting Author: Sara Vashaghian
- 5:50 PM - 6:10 PM | Simulation of Long Term Fluid Circulation in Utah Forge | Presenting Author: Ruwantha Ratnayake
- 6:10 PM - 6:30 PM | Integrated Lifecycle Simulation for Utah FORGE – Part II – Flow Modeling for Circulation and Production | Presenting Author: Abdul Muqtadir Khan

Session 4E: Economics | Tuscany 5

- 4:30 PM - 4:50 PM | Design-Aware Economic Prospecting for Scalable Enhanced Geothermal Systems | Presenting Author: Luke Frash

- 4:50 PM - 5:10 PM | Techno-Economic Analysis of Geothermal Resource Development in the Williston Basin, North Dakota | Presenting Author: Samuel Herrboldt
- 5:10 PM - 5:30 PM | Maximizing ITC Credits for Your Geothermal Project — And What Could Be Costing You | Presenting Author: Josh Howes
- 5:30 PM - 5:50 PM | Unlocking Investment Confidence in First-of-a-Kind (FOAK) Geothermal Projects through Advanced Scenario Modeling | Presenting Author: Nasikul Islam
- 5:50 PM - 6:10 PM | Techno-Economic Analysis of Open-Loop Ground Heat Exchanger System Integrated with a Central Chilled Water Plant for Campus Buildings at the University of Puerto Rico at Río Piedras | Presenting Author: Jon Weers
- 6:10 PM - 6:30 PM | Enhancing GEOPHIRES for Techno-Economic Modeling: Tool Updates and Cross-Platform Integration | Presenting Author: Jonathan Pezzino

Session 4F: Above Ground Challenges & OpportunitiesTuscany 6

- 4:30 PM - 4:50 PM | Addressing geothermal development barriers in Hawai'i through peer information sharing | Presenting Author: Faith Martinez Smith
- 4:50 PM - 5:10 PM | PREPARATION OF THE ABAYA PROJECT FOR GEOTHERMAL SUSTAINABILITY ASSESSMENT PROTOCOL (GSAP) IN ETHIOPIA | Muhammed Adem
- 5:10 PM - 5:30 PM | Communications and Community Engagement Best Practices for Geothermal Energy | Presenting Author: Ann Garth
- 5:30 PM - 5:50 PM | Flammable Gas Safety When Handling Geothermal Non-Condensable Gas | Presenting Author: Kenneth McIntush
- 5:50 PM - 6:10 PM | 01 of 03 CWU Casestudy of Geothermal Feasibility in Public Higher Education | Presenting Author: Delano Palmer
- 6:10 PM - 6:30 PM | Social Acceptance of Geothermal Systems in the United States | Presenting Author: Amarise Khan

Session 4G: Panel - New Drilling Technologies for Ground Source Heat Pump Installations Naples 1-2

Demand is increasing for sustainable heating and cooling solutions, such as geothermal ground source heat pump (GSHP) systems. This has driven the need for more efficient and cost-effective GSHP drilling technologies. To expand the adoption of GSHP technology, drilling methods must be improved to reduce costs, enhance installation efficiency, and minimize environmental impacts, since drilling remains the most significant cost component of GSHP installations. The upfront investment often limits GSHP's feasibility in certain regions. Development of safer, faster, and less impactful drilling techniques is crucial for the broad deployment of GSHP systems. Coiled Tubing (CT) drilling offers a transformative evolution for GSHP cost reduction and installation efficiency.

Key advantages of CT drilling for GSHP include:

- Faster and more cost-effective drilling due to the elimination of pipe connections
- Quick mobilizations with less labor

- Improved borehole stability - Continuous drilling prevents fluid circulation interruptions
- Enhanced safety - Eliminates manual pipe handling
- Lower environmental impact - Minimal surface disturbance, efficient drilling fluid recycling, and smaller drill pad setups
- Real-time downhole monitoring - Downhole communication capabilities are integrated
- Efficient rock drilling – No need for compressed air, reducing energy consumption and equipment complexity
- Lower operating costs - Significant savings on consumables and more sustainable operations

This panel will discuss technology updates and explore applications to accelerate the adoption of geothermal heating and cooling solutions.

