

Curriculum Vitae

Erika GASPERIKOVA

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Research Interest

Electrical and electromagnetic methods (EM), potential-field methods, and joint seismic and EM interpretations with applications in environmental and groundwater exploration, carbon dioxide (CO₂) sequestration, and natural resources exploration

Education

- **Ph.D.** Engineering Geoscience, University of California, Berkeley, 1999
- **M.S.** Geophysics, University of Utah, Salt Lake City, 1996
- **RNDr.** Applied Geophysics, Hydrology, and Engineering Geology, Comenius University, Bratislava, 1990

Awards and Fellowships

- **2017**, LBNL Spot Recognition Award
- **2016**, Certificate of Appreciation, LBNL Emergency Response Organization
- **2015**, Geothermal Resources Council Best Presentation Award
- **2015**, LBNL Spot Recognition Award
- **2011**, Geothermal Resources Council Best Presentation Award
- **2007**, R&D100 award for Berkeley UXO Discriminator (BUD) from R&D100 Magazine
- **2004**, SERDP Project-of-the-year award for detection and discrimination of buried metallic objects
- **1999**, Jane Lewis Fellowship, University of California at Berkeley
- **1995**, Jane Lewis Fellowship, University of California at Berkeley

Professional Experience

- **2002 – Present.** Lawrence Berkeley National Laboratory. Research Scientist: Work on investigation of geophysical techniques for carbon dioxide (CO₂) monitoring; work on hybrid MRS-TEM system for groundwater exploration; magnetotelluric (MT) and CSEM data processing and interpretation; work on electric and electromagnetic methods in geothermal exploration and environmental remediation; work on detection and classification of buried metallic objects; design and implementation of an interactive textbook.
- **1999 – 2002.** University of California at Berkeley. Visiting Postdoctoral Researcher and Associate Specialist: Work on numerical modeling of seismic and electromagnetic responses of petroleum reservoirs; work on detection and classification of buried metallic objects; work on implementation of NFIP for mining industry; design and implementation of an interactive textbook on the web for “Introduction to Applied Geophysics” (<http://appliedgeophysics.berkeley.edu>).
- **1995 – 1999.** University of California at Berkeley. Research Assistant: Work on mapping of induced polarization using natural fields (NFIP).
- **1998.** Chevron. Summer Internship: Work on MT modeling of Gulf of Mexico prospects.
- **1997 and 1998.** PBG – Geophysical Exploration Company, Poland. Training for MT field data acquisition, processing, modeling and inversion.
- **1997.** Fifth Geological Survey Division of CNPC, China. Training for MT data processing, modeling and inversion.

- **1993 – 1995.** University of Utah Research Institute. Research assistant: Work on borehole-to-surface DC resistivity imaging project in Ferron sandstone in Central Utah, and work on an application of TEM methods in studies of desert basin hydrology.

