



Board of Directors Candidate Statements

2019-2020 TERM OF OFFICE

**Mailed Ballots MUST be
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By Friday, November 30, 2018**

**Geothermal Resources Council
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Candidate Statements

Simon Addison



Hello, my name is Simon Addison, and I feel honored to be nominated for a place on the GRC Board of Directors. I am the Subsurface Operations Manager for Mercury

(formerly known as Mighty River Power), a top-10 worldwide geothermal operator with nearly 500 MW of installed capacity either owned directly or through joint-ventures with indigenous Maori here in New Zealand.

I am well connected in the geothermal community here in New Zealand and have built strong relationships with a number of other major geothermal operators around the World. I wish to bring international insight to the Geothermal Resource Council. I have a goal to focus on helping the next generation of the geothermal industry to learn and develop and would like to apply myself significantly in this area.

I have studied at the University of Waikato obtaining a Bachelor of Science, a Master of Science and a Postgraduate Diploma in Business Management.

Andrea Blair



In my previous role as Business Development Manager at GNS Science, for ten years I sought, negotiated, and secured geothermal science contracts with governments, multinationals, research, and commercial organisations around the globe. I served as translator between science and client need; providing scientific solutions to commercial problems. Now as a Director for Upflow (NZ) I continue to match geothermal specialists with client's specific needs to deliver successful geothermal development outcomes.

In 2013 I became the Global Chair for Women in Geothermal (WING) and have led the organisational growth to ~1200 members worldwide. My involvement with WING has been the most rewarding engagement of my career to date; I embrace the privilege of serving a group of phenomenal women and men that I respect and admire greatly.

My professional interests lie in utilising geothermal energy directly to drive socio-economic growth, and

championing diversity within the geothermal industry. I regularly present as an invited speaker for both topics.

In 2017 I was awarded the role of Geothermal Business Development Lead for NZ, and am charged with driving and supporting investment and developing geothermal industrial direct use projects. The desired outcome is the development of large projects with significant positive impacts on local economies and communities.

I hold the position of Director for the International Geothermal Association and the Governance Board Co-Chair and Chair of Energy for the Bay of Connections (Regional Economic Development Agency). In 2017 I was a finalist in the NZ Women of Influence Awards for both the Diversity and International Categories.

Louis Capuano III



Louis Capuano III was born and raised in Santa Rosa, Ca. He has been around the geothermal industry for his whole life and still remembers visiting rigs in the Geysers and Dixie Valley when he was three years old.

Louis graduated from Louisiana State University in 2006 with a Petroleum Engineering degree. He was going to work in Halliburton's cementing lab in Lafayette, LA, but decided to move back to California and work with his father Louis Capuano Jr. at ThermaSource.

While at ThermaSource, Louis worked as an onsite supervisor in the geysers and Utah geothermal fields. He also designed and managed several geothermal drilling operations around the western hemisphere. He along with Louis Capuano, Jr. and Dr. Bill Livesay have been the teachers of the geothermal drilling section of The National Geothermal Academy held at The University of Nevada, Reno.

In February 2012, Louis and his father moved away from ThermaSource and opened Capuano Engineering Company. He is currently working on several projects in the United States and is looking forward to larger project in Europe starting next year.

In the past two years as a board member of the GRC, Louis has been chairman of two committees; the nomination committee and the student committee. As the chairman of the student committee, Louis is assisting the student members to form university

chapters of the GRC and orchestrate additional involvement by the students to the GRC.

If re-elected to the GRC board of directors, I would continue the level of excellence that has been displayed throughout the years by the various board members. Throughout the last four years, I have assisted with bringing more awareness to the student community of the GRC as well as implementing university chapters. Our goal is to have a chapter of the GRC (run by students and professors) at colleges throughout the world in order to get more students aware and involved in the geothermal industry. I am proud to announce that 7 student university chapters of the GRC are formed and having regular meetings. I have enjoyed seeing the increase in educational workshops throughout the world and am very pleased to see the GRC contributing greatly to this endeavor. I would like to see an expansion of the current scholarship program with a minor focus on undergraduate students. This would be a method of bringing additional attention to the Council as well as helping the education of potential new members. As a continued board member, I would look forward to helping the GRC with the annual meetings and keeping the level of professionalism that I have admired for years.