- Moderator: Brock Yordy, Geothermal Drillers Association
- Panelist: Tunca Alikaya, SLB / Celsius Energy
- Panelist: Noah Buck, NOV Inc
- Panelist: Silviu Livescu, Bedrock Energy
- Panelist: Soren Soe, CoilRig

Concurrent Sessions – Wednesday, October 29

7:30 AM - 9:30 AM | Concurrent Sessions 5

Session 5A: Geology | Tuscany 1

- 7:30 AM - 7:50 AM | Exploring Martian Geothermal and Liquid Water Potential with Basin Modeling | Rand Gardner
- 7:50 AM - 8:10 AM | McMullen County, Texas: A Future Hotspot for Geothermal Exploration? | Eric Stautberg
- 8:10 AM - 8:30 AM | Successful Injection Well 85A-18 at the Beowawe Geothermal Field, Nevada, USA: Implications of High Permeability from Geologic Parameters and Injection Testing | Adrian Wiggins
- 8:30 AM - 8:50 AM | Cost-Effective Geothermal Exploration: Advances in 2-Meter Temperature Probe Surveys at the Coso Geothermal Field, CA | Jade Zimmerman
- 8:50 AM - 9:10 AM | Evidence for multi-phase extensional deformation, strain partitioning, and block rotation leading to permeability enhancement in the Blue Mountain Geothermal Field, NV. | Daniel Minguez
- 9:10 AM - 9:30 AM | Evaluating the Effectiveness of Infrared Spectroscopy in Surface Rock Alteration Mapping at Olkaria Geothermal Project Using High-Resolution Spectroradiometer | Mathew Kamau

Session 5B: AI and Machine Learning | Tuscany 2

- 7:30 AM - 7:50 AM | Open-Source Value of Information App: Insight from Three Geothermal Case Studies | Presenting Author: Whitney Trainor-Guitton
- 7:50 AM - 8:10 AM | Machine Learning to Delineate Concealed Hydrothermal Resources in the Rio Grande Rift Zone of Southwestern United States | Presenting Author: Shuvajit Bhattacharya
- 8:10 AM - 8:30 AM | Machine Learning for Decline Curve Analysis: Beyond Arps Model | Presenting Author: Emmanuel Gyimah
- 8:30 AM - 8:50 AM | Preventing Overfitting When Using Tree-Based Methods for Mapping Hydrothermal Favorability | Presenting Author: Eric Burns
- 8:50 AM - 9:10 AM | Machine Learning-Based Prediction of Fracture Characteristics from Drilling Data in Geothermal Wells | Presenting Author: Khomchan Promneewat
- 9:10 AM - 9:30 AM | Advancing Geothermal Drilling Efficiency Through Multi-Prediction and Hybrid Machine Learning Models | Presenting Author: Ahmed Saad

Session 5C: Superhot Rock | Tuscany 3

- 7:30 AM - 7:50 AM | Status of Japanese Supercritical Geothermal Project as of 2025 | Presenting Author: Hiroshi Asanuma
- 7:50 AM - 8:10 AM | Harnessing the Pacific Ring of Fire | Presenting Author: John Eichelberger
- 8:10 AM - 8:30 AM | Impact of Elevated Temperatures on Shear Strength and Dilation Behavior of Sierra White Granite Fracture | Presenting Author: Ahmad Ghassemi
- 8:30 AM - 8:50 AM | Production Characteristics of Superhot Geothermal Resources: Role of Reservoir Pressure and Fluid Salinity | Presenting Author: Samuel Scott
- 8:50 AM - 9:10 AM | Investigation of Favorable Conditions in Superhot Rock Geothermal Wells Based on Techno-Economic Studies | Presenting Author: Yuxing Wu
- 9:10 AM - 9:30 AM | DE-risking Exploration for geothermal Plays in magmatic ENvironments through Open Source Tools: An Open Source Python Framework for 2D and 3D Play Fairway Analysis | Presenting Author: Amanda Kolker

Session 5D: Enhanced Geothermal Systems | Tuscany 4

- 7:30 AM - 7:50 AM | Simulation Study by the Phase Field Model in the Carbon Recycle CO₂ Geothermal Power Generation Project (application of Dynamic Adaptive Gridding and Staggered Iterative Scheme) | Presenting Author: Kodai Ariyama
- 7:50 AM - 8:10 AM | Harnessing geothermal energy and emerging technologies to build a resilient electric grid in an evolving energy landscape | Presenting Author: J Michael Grappone
- 8:10 AM - 8:30 AM | Engineering an economically successful hydrothermal resource from an extensive blind high temperature meteoric-water isolated fracture network, Newberry Volcano, Oregon | Presenting Author: Al Waibel