Publications in Archival Journals and Book Chapters

- Morrison, H.F. and **E. Gasperikova**, The Berkeley Course in Applied Geophysics - interactive textbook on the web: <http://appliedgeophysics.berkeley.edu>.
- Gasperikova, E.** and H.F. Morrison, 2018, Fundamentals of Electrical and Electromagnetic Techniques for CO₂ Monitoring. In: Geophysical monitoring for geologic carbon sequestration, L.Huang (Ed.), AGU Wiley, in review.
- Gasperikova, E.** and M. Commer, 2018, Electrical and Electromagnetic Methods. In: Geophysics and CCS, Editors: Davis, T. and Landro, M., Cambridge University Press book, in press.
- Dobson, P., **E. Gasperikova**, N. Spycher, N. Lindsey, T-R. Guo, W. S. Chen, Ch. H. Liu, Ch-J. Wang, and S-N. Chen, 2018, Conceptual Model of the Tatun Geothermal System, Taiwan, *Geothermics*, 74, 273-297.
- Verliac, M., T. Daley, P. Ringrose, M. Dean, O. Eiken, **E. Gasperikova**, W. Harbert, M. Landro, D. Lawton, R. Pevsner, and D. White, 2017, Geophysical monitoring of CO₂ injection back on the agenda and more relevant than ever, *First Break*, 35.
- Siler, D.L., Zhang, Y., Spycher, N.F., Dobson, P.F., McClain, J.S., **Gasperikova, E.**, Zierenberg, R.A., Schiffman, P., Ferguson, C., Fowler, A., Cantwell, C., 2017, Play-fairway analysis for geothermal resources and exploration risk in the Modoc Plateau region, *Geothermics*, 69, 15-33, ISSN 0375-6505, <https://doi.org/10.1016/j.geothermics.2017.04.003>.
- Gasperikova, E.**, G. K. Rosenkjær, K. Arnason, and G. A. Newman, 2015, Resistivity Characterization of the Krafla and Hengill Geothermal Fields through 3D MT Inverse Modeling, *Geothermics*, 57, 246–257.
- Rosenkjær, G. K., **E. Gasperikova**, K. Arnason, and G. A. Newman, 2015, Appraising 3D MT Resistivity Inverse: Case Studies -- Krafla and Hengill Geothermal Fields, *Geothermics*, 57, 258-274.
- Gasperikova, E.**, Hubbard, S.S., Watson, D., Baker, G. S., Peterson, J. E., Kowalsky, M. K., Smith, M, and Brooks, S., 2012, Long-term electrical resistivity monitoring of recharge-induced contaminant plume behavior: *Journal of Contaminant Hydrology*, 142-143, 33-49.
- Kappler, K. N. and **Gasperikova, E.**, 2011, A hybrid method for UXO vs. non-UXO discrimination: *Journal of Environmental and Engineering Geophysics*, 16, 177-189.
- Kowalsky, M. B., **Gasperikova, E.**, Finsterle, S., Watson, D., Baker, G., and Hubbard, S. S., 2011, Coupled modeling of hydrogeochemical and electrical resistivity data for exploring the impact of recharge on subsurface contamination: *Water Resources Research*, 47, W02509, doi:10.1029/2009WR008947.
- Gasperikova, E.**, Smith, J.T., Morrison, H.F., Becker, A., and Kappler, K., 2009, UXO detection and identification based on intrinsic target polarizabilities: *Geophysics*, 74, B1-B8.
- Gasperikova, E.**, and Chen, J., 2009, A resolution study of nonseismic geophysical monitoring tools for monitoring of CO₂ injection into coal beds. In: *Carbon Dioxide Capture for Storage in Deep Geologic Formations - Results from the CO₂ Capture Project Vol 3: Advances in CO₂ Capture and Storage Technology - Results (2004 - 2009)*, L.I.Eide (Ed.), CPLPress Newbury, UK. ISBN 9781872691497.
- Gasperikova, E.**, and Hoversten, M., 2008, Gravity monitoring of CO₂ movement during sequestration: *Model Studies: Geophysics*, 73, WA105-WA112.
- Newman, G. A., **Gasperikova, E.**, Hoversten, G. M., and Wannamaker, P. E., 2008, 3D Magnetotelluric characterization of the Coso Geothermal Field, *Geothermics*, 37, 369-399.
- Kieke, D., Imbus, S., Cohen, K., Galas, Ch., **Gasperikova, E.**, Pickles, W., and Silver, E., 2008, The CO₂ Capture Project Phase 2 (CCP2) Storage Program: Progress in Geological Assurance in Unmineable Coal Beds: *Energy Procedia*, GHGT-9, Elsevier.
- Gasperikova E.**, and Beard, L.P., 2007, Geophysics Applied to Detection and Discrimination of Unexploded Ordnance, *Journal of Applied Geophysics*, 61, 165-167.
- Gasperikova E.**, and Hoversten G.M., 2006, A feasibility study of non-seismic geophysical methods for monitoring geologic CO₂ sequestration: *The Leading Edge*, 25, 1282-1288.