Trenton Cladouhos



I am honored to be nominated to become a member of the GRC board.

I am a geologist with 25 years of experience in academic research, consulting (to O&G operators, nuclear waste repository designers, and geothermal operators), and technology development for the geothermal industry.

My education includes a BS in geology from Stanford University, a PhD from Cornell University based on field work in the Andes of Argentina and Bolivia, and postdoctoral research at the University of Washington on fault zone mechanics. I have also taught structural geology, fractured rock hydrology, and co-supervised students on geothermal research projects at UW.

Over the past decade, as Senior VP of Research & Development at AltaRock Energy, I have worked on EGS projects in the USA and worldwide. I have co-led many DOE-supported projects and proposals including the Newberry EGS Demonstration, the Washington State Play Fairway Analysis, and the Newberry FORGE project.

I recently joined Cynq Energy, owner of five operating geothermal fields in the western US, as VP Resource. I support the recent changes at the GRC.

If elected, I look forward to continuing the reforms and bringing my industry and technology perspectives to the GRC board.

Tim Conant



My name is Tim Conant and I am seeking your vote to serve a second term on the Geothermal Resources Council Board of Directors. The geothermal industry has provided me with an engaging, prosperous career and I would like to continue to share my 39 years of industry experience by continuing to serve the GRC. Geothermal education is important and I look forward to helping GRC further the goals of advancing geothermal development through education, outreach and dissemination of research.

My career in the geothermal industry began in 1980 when I went to work for McCullough at The Geysers. I headed up a multimillion dollar project as my first assignment. In 1988, I joined the Calpine team where I started work at the Aidlin power plant shortly after its startup. I hit the ground running working to make the plant's abatement system more efficient and economical. Along the way, I have had many unique opportunities to learn about geothermal providing me experience and insight needed to work in a meaningful way to increase plant and field efficiency. Outside The Geysers, I worked on a project in Mexico, advising in a variety of areas, including surface equipment. Working and learning with a different culture and work philosophy was enriching. Additionally, I have worked several years on plans for the Glass Mountain known geothermal resource area.

Throughout the course of my career in geothermal, I have had the privilege to be actively involved with the GRC. Each year I look forward to assisting with the technical paper review and supporting the annual meetings. On the work front, I volunteer my time to lead Geysers tours – from fourth graders to graduate students, it is truly enriching to share geothermal energy production and how it works.

At this juncture of my career, I am focused on engaging actively as a GRC board member. Encouraging and mentoring students toward the geothermal industry and promoting geothermal in the public sector are two areas of interest to me. If re-elected, I bring my years' geothermal knowledge to the

table and two years as a GRC Board Member to serve another term. I am proud to have been a part of the work and progress the current GRC Board has made over the past two years and hope to serve another term to keep that momentum going.

I hold a BS degree in Mechanical Engineering and Agricultural Engineering, masters Agricultural Engineering (ABD) from UC Davis and outside of work, I enjoy farming, cycling, reading and drinking Lake County wine.

Warren T. Dewhurst



Dr. Warren T. Dewhurst, completing his first term on the GRC Board, founder and managing member of Dewhurst Group, LLC (DG), has been involved in the Earth sciences, geothermal exploration, engineering, and management since

the early 1970s. His academic background began with a bachelor's degree in geophysics from the Colorado School of Mines (CSM), followed by a master's degree in mechanical engineering from Catholic University, and a doctorate in geophysics from CSM. His research interests include the development of the Global Positioning System in a geodetic context as well as the application of Bayesian inference for simultaneously inverting multiple and discrete data sets over geotectonic spreading centers. He is also a registered professional engineer (PE).

After serving briefly as a commissioned officer in the US Army and in the National Oceanic and Atmospheric Administration (NOAA), he was appointed as chief geophysicist of the NOAA Coast and Geodetic Survey in 1991. During his tenure in NOAA, Dr. Dewhurst developed close relationships with the Russian Academy of Sciences and the international geosciences community. Between 1991 and 1995, he founded and directed the Geophysical Technology Transfer Initiative (GTTI) between Russia and the United States. GTTI was likely the first official US government initiative to bring Soviet remote-sensing and geophysical technologies, primarily used for military purposes, to civilian applications outside of Russia. He has published many scientific articles and monographs. Among numerous awards, Dr. Dewhurst has earned some of the highest commendations within US government service, including the US Department of Commerce Gold and Silver medals as well as the Society of American Military Engineers Colbert Medal.