- 8:30 AM - 8:50 AM | Advancing Enhanced Geothermal Systems (EGS) Modeling with Volsung: Evaluating Well Geometry, Stimulation Strategies, and CO₂-Enhanced Heat Extraction | Presenting Author: Robert Stacey
- 8:50 AM - 9:10 AM | Understanding Heat Recovery in EGS: Insights from Gringarten Type Curves and Numerical Simulation | Presenting Author: Piyush Kumawat
- 9:10 AM - 9:30 AM | Integrated Hydraulic Fracturing and Reservoir Modeling for Economic Optimization of Enhanced Geothermal Systems | Presenting Author: Jerjes Porlles Hurtado

Session 5E: Low-Temperature/Direct Use | Tuscany 5

- 7:30 AM - 7:50 AM | An analysis of potential benefits of adding diurnal thermal storage in geothermal heat pump systems | Presenting Author: Fady Anees
- 7:50 AM - 8:10 AM | A System Dynamics Framework for Geothermal Energy Network Modeling and Simulation | Presenting Author: Nicholas Fry
- 8:10 AM - 8:30 AM | A TOUGH2 Analysis of Submerged Closed Loop Heat Exchangers | Presenting Author: Carter Johnson
- 8:30 AM - 8:50 AM | Energy Density Assessments of Blind Geothermal Resources in NEOM, Saudi Arabia | Presenting Author: Greg Ussher
- 8:50 AM - 9:10 AM | Thermal Resilience by Design: Enhancing GHX Performance with Wastewater Energy Transfer | Presenting Author: Michael Albertson
- 9:10 AM - 9:30 AM | Electrical load impacts of three heating and cooling solutions for an existing community in Washington, DC | Presenting Author: Whitney Trainor-Guitton

Session 5F: Above Ground Challenges & Opportunities | Tuscany 6

- 7:30 AM - 7:50 AM | Transforming Public Perception of Geothermal Energy through Strategic Community Engagement: Empirical Case Studies from Ormat Technologies | Presenting Author: Marisol Collons
- 7:50 AM - 8:10 AM | On Geothermal Energy Production, Site Permitting and Monitoring and Preservation of Surface Thermal Features | Presenting Author: Rebecca Kreuzer
- 8:10 AM - 8:30 AM | Groundwork - regulatory practices of top global geothermal electricity producers | Presenting Author: Emily Smejkal
- 8:30 AM - 8:50 AM | Geothermal Power Plant Screening | Benchmarking Prime Development Regions | Presenting Author: Graham Bain
- 8:50 AM - 9:10 AM | Federal Law and Geothermal Power: Primers and Predictions | Presenting Author: Travis Annatoyn
- 9:10 AM - 9:30 AM | Geothermal Exchange and Data Center Integration Result in Golden Opportunities | Presenting Author: Jason Willeford

Session 5G: Panel - Research-Backed Strategies for Geothermal Public Engagement | Naples 1-2

This panel would cover best practices in community engagement and communications. Public awareness of geothermal is low, and CATF's research suggests that the vast majority of US residents have little to no understanding of how geothermal power production works.

However, as geothermal energy begins to approach liftoff, media coverage and public awareness is growing quickly. The geothermal community is in a critical window: we can shape public perceptions of geothermal while they're still flexible, but not for much longer.

CATF has conducted extensive quantitative and qualitative research, via surveys and focus groups, which clearly indicate best practices in community engagement (defined as interacting with local communities near a project site) and communications (defined as communicating with those outside the geothermal community, from the general public to journalists and beyond). This panel would feature experts in these topics who can share the results of their research and tangible, practical advice based on that research which the rest of the geothermal community can rely on. The focus of the panel would be on all forms of geothermal power generation, including conventional and next-generation.

- Moderator: Terra Rogers, Clean Air Task Force
- Panelist: Ari Appel, Greenlight
- Panelist: Ann Garth, Clean Air Task Force
- Panelist: Amarise Khan, Geothermal Rising
- Panelist: Alissa Sanchez, Ormat Technologies Inc.