- Hoversten G.M., Cassassuce F., **Gasperikova E.**, Newman G.A., Chen J., Rubin Y., Hou Z., and Vasco D., 2006, Direct reservoir parameter estimation using joint inversion of marine seismic AVA and CSEM data: Geophysics, Vol. 71, p. C1–B13.
- Sherlock, D., Toomey, A., Hoversten, G.M., **Gasperikova, E.**, and Dodds, K., 2006, Gravity monitoring of CO₂ storage in a depleted gas field: A sensitivity study: Geophysical Exploration, Butsuri-Tansa, 59, 37-43.
- Gasperikova E.**, Cuevas N.H., and Morrison H.F., 2005, Natural field induced polarization for mapping of deep mineral deposits: A field example from Arizona: Geophysics, Vol. 70, p. B61–B66.
- Hoversten, G.M. and **Gasperikova, E.**, 2005, Non-seismic Geophysical Approaches to Monitoring, Chapter 23, in Carbon Dioxide Capture for Storage in Deep Geologic Formations - Results from the CO₂ Capture Project, Volume 2: Geologic Storage of Carbon Dioxide with Monitoring and Verification, D.C. Thomas ed., Elsevier Ltd., The Neatherlands, pp.1071-1112.
- Hoversten, G.M., Newman, G., Morrison, H.F., **Gasperikova, E.**, and Berg, J., 2001. Reservoir characterization using crosswell electromagnetic inversion: A feasibility study for the Snorre Field, North Sea: Geophysics, 66, 1177-1189.
- Gasperikova, E.**, and Morrison, H.F., 2001. Mapping of induced polarization using natural fields: Geophysics, 66, 137-147.
- Smith, J.T., Hoversten, G.M., **Gasperikova, E.**, Morrison, H.F., 1999. Sharp boundary inversion of 2-D magnetotelluric data: Geophysical Prospecting, Vol. 47, p. 469-486.
- Gasperikova, E.**, Frangos, W., Tripp, A.C., Wright, P.M., 1994. A Borehole-to-Surface DC Resistivity experiment, Transactions, Vol. 18, October 1994, p. 185-190.

Patents

- U.S. Patent US-2009-0219027-A1: Multi-Sensor System for the Detection and Characterization of Unexploded Ordnance.
- U.S. Patent 2014-057, A Hybrid MRS-TEM System for Mapping Shallow Aquifers.

Conference and Symposium Proceedings

- Warren, I., **E. Gasperikova**, and S. Pullammanappallil, 2018, Passive Seismic Emission Tomography Applied to Mapping of Geothermal Permeability, Geothermal Resources Council Transactions, 42.
- Glen, J.M., L. Liberty, J. Peacock, **E. Gasperikova**, T. Earney, W. Schermerhorn, D. Siler, J. Shervais, A Geophysical Characterization of the Structural Framework of the Camas Prairie Geothermal System, southcentral Idaho, Geothermal Resources Council Transactions, 42.
- Shervais, J.W., Glen, J.M., Siler, D., DeAngelo, J., Liberty, L.M., Nielson, D.L., Garg, S., Neupane, G., Dobson, P., **Gasperikova, E.**, Sonnenthal, E., Newell, D.L., Evans, J.P., Snyder, N., Mink, L.L., 2018, Geothermal Play Fairway Analysis, Phase 3: A Provisional Conceptual Model of the Camas Prairie, Snake River Plain, Idaho, Geothermal Resources Council Transactions, 42.
- Warren, I., **E. Gasperikova**, S. Pullammanappallil, and M. Greal, 2018, Mapping Geothermal Permeability Using Passive Seismic Emission Tomography Constrained by Cooperative Inversion of Active Seismic and Electromagnetic Data, Proceedings: Workshop on Geothermal Reservoir Engineering, 43.
- Shervais, J.W., Glen, J.M., Siler, D., DeAngelo, J., Liberty, L.M., Nielson, D.L., Garg, S., Neupane, G., Dobson, P., **Gasperikova, E.**, Sonnenthal, E., Newell, D.L., Evans, J.P., Snyder, N., 2018, Provisional Conceptual Model of the Camas Prairie (ID) Geothermal System from Play Fairway Analysis, Proceedings: Workshop on Geothermal Reservoir Engineering, 43.
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- Garg, S.K., **Gasperikova, E.**, Shervais, J.W., Nielson, D.L., 2017, Mountain Home Geothermal Area: Natural State Model, Geothermal Resources Council Transactions, 41, 2731-2742.
- Shervais, J.W., Glen, J.M., Nielson, D.L., Garg, S., Liberty, L.M., Siler, D., Dobson, P., **Gasperikova, E.**, Sonnenthal, E., Neupane, G., DeAngelo, J., Newell, D.L., Evans, J.P., Snyder, N., 2017, Geothermal Play