With groundbreaking projects in Latin America, DG opened up geothermal exploration and development in Colombia, South America. DG has provided technical

expertise to Empresas Públicas de Medellín E.S.P. and the Colombian Government, influencing legislation vital to the development of the geothermal industry in Colombia. This work was recognized by the Geothermal Energy Association (GEA) as DG was presented with GEA Honors in 2014 for Economic Development. Dr. Dewhurst has been a visible proponent of geothermal energy development in Latin America, with DG offices in Colombia and representatives in Mexico and Chile. Further, Dr. Dewhurst was competitively selected to serve as the lead geothermal project manager for the Geothermal Development Facility for Latin America (GDF), while DG (along with Interlink Capital Strategies) was named as the fund manager for the GDF. Organized by the German KfW Development Bank, GDF is the first multidonor climate initiative within Latin America, covering ten Latin American countries over a ten-year span. GDF's objective is to be a catalyst for more than €2B of investment in geothermal projects within the region.

Aside from technical and industry involvement, Dr. Dewhurst has been passionate about community education and participatory development of geothermal projects in local communities. DG is the only exclusive geothermal exploration and development company that is also an institutional member of the Society of International Development (SID – Washington, DC chapter). DG recognizes that responsible development is key to success in the geothermal sector. Dr. Dewhurst has developed close relationships with local communities and universities in Colombia, employing university interns and members of local indigenous populations to help with projects whenever possible.

During his first term on the GRC Board, Dr. Dewhurst spearheaded the creation of international representative offices for the GRC (Rep Office(s)) that serve as local and regional points of contact for members, host in-country geothermal events, and increase knowledge transfer in the geothermal sector. Dr. Dewhurst volunteered to host the first Rep Office out of Colombia: GRC Latin America. He has initiated a series of bilingual (English and Spanish) video tutorials that promote awareness of geothermal energy, particularly for school-age children and laypersons and with inspiration from Dr. David Boden (GRC Board Member) created a new geothermal educational poster for distribution to the public.

As a board member, Dr. Dewhurst would continue to offer a unique perspective to the GRC. He would promote the importance of social and environmental stewardship in addition to business goals. Specifically, he would encourage GRC members to embrace participatory development, engaging with local talent and populations in the development process. He would

also promote educational opportunities for university students in the US and Latin America.

Will Gosnold



Will Gosnold is Chester Fritz Distinguished Professor in the Harold Hamm School of Geology and Geological Engineering at the University of North Dakota.

He received his PhD in geophysics from SMU studying heat flow with David Blackwell. He has developed a research career spanning 42 years on heat flow, geothermal energy, and climate change. He has served as Custodian of the Global Heat Flow Database of the International Heat Flow Commission since 2001.

His geothermal energy research in the Williston Basin led to the first commercial demonstration of geothermal power using low-temperature waters in an oil and gas setting in 2016.

Will has developed a graduate studies program in geothermal energy at UND that has produced 9 MS and 8 PhD graduates.

He has been active in promoting geothermal energy through engagement with state agencies in the Midwest and with geothermal developers and the petroleum industry and as a member of the GRC Geothermal Ambassadors.

Will and his student have been frequent contributors at GRC meetings and at geothermal sessions in other societies. At UND, he has served as chair of the Department of Geology and Geological Engineering (2006-2010) and interim chair of the Department of Petroleum Engineering (2015-2016). He also served as Interim Director of University of North Dakota Office of Research and Program Development (2001-2004).

Dan Hoyer



Dr Hoyer is a senior executive with 35+ years' experience developing, operating and managing capital projects.

An astute and culturally sensitive business partner with expertise developing high profile national and international projects. Skilled in building relationships with key stakeholders including utility, investor, business, government, and tribal leaders. History of

delivering projects on time and on budget, increasing revenue, and maintaining an exceptional environmental and safety record. Successful in making effective decisions under ambiguous or uncertain circumstances.

Dr Hoyer has been a member of the GRC during his career and has been on the GRC Board for 2 different terms. During his current term, he led the team to hire the New Executive Director, Will Pettitt. He has presented workshops at GRC annual meetings and international meetings.

