

**GEOHERMAL LITHIUM  
EXTRACTION PRIZE  
IAP MEMBER BIOS**



U.S. DEPARTMENT OF ENERGY

# Derek Benson

## EnergySource Minerals, LLC

Derek has over 23 years of experience in renewable energy and mineral project development. He currently oversees the day-to-day activities of EnergySource Minerals' (ESM) project development team, advancing its California-based project, the global deployment of ESM's ILiAD technology platform and the existing geothermal power operations.

### Areas of Expertise:

Evaluation of technology platforms in the context of risk management/mitigation in constructability, operation and management, project financing, and market compatibility.



# Kevin Brown, BSc, MSc, PhD

## GEOKEM

Kevin has over 30 years of experience in the geothermal industry. He has consulted within New Zealand for state-owned enterprises, government departments, private consultants, and geothermal companies. Overseas consulting includes work in China, Tibet, Philippines, Indonesia, Iceland, Japan, El Salvador, Mexico, Nicaragua, Australia, the U.S., Papua New Guinea, and Kenya for private companies, government organizations, the World Bank, and the United Nations Development Programme.

### Areas of Expertise:

Geothermal mineral scaling, geochemical thermodynamics, and gold silver and sulfide deposition in epithermal mineral deposits.



# Jason Czapla, PhD

## Controlled Thermal Resources

Experienced principal engineer with a demonstrated history of working in the oil and energy industry. Skilled in petroleum, management, business development, oil and gas, and offshore drilling. Strong engineering professional with a doctorate of philosophy focused in mechanical engineering from The University of Queensland.

### Areas of Expertise:

Power conversion systems, geothermal energy, oil and gas operations, and mineral extraction.



# Darrell Gallup, PhD

## Thermochem, Inc.

Darrell has over 40 years of experience in geothermal flow assurance. Darrell received his PhD in inorganic chemistry from Utah State University and has worked for major players in the geothermal and oil and gas industries since.

### Areas of Expertise:

Geothermal production chemistry, brine treatment, mineral recovery, scaling, and corrosion.



# Katharina Gerber, PhD

## Vulcan Energy Resources

Katharina holds a PhD and master of science in lithium-ion battery chemistry, and is the former manager of geothermal lithium projects in the Salton Sea with the California Energy Commission. Currently, Katharina is a part of the executive team at Vulcan Energy Resources, developing the world's first zero carbon lithium project. Katharina is the chairwoman of the German International Organization for Standardization Technical Committee 333 developing international standards for lithium mining and products.

### Areas of Expertise:

Lithium-ion battery, battery supply chain, lithium extraction, and direct lithium extraction technologies.



# Stephen Harrison, PhD

## All America Lithium

Stephen is a chemist and chemical engineer from the U.K. He joined Hydro-Quebec in 1988 as a research scientist and later became a group leader. He led a lithium project at Hydro-Quebec that led to a startup company called LIMTECH, producing high-purity lithium carbonate for batteries. He joined Simbol Materials as its chief technology officer in 2008 and led its technology development until 2015. He formed Rakehill Technologies in 2016 as a consulting company and has worked on many lithium projects, including microbiology and electrochemistry.



### Areas of Expertise:

Production of lithium chemicals from brines, direct lithium extraction, purification of lithium carbonate, and development process from laboratory to commercial scale.

# Dan Hoyer, PhD, P.E.

## Veizades & Associates

Dan Hoyer brings over 40 years of geothermal experience as a production and drilling engineer, project manager of geothermal power projects, and general manager of operations for geothermal projects in the U.S. and globally. He has worked in many stages of the development cycle, including managing infrastructure construction and exploration drilling; feasibility studies; procurement strategies and implementation of time and materials or engineering, procurement and construction contracts; owner design representation; procurement; construction; turnover; commissioning; and startups. He has managed operations for flash, binary, and direct-use projects in multiple fields and countries.

### Areas of Expertise:

Geothermal drilling surface equipment, operations, and mineral recovery.





# Mike O'Sullivan

## Geo40

Mike graduated from Otago University with a bachelor of mineral technology (Hons). He was previously the senior vice president of business development with Anvil Mining and the chief operating officer of Copperbelt Minerals. He has worked in operational and business development roles in New Zealand, Australia, Indonesia, Zimbabwe, South Africa, Algeria, and the Democratic Republic of the Congo.

### Areas of Expertise:

Process and project development.



# Andy Robinson, PhD

## Standard Lithium Ltd.

Andy is an experienced geochemist with more than seven years of experience developing lithium brine resources and associate modern lithium extraction, conversion, and crystallization technology. As the president and chief operating officer of Standard Lithium, Andy is leading development in the Smackover Formation.

### Areas of Expertise:

Geochemistry, hydrogeology, direct lithium extraction, conversion, lithium salt crystallization, and project development.



# Jonathan Weisgall

## Berkshire Hathaway Energy Co.

Jonathan Weisgall is Vice president for government relations for Berkshire Hathaway Energy and has been named one of the top Washington, DC, corporate lobbyists by The Hill since 2004. He also serves as chairman emeritus of the board of directors for the Center for Energy Efficiency and Renewable Technologies. He is a member of California's Lithium Valley Commission and vice chair of the Geothermal Rising Policy Committee. Mr. Weisgall graduated Phi Beta Kappa from Columbia College and Stanford Law School.

### Areas of Expertise:

Legal and regulatory matters, permitting, and direct lithium extraction.