- Fairway Analysis of the Snake River Plain: Phase 2. Geothermal Resources Council Transactions, 41, 2328-2345.
- Gasperikova E.**, X. Yang, T. Buscheck, K. Mansoor, S. Carroll, Z. Wang, R. Dilmore, W. Harbert, L. Huang, K. Gao, T. Chen, M. Zhang, D. Appriou, C. Strickland, C. Brown, Y-M. Yang, C. Yonkofski, T. Johnson, J. Burghardt, Q. Zhou, J. Birkholzer, T. Daley, 2017, National Risk Assessment Partnership - Strategic Monitoring for Uncertainty Reduction, Mastering the Subsurface Through Technology Innovation, Partnerships and Collaboration: Carbon Storage and Oil and Natural Gas Technologies Review Meeting, Pittsburgh, PA.
- Glen, JMG, Liberty, L, **Gasperikova, E**, Siler, D, Shervais, JW, Ritzinger, B, Athens, N, Earney, T, 2017, Geophysical Investigations and Structural Framework of Geothermal Systems in west and southcentral Idaho; Camas Prairie to Mountain Home. PROCEEDINGS, 42nd Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, February 13-15, 2017, SGP-TR-212.
- Yang, Y.M., Dilmore, R.M., Daley, T.M., Carroll, S., Mansoor, K., **Gasperikova, E.**, Harbert, W., Wang, Z., Bromhal, G.S., and Small, M.J., 2016. Spatial and Temporal Monitoring Resolutions for CO₂ Leakage Detection at Carbon Storage Sites, AGU, San Francisco, CA.
- Dobson, P., **E. Gasperikova**, N. Spycher, N. Lindsey, T-R. Guo, W. S. Chen, Ch. H. Liu, Ch-J. Wang, and S-N. Chen, 2015, Conceptual Model of the Tatun Geothermal System, Taiwan: International Conference on Geothermal Energy in Taiwan, Taipei, Taiwan.
- Shervais, J. W., J. M. Glen, L. M. Liberty, P. Dobson, **E. Gasperikova**, E. Sonnenthal, Ch. Visser, D. Nielson, S. Garg, J. P. Evans, D. Siler, J. DeAngelo, N. Athens, E. Burns, 2015, Snake River Plain Play Fairway Analysis – Phase 1 Report. Geothermal Resources Council Transactions, 39.
- McClain, J., P. Dobson, C. Cantwell, M. Conrad, C. Ferguson, A. Fowler, **E. Gasperikova**, W. Glassley, S. Hawkes, P. Schiffman, D. Siler, N. Spycher, C. Ulrich, Y. Zhang, R. Zierenberg, 2015, Play Fairway Analysis Applied to Geothermal Exploration: A Transition between Extension-Hosted and Volcanically Hosted Geothermal Fields: Geothermal Resources Council, Reno, NV.
- Nielson, D. L., Shervais, J. W., Evans, J. P., Liberty, L., Garg, S. K., Glen, J., Visser, Ch., Dobson, P., **Gasperikova, E.**, Sonnenthal, E., 2015, Geothermal Play Fairway Analysis of the Snake River Plain, Idaho: Proceedings, Fortieth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, CA, SGP-TR-204.
- Shervais, J. W., Evans, J. P., Liberty, L., Nielson, D. L., Garg, S. K., Glen, J., Visser, Ch., Dobson, P., **Gasperikova, E.**, Sonnenthal, E., 2014, Geothermal Play Fairway Analysis of the Snake River Plain, Idaho: Geothermal Resources Council, Portland, OR.
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- Bertrand, E. A., Lindsey, N. J., Caldwell, T. G., Newman, G. A., and **Gasperikova, E.**, 2014, Comparison of 3-D resistivity inversion models of MT array data (200+ sites) in the Taupo Volcanic Zone, New Zealand: EM Induction workshop, Weimar, Germany.
- Haijiang, Z., **E. Gasperikova**, B. Parker, A. Tryggvason, O. Gudmundsson, T. Seher, G. Newman, M. Fehler, and K. Arnason, 2012, Advanced 3D Geophysical Imaging Technologies for Geothermal Resource Characterization: Geothermal Resources Council, Reno, NV.
- Gasperikova, E.**, G. Newman, M. Hoversten, M. Ryan, J. Kauahikaua, N. Cuevas, M. Commer, 2012, Kilauea Volcano 3D Imaging using Magnetotelluric Data: AGU Chapman conference, Hawaii.
- Gasperikova, E.**, G. K. Rosenkjær, K. Arnason, and G. A. Newman, 2013, 3D MT Characterization of Geothermal Fields in Iceland: Advanced 3D Geophysical Imaging Technologies for Geothermal Resource Characterization, Workshop in Iceland.