GRC is a changing organization and I would like to continue to support that change as a Board member.

James Lovekin



Field Operations Manager, GeothermEx, Inc. (Richmond, CA). Current GRC Board Member.

Thirty-one years of experience in the development and assessment of geothermal resources, with expertise in field operations, geology, reservoir engineering, drilling, and project economics.

I regard the GRC as a prime forum for exchanging geothermal technology, as well as promoting the benefits of geothermal energy to the general public. In my most recent term on the GRC Board of Directors, I have served as Chair of the Foundation Committee and have participated in the review of student applicants for GRC educational grants, as well as selection of recipients of the 2017 GRC awards.

If re-elected, my main priorities will be making sure the GRC serves the needs of its membership (both within the United States and internationally) and enhancing the credibility of our industry.

Leland "Roy" Mink



Leland "Roy" Mink began his career as a hydro-geologist with the Idaho Bureau of Mines and Geology in 1972. His career spanned a variety of activities. Morrison Knudsen Construction Company hydrology project engineer; University

teaching; US Department of Energy geothermal energy project manager; Idaho Water and Energy Research Institute director; and US Department of Energy Geothermal Program director.

Roy earned a BS from Idaho State University and a hydrology MS and geology PhD from the University of Idaho.

Currently he resides in Idaho and is the principal with Mink GeoHydro LLC consulting in water and geothermal energy. Roy has served on the board of directors for US Geothermal Inc, Green Field Energy Inc, and Pagosa Verde LLC. He was a member of the advisory board for the National Science Academy Earth Resource Committee as well as the University of Idaho College of Science and is presently technical advisor for GreenFire Energy.

I am seeking another term as a member of the GRC board of directors. Progressing toward refining the role of GRC since merging with GEA; encouraging team work within the organization; and advancing geothermal education and outreach are key areas I would continue to concentrate my energy if re-elected.

Lara Owens



Lara Owens currently serves as Chief Geochemist for Ormat Nevada Inc and has been an integral part of the exploration team since 2010. During this time, she served as principle geologist for the nearly 100MW expansion at Olkaria III in Kenya and is responsible for new geothermal ventures throughout Africa, Latin America and the Caribbean.

Her goals for the GRC board include improving membership of the international geothermal community particularly in developing markets; promoting environmental stewardship and encouraging public acceptance; and advocating the advantages of this baseload, home-grown energy source to utilities, state regulators and communities.

Ms. Owens holds a PhD and MS in Geochemistry from New Mexico Institute of Mining and Technology, a BS in Geosciences from Penn State, and is a registered California PG.

Robert Podgorney



I am a geologist and reservoir modeler with over 20 years of professional experience in energy and environmental areas. Since 2010, I have been the geothermal group lead at the Idaho National Laboratory (INL), leading a diverse team focused on understanding subsurface dynamics, topside integration, and expanding applications of geothermal energy.

Over the last eight years, I have also been functioning as the United States Chair for Reservoir Modeling to the International Partnership for Geothermal Technology, a multinational coordination effort focused on advancing geothermal energy.

Prior to working at INL, I worked for several geologic consulting firms such as Montgomery Watson and Parsons Engineering.

On a more personal note, I am a proud six-year veteran of the U.S. military and apply the lessons I learned about commitment and service into everything I do. I currently live in Idaho Falls, Idaho with my wife, son, and daughter.

My personal research interests center on energy and water-related issues, focusing primarily on investigations of fluid flow, heat transport, and mechanics in fractures and fracture networks, as well as the development of massively parallel simulators for describing these systems. I also have a strong interest in earth modeling techniques and establishing workflows to transfer high fidelity information into numerical simulators.

I enjoy motivating others and driving successful change through processes and programs. For the last two years, I have served as the technical chair for the Geothermal Resources Council Annual Meeting (Salt Lake City and Reno). I developed and instituted the current electronic submission and review system. As with any new process there were a few bugs along the way, but the number of submissions for the annual meeting more than doubled under my leadership.

I plan to use my extensive professional and leadership experience to be a positive force on the Board to serve as an advocate for geothermal education and awareness, continue growing the GRC, and engage a larger audience for the geothermal industry. The world needs more geothermal energy utilization, I'd like to work with you to help make it happen!