10:00 AM - 12:00 PM | Concurrent Sessions 6

Session 6A: Geology | Tuscany 1

- 10:00 AM - 10:20 AM | Detecting Hidden Sedimentary Geothermal Systems in the Upper Colorado River Basin | Presenting Author: Rand Gardner
- 10:20 AM - 10:40 AM | Enhancing the Known Geothermal Systems Database Using INGENIOUS Project Data | Presenting Author: Nicole Hart-Wagoner
- 10:40 AM - 11:00 AM | Stability of Subsurface Thermal Fields Based on the Analysis of Temperature-Depth Measurements in Water Wells in the Española Basin | Presenting Author: Shari Kelley
- 11:00 AM - 11:20 AM | Sedimentary Geothermal Reservoir Characterization in the West Texas Permian Basin | Presenting Author: Kellen Gunderson
- 11:20 AM - 11:40 AM | Analysis of geoscience data for geothermal exploration in the Whitehorse area, Yukon | Presenting Author: Jeffrey Witter

Session 6C: Reservoir/Production | Tuscany 3

- 10:00 AM - 10:20 AM | Guiding Future Geothermal Development: Enablers, Innovations, and Learnings from Hot Sedimentary Aquifers | Presenting Author: Claringbould
- 10:20 AM - 10:40 AM | From Subsurface to Success: Reservoir Modeling and System-Level Evaluation of Geothermal Energy Projects | Presenting Author: Solomon Evro

- 10:40 AM - 11:00 AM | Successful Extension of Life – Using ESPs in Reduced Diameter Geothermal Wells | Presenting Author: Fahad Iqbal Syed
- 11:00 AM - 11:20 AM | Tuned Analytical Models for A Cost-Effective Forecasting of Thermal Depletion at the Pre-FEED Stage of a Project | Presenting Author: Xiaooqi (Vicky) Wang
- 11:20 AM - 11:40 AM | Application of Solenis Chemical Cleaning Method to Free Up Stuck CIS Tubing in EDC Production Wells | Presenting Author: Esteban Rodriguez
- 11:40 AM - 12:00 PM | Predicting the depth to thermal reservoirs in USA: Geothermal gradients and uncertainty analysis | Presenting Author: Philip Ball

Session 6E: Low Temperature/Direct Use | Super Hot Rock | Tuscany 5

- 10:00 AM - 10:20 AM | Seasonal Energy Storage in a Middle-Deep Coaxial Borehole Heat Exchanger | Presenting Author: Roman Shor
- 10:20 AM - 10:40 AM | Harnessing Low-Temperature Geothermal Heat from Hot Oil Wells for Sustainable Fruit Drying in Iquitos, Peru: A Pathway to Economic Empowerment and Food Security | Presenting Author: Jerjes Porlles Hurtado
- 10:40 AM - 11:00 AM | Initial Learnings from the Construction and Commissioning Phase of the First Utility-led Retrofit Geothermal Energy Network for Heating and Cooling in Framingham, MA | Presenting Author: Isabel Varela Gutierrez
- 11:00 AM - 11:20 AM | Materials and Corrosion Research for Superhot Geothermal Wells | Presenting Author: Sigrun Karlsdottir

Session 6F: Panel - Geothermal Development in Sedimentary Basins | Tuscany 6

Geothermal development in sedimentary basins offers a promising avenue for energy production, and benefits from robust existing data sets that reduce the need for new geothermal exploration work. In addition, the adjacency between geothermal and oil and gas projects provides synergies in terms of deep knowledge of subsurface conditions and drilling technologies, infrastructure and services. Unlike the geographically limited volcanic regions, sedimentary basins are widespread across broad swaths in many countries. Even with only slightly elevated temperature gradients, sedimentary basins often contain vast amounts of stored thermal energy within porous and permeable formations. When hydraulic conditions are less favorable than those in typical geothermal reservoirs, fracturing technologies perfected in shales are enabling various rock types to be hydraulically stimulated. With many new technologies being developed, tested and implemented today, this panel explores a variety of geothermal concepts that are predominantly driven by the experience, expertise and the innovative spirit of the oil and gas industry.

- Moderator: Jim Hollis, Geothermal Technologies
- Panelist: Logan Hackett, GeothermEx
- Panelist: Kirsten Marcia, DEEP
- Panelist: Eric Stautberg, Colorado School of Mines
- Panelist: Ken Wisian, Ph.D., Bureau of Economic Geology, The University of Texas at Austin

Session 6G: Panel - From Simulation to Site: Bridging the Geothermal Knowledge Gap with HPC and AI | Naples 1-2

This intriguing panel unites two pivotal themes in geothermal innovation: the deployment of AI to accelerate adoption, education, and operational insight, and the use of high-performance computing (HPC) for advanced geothermal modeling and simulation. Participants will come away with a comprehensive understanding of how AI and HPC can collaboratively drive geothermal energy forward—both in terms of broad adoption and deep system understanding. The panel will discuss practical examples, highlight emerging tools like digital twins, and promote dialogue on overcoming current limitations.