- Gasperikova, E.**, V. Vytla, and A. Ratti, 2013, Near-real time discrimination with a hand-held UXO discriminator at the former Spencer Artillery Range, TN, SAGEEP, Denver.
- Gasperikova, E.**, J. T. Smith, Kappler, K., H. F. Morrison, A. Becker, 2011, Design and performance of a hand-held UXO discriminator, Society of Exploration Geophysicists Annual Meeting, San Antonio, TX.
- Gasperikova, E.**, V. Vytla, T. Jobe, L. Kennedy, and X. Zhu, 2011, Cued survey with a hand-held UXO discriminator at Camp Beale, CA: Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Gasperikova, E.**, R. Salve, D. Rempe, and J. Peterson, 2011, Investigating hillslope hydrology with electrical resistivity tomography, SAGEEP, Charleston, NC.
- Gasperikova E.**, G. Newman, D. Feucht, and K. Arnason, 2011, 3D MT characterization of two geothermal fields in Iceland: Geothermal Resources Council, San Diego, CA
- Gasperikova, E.**, G. Newman, D. Feucht, and K. Arnason, 2011, Using 3D MT inversion to better understand Iceland geothermal systems: AGU.
- Gasperikova, E.**, Kowalsky, M., Hubbard, S., Peterson, J., Baker, G., Modi, A., Smith, M., Watson, D., 2010, Long-term time-lapse surface and borehole resistivity monitoring of contaminant plume migration, Society of Exploration Geophysicists Annual Meeting, Denver, CO.
- Gasperikova, E.**, J. T. Smith, Kappler, K., H. F. Morrison, A. Becker, 2010, Hand-held UXO discriminator design and performance, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Kelley, B., **Gasperikova, E.**, Ajo-Franklin, J., Butler-Veytia, B., Wu, Y., Peterson, J., and Hubbard, S.S., 2010, Geophysical Imaging for Investigating the Delivery and Distribution of Amendments in the Heterogeneous Subsurface, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Hubbard, S., Watson, D., Baker, G., Chen, J., Kowalsky, M., **Gasperikova, E.**, Gaines, D., Smith, M., and Brooks, S., 2010, Hydrogeophysical Quantification of Plume-Scale Flow Architecture and Recharge Processes, Goldschmidt 2010, Knoxville, TN.
- Baker, G., Hubbard, S., Watson, D., **Gasperikova, E.**, Wu, Y., and Brooks, S., 2010, Time-Lapse Electrical Resistivity Tomography (ERT) Monitoring of in situ Hydrogeochemical Changes Associated with an Emulsified Vegetable Oil Injection for Bioreduction of Uranium(VI), Goldschmidt 2010, Knoxville, TN.
- Gasperikova, E.**, 2009, Non-seismic geophysical techniques for CO₂ monitoring, Society of Exploration Geophysicists Summer Research Workshop, Banff, Canada, August 23-27, 2009.
- Hubbard, S.S., G. Baker, J. Chen, M. Kowalsky, **E. Gasperikova**, D. Gaines, A. Modi, D. Watson and P. Jardine, 2009, Quantification of Flow Architecture and Recharge Processes at the Watershed Scale using Joint Hydrogeophysical Inversion Approaches, AGU,90(22), Jt. Assem. Suppl., Abstract IA32A-01.
- Hubbard, S.S., Kelley, B., Butler-Veytia, B., Ajo-Franklin, J., Wu, Y., and **Gasperikova, E.**, 2009, Geophysical Imaging for Investigating the Delivery and Distribution of Amendments in the Heterogeneous Subsurface of the F. E. Warren Air Force Base, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Kowalsky, S. Finsterle, **E. Gasperikova**, G. Moridis, and S.S. Hubbard, 2009, Hydrogeophysical approaches with the TOUGH family of codes. In: Moridis, G., C. Doughty, S. Finsterle, and E. Sonnenthal (eds.), Proceedings of the TOUGH Symposium 2009 (LBNL-2790E), LBNL, Berkeley, CA.
- Gasperikova, E.**, Zhang, Y., and Hubbard, S., 2008, Using self potential and multiphase flow modeling to optimize groundwater pumping, AGU, San Francisco.
- Gasperikova, E.**, J. T. Smith, Kappler, K., H. F. Morrison, A. Becker, 2008, Advances in UXO discrimination, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Zhang, Y., Finsterle, S., **Gasperikova, E.**, and Hubbard, S., 2008, Time-Dependent Riverbed Clogging and its Impact on Groundwater Pumping AGU, San Francisco.
- Modi, A., Baker, G.S., Hubbard, S.S., **Gasperikova, E.**, Gaines, D.P., Watson, D., and Jardine, P., 2008, Using high-resolution, surface time-lapse electrical resistivity tomography to characterize and monitor subsurface hydrological processes, Eos. Trans. AGU 89(53), Fall Meeting Suppl., Abstract H53E-1116.