Paul A. Siratovich



I am a Director of Upflow Ltd (New Zealand) responsible for the execution and delivery of technical works for Upflow and its clients. I have experience in geothermal technical management and operations. I have more than ten years of industry experience as a geologist and project manager. I have an extensive publication record, presently an Adjunct Senior Lecturer at the University of Canterbury and act as the Vice President of the New Zealand Geothermal Association (NZGA).

I am well versed in the technical operations of large-scale geothermal operations and have worked on several of New Zealand's major geothermal fields (e.g. Kawerau, Rotokawa, Ngatamariki, Ohaaki). As the Vice-President of the NZGA, I understand the challenges that a multi-disciplinary board can face. I have helped improved value to our members through: increased dissemination of information, engagement of young members, governmental submissions and liaison meetings, and have been recognized for my efforts to the organization with a contribution award.

As a board member for the GRC, my goal is to further strengthen the relationship between United States and New Zealand and help further solidify the transfer of knowledge and technological acumen that both countries can leverage to further drive down the cost of geothermal operations. I am certain that both countries we can learn much from each other's operating environments. As an American citizen and New Zealand resident, I know how to be successful in both business environments and my role on the GRC board will continue to strengthen the relationship between these world leaders in geothermal technology.

Hildigunnur (Hidda) Thorsteinsson



I have worked in the geothermal industry on both sides of the Atlantic, both in government and the private sector, from electricity generation to direct use projects, and throughout the development pipeline from research to operations.

Consequently, if elected, I believe I can bring an experienced and valuable perspective to the table. I believe the changes that the current GRC board of directors recently implemented are the foundation for a stronger, more

impactful GRC and I would like to add my voice to the future direction and operation of the GRC.

Hildigunnur Thorsteinsson is the Managing Director for Research and Development at Reykjavik Energy. In her role, she oversees natural resource management and R&D for the company. Reykjavik Energy, through its subsidiaries, owns and operates two geothermal co-generation power plants and over a dozen geothermal district heating systems. In addition, the company is very active in geothermal research, for instance in the reinjection and mineralization of geothermal gases (CarbFix) and the creation of new value streams based on the zero-waste concept.

Previously, Mrs. Thorsteinsson led the Hydrothermal and Resource Confirmation team at the Energy Efficiency and Renewable Energy's Geothermal Technologies Office at the U.S. Department of Energy.

Prior to working for the U.S. Department of Energy, she was a project manager and engineer at geothermal developers in both the United States and Iceland.

Currently, Mrs. Thorsteinsson serves on the boards of ON Power, Iceland School of Energy, the Icelandic Geothermal Association and Iceland Geothermal. She is also the Vice Chairman of the WGC 2020 Organizing Committee.

She received a Bachelor of Science in Industrial Engineering from the University of Iceland in 2005, and a Master of Science in Technology and Policy from the Massachusetts Institute of Technology in 2008.

Jefferson W. Tester



Dr. Tester is the Professor of Sustainable Energy Systems in the School of Chemical and Biomolecular Engineering at Cornell University and Cornell's Principal Scientist for Earth Source Heat. He also founded and served as Director of the Cornell Energy Institute from 2009 -2017 and is a Fellow in the

Atkinson Center for a Sustainable Future and a Croll Energy Fellow.

Prior to his appointment at Cornell in 2009, Dr. Tester was the H.P. Meissner Professor of Chemical Engineering at the Massachusetts Institute of Technology and served as Director of MIT's Energy Laboratory for 12 years (1989-2001).

While at MIT, Professor Tester chaired an 18-member international panel that evaluated the long term geothermal potential of the US, resulting a major report in 2007– The Future of Geothermal Energy. Dr. Tester was the US representative for geothermal energy to the IPCC working group which evaluated the global potential of renewable energy.

Professor Tester is a fellow of the Royal Society of Chemistry. In 2011 Dr. Tester received the Special Achievement Award, Geothermal Resources Council.

He has published extensively in the energy field having co-authored over 280 research papers and 12 books, including two books on geothermal energy technology and a popular energy textbook --Sustainable Energy – Choosing Among Options.

He has served on the advisory boards for the National Renewable Energy Laboratory, Idaho National Laboratory, Los Alamos National Laboratory, and the American Council on Renewable Energy.