- Moderator: Jay Egg, Egg Geo, LLC
- Panelist: Ziwen Deng, SureSteps
- Panelist: David Eder, University of Hawaii
- Panelist: Alice Koniges, University of Hawaii
- Panelist: Kevin Rosso, Pacific Northwest National Laboratory

1:30 AM - 3:30 AM | Concurrent Sessions 7

Session 7A: Reservoir/Production | Tuscany 1

- 1:30 PM - 1:50 PM | ORMAT PRODUCTION PUMP PHILOSOPHY AND RUNTIME DATA | Presenting Author: Brian Canning
- 1:50 PM - 2:10 PM | Maximizing Operational Efficiency – A Study into Proper Valve Technology Selection and Sizing for Critical Geothermal Applications | Shahrum Iqbal
- 2:10 PM - 2:30 PM | TrueSync™ hybrid permanent magnet motor for Geothermal ESP systems | Presenting Author: Hassan Mansir
- 2:30 PM - 2:50 PM | Maximizing production in 9-5/8" casings with the new industry-leading Summit SL58000 pump | Presenting Author: David McManus
- 2:50 PM - 3:10 PM | Maximizing the Thermal Longevity of Unconventional Geothermal Systems to Enable Economic Electricity Generation | Presenting Author: Saman Karimi
- 3:10 PM - 3:30 PM | New GeoESP® Pump Intake Enhances Performance in High-Flow Geothermal Wells | Presenting Author: Joshua Webster

Session 7D: Enhanced Geothermal Systems | Tuscany 4

- 1:30 PM - 1:50 PM | Response Surface Analysis of Biopolymer Gel Performance in Fractured High Temperature Formations | Presenting Author: Farhad Bina
- 1:50 PM - 2:10 PM | Fracture Characterization from Chemical Transients | Presenting Author: William Kibikas

- 2:10 PM - 2:30 PM | Mitigating Thermal Short-Circuiting in Enhanced Geothermal Systems Using Stimuli-Responsive Silica-Based Nanofluids | Presenting Author: Nabe Konate
- 2:30 PM - 2:50 PM | Evaluation of Microgel for In-depth Fluid Redistribution in Enhanced Geothermal Reservoirs | Presenting Author: Yanbo Liu
- 2:50 PM - 3:10 PM | Geochemical Stability and Alteration Mechanisms of Proppant Materials in Reactive Enhanced Geothermal Systems | Presenting Author: Bruce Mutume
- 3:10 PM - 3:30 PM | Laboratory Assessment of Proppant Durability and Reactivity in Simulated Geothermal Reservoir Conditions | Presenting Author: Jerjes Porlles Hurtado

Session 7F: Panel - Overcoming Challenges for Deep Subsurface Instrumentation | Tuscany 6

This interactive panel session addresses the pressing challenges associated with subsurface instrumentation used for evaluating geothermal reservoirs and managing drilling operations. This session will bring together industry experts, including geothermal operators, wireline engineers, technology developers and drilling service companies. Participants will explore the complexities of high temperature, high pressure, corrosive fluids, high vibration, and highly deviated wells, focusing on tailored solutions to meet specific operational demands and ensure accurate data collection. The panel will also engage in discussions about the essential measurements and the limiting factors for subsurface tools, such as environmental conditions, tool reliability, and data acquisition challenges. By fostering an open dialogue, this session aims to highlight innovative solutions and collaborative strategies that can enhance the efficiency and reliability of geothermal development and operations. We believe this panel will provide valuable insights and drive meaningful discussions within the geothermal energy community that advance technologies and improve operational practices.

- Moderator: Andrew A. Wright, Sandia National Laboratories
- Panelist: Joe Henfling, Thermochem
- Panelist: Mehdi Hizem, SLB
- Panelist: Paul Spielman, Ormat Technologies Inc.
- Panelist: Tim Tarver, Exceed Geo Energy
- Panelist: Matthew White, Hephæ Energy Technology