Far too often the positive attributes of geothermal energy are undervalued or even omitted in the national conversation about transforming our energy system to a more environmentally sustainable future where cleaner, renewable energy technologies will replace much of our current fossil energy use.

Geothermal's ability to provide both base load electricity and heat that can be scaled to have national impact is critically needed to achieve that transformation. And increasing the role of geothermal in an integrated energy systems approach for the US complements rather than competes with other renewables, including bioenergy and intermittent sources such as wind and solar.

I believe that geothermal needs to be much more aggressively pursued as a key component of our national energy strategy with increasing roles for geothermal power generation, district heating, and geothermal heat pumps.

As a GRC board member, I will work to increase the visibility of geothermal nationally as a significant clean and reliable option for the United States. In addition, my role as an academic member of the board will help provide balance, with appropriate focus on the importance of the GRC's involvement in the education and training of the next generation of geothermal leaders.

Jon Trujillo



Jon Trujillo has served on the Geothermal Resource Council's board of directors for the past two years. During this time he initiated the Southern California GRC section (with lots of help). The group is a local coalition of over 110 individuals representing private industry, local and state government and regulatory agencies. The section's goals include aligning the local geothermal industry, promoting growth of the industry, serving as a networking forum, collaborating on common challenges and generating public awareness.

Jon is currently on the GRC's executive committee and leads the membership committee. In 2017 and 2018 the GRC welcomed Will Pettitt (the new executive director), merged with the GEA (our industry lobbying group) and finally had a balanced budget. Jon would like to build upon these experiences with another term on the board for the betterment and growth of the GRC.

As CalEnergy's (Berkshire Hathaway Energy) geothermal resource manager, Jon oversees drilling operations, resource management and the facilities' non-hazardous landfill. CalEnergy produces 338 megawatts at the Salton Sea geothermal resource in Southern California. Jon has worked in the geothermal industry and with CalEnergy for ten (10) years. His professional experience also includes mineral exploration in Latin America and geologic modeling. Beyond his technical experience, Jon has taken graduate courses in finance, accounting and organizational behavior.

Mr. Trujillo obtained a B.S. in Geology & Geophysics from the University of Missouri – Rolla (currently Missouri University of Science and Technology) in 2002 and spent two years focusing on isotope geochemistry and igneous tectonics at Virginia Tech's geosciences graduate program. The business courses noted above were taken at the Harvard University Extension School.

Jon's goals are to (1) develop an organizational voice with active support that furthers our industry in the Western US and positively impacts our industry worldwide; (2) create more opportunities for collaboration, including technical advances, workforce needs, and bridging related industries; and (3) grow the GRC so we are better serving our members and remain financially sensible.

Maxwell Wilmarth



Maxwell Wilmarth is Geoscience Manager for Jacobs Engineering in Indonesia where he is responsible for exploration and resource development at multiple greenfields as well as expansion of clients' operating geothermal fields.

Previous to his work with Jacobs, Mr. Wilmarth's career in the geothermal industry spanned more than 10 years with geothermal developers, operators, and consulting companies on five continents and numerous countries including substantial work in California, Nevada, Oregon, Chile, New Zealand, Samoa, Armenia, Turkey, Kenya, Djibouti and Indonesia.

Mr. Wilmarth has published papers on a variety of topics including case studies, power density resource capacity estimation, permeability mapping and others. His involvement with the GRC has been long and substantial and includes serving on the Membership Committee, presenting at Annual Meetings, and teaching multiple pre-Meeting workshop courses.

Mr. Wilmarth has bachelor's and master's degrees in Geology and Earth and Planetary Science from the University of California, Berkeley. He is originally from Santa Rosa, Calif.

If elected, Mr. Wilmarth would like to continue to expand the membership of the GRC internationally, especially in Indonesia where he can effectively act as a bridge to the Indonesian geothermal community.

Jeff Witter



Dr. Jeff Witter is a geothermal geoscientist with over thirteen years of industry experience. His geothermal work includes projects in Alaska, Yukon, the Northwest Territories, British Columbia, Nevada, and New Mexico.

From 2008-2010, he led the exploration program at Sierra Geothermal Power Corp. which resulted in a \$10 million grant award through the U.S. Department of Energy Innovative Exploration Technologies program.

Over the past several years, as a geothermal consultant, Jeff has provided services to clients in

government and private industry in both Canada and the U.S.

Currently, he is Principal Geoscientist at Innovate Geothermal Ltd., a geothermal consulting firm in Vancouver, Canada. For the last five years, Jeff has served on the geothermal technical advisory committee for Geoscience BC, a non-profit that pursues natural resource initiatives for British Columbia and he has been an adjunct professor of geology at Simon Fraser University since 2016.

Jeff has a Master's degree from the University of Hawaii, a doctorate from the University of Washington and is a registered professional geoscientist (PGeo) with Engineers and Geoscientists of British Columbia.

I have been an active member of the GRC since 2008. I am running for re-election to the GRC Board of Directors to help guide the future course of this outstanding geothermal energy organization. I have served on the GRC Board's budget, membership, and branding committees and I am confident that my experience, communication skills, and positive energy will continue to serve GRC well.

Shigeto Yamada



I am a mechanical engineer with over 35 years' experience in geothermal power plant projects at Fuji Electric Co., Ltd., a supplier of geothermal power plants worldwide.

I have been on the GRC Board since 2003. In addition, I have been on the IGA Board twice of two terms 2004-2007, 2007-2010, 2013-2016 and 2016-2019 and also on the GRSJ, Geothermal Research Society of Japan since 2014.

Through my experiences on both geothermal power projects as well as activities relating to the associations, I believe that I could fortunately establish various geothermal friends worldwide, which would help GRC's International activities.

If elected, I will contribute to the GRC's activities especially in the international relationship based on my abundant experiences of worldwide projects and through the international associations.

Katherine "Kate" Young



GRC's primary goal is one of education and outreach. As a GRC board member, I have played an active role as the outreach chair, developing the state outreach flyers, instituting the young and growing geothermal ambassador program, and leading the strategic planning committee. As a director, I have recently partnered with the International Geothermal Association to develop a global initiative to drive down the cost of geothermal drilling.

My goal, if elected, is to continue to push to help make geothermal a part of the renewable conversation and the grid of the future. I am excited about the opportunity to utilize my past experiences in helping to further the GRC's goals, targeting varied audiences: power purchasers, utilities, communities, investors, and the present and future geothermal industry members. Thank you for your vote!

Ms. Young is the geothermal program manager at the National Renewable Energy Laboratory, where their team is focused on driving down the cost of geothermal deployment. She has been at NREL since 2008 focusing her research on geothermal drilling analyses, regulatory and permitting concerns, and geothermal resource reporting methodologies. Ms. Young has developed innovative tools, such as the Geothermal exploration and area case histories on OpenEI (<http://en.openei.org/wiki/Gateway:Geothermal>), a wiki-based, crowd-sourced information sharing Website; and the Regulatory and Permitting Information Desktop (RAPID) Toolkit (<http://en.openei.org/wiki/RAPID>), a collection of publicly available information about permits and regulations affecting energy and bulk

transmission project development. The resource is intended to facilitate communication between project developers and agency personnel, among agencies at all jurisdictional levels, and among all project stakeholders - including the public. She has also led the multi-lab effort to develop the Geothermal Resource Portfolio Optimization and Reporting Tool (GeoRePORT) (<https://openei.org/wiki/GeoRePORT>), a quantitative, objective method for reporting resource grade and project progress to allow increased investor understanding and confidence.

Previously, Ms. Young worked as a water engineer for Martin and Wood in the state of Colorado. During this time, she located, designed, & performed construction observation of sedimentary and fractured-rock aquifer water wells, developed MODFLOW groundwater models for dewatering analysis, designed and implemented water quality testing programs, and aided in project permitting. As part of this work, Ms. Young also conducted historical use analyses for change of use of water rights for water court applications, and testified as an expert witness in water court cases in deposition and in water court. She served as the lead expert witness for the prevailing objectors in the landmark Colorado water court case (02CW403). The decision was later upheld by the Colorado Supreme Court.

Katherine Young received a bachelor's degree in geological engineering and geology from the University of Wisconsin in Madison and a masters' degree in Geochemistry from the University of Michigan in Ann Arbor. She has also worked as a field engineer for Schlumberger Dowell, a geology instructor, and a database software designer, developer, and trainer.