- Gasperikova, E.**, Smith, J.T., Morrison, H.F., Becker, A., and Kappler, K., 2008, UXO discrimination using a multiple-component AEM system: SEG Expanded Abstracts.
- Gasperikova, E.**, Smith, J.T., Morrison, H.F., and Becker, A., 2008, UXO Identification Using Berkeley UXO Discriminator (BUD), IEEE International Geoscience & Remote Sensing Symposium, Boston, MA.
- Gasperikova, E.**, 2008, A resolution study of non-seismic geophysical monitoring tools for CO₂ Enhanced CBM Production, Seventh Annual Conference on Carbon Capture and Sequestration, Pittsburgh, PA.
- Gasperikova, E.**, Morrison, H.F., Smith, J.T., and Becker, A., 2007, Berkeley UXO Discriminator (BUD) at Camp Sibert, AL, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Gasperikova, E.**, Morrison, H.F., Smith, J.T., and Becker, A., 2007, BUD Results from ESTCP Demonstration Sites, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Gasperikova, E.**, Smith, J.T., Morrison, H.F., and Becker, A., 2007, UXO Detection and Discrimination with Berkeley UXO Discriminator (BUD), UXO Forum, Orlando, FL.
- Gasperikova, E.**, Morrison, H.F., Smith, J.T., and Becker, A., 2007, Berkeley UXO Discriminator (BUD), SAGEEP Proceedings, 1049-1055.
- Gasperikova E.**, Hoversten, G.M., and Benson, S.M., 2006, Feasibility Study of Seismic Detection of Small Accumulations of Carbon Dioxide in the Subsurface, NETL, Washington D.C.
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- Gasperikova, E.**, Morrison, H.F., Smith, J.T., and Becker, A., 2005, LBNL Optimized Multisensor System for the Detection and Classification of UXO, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Gasperikova, E.**, Morrison, H.F., Smith, J.T., and Becker, A., 2005, LBNL Optimized Multisensor System for the Detection and Classification of UXO, SERDP/ESTCP/NAOC Technology Transfer Workshop, Aberdeen MD.
- Gasperikova, E.**, Becker, A., Morrison, H. F. and Smith, J. T., 2005, A multisensor system for the detection and characterization of UXO, SAGEEP Proceedings, 1236-1243.
- Hoversten, G. M., **Gasperikova, E.** and Benson, S. M., 2005, Theoretical limits for seismic detection of small accumulations of carbon dioxide, LBNL-59080 Ext. Abs. 8th International Conference on Greenhouse Gas Control Technologies (GHGT-8), IEA Greenhouse Gas, Trondheim, Norway.
- Newman, G., Hoversten, G.M., **Gasperikova, E.**, and Wannamaker, P. E., 2005, 3D Magnetotelluric characterization of the COSO Geothermic Field, LBNL-58328. 30th Workshop on geothermal reservoir engineering, Stanford University, Stanford, California. SGP-TR-176.
- Gasperikova, E.**, Hoversten, G.M., and Cassassuce, F., 2004, A feasibility study of geophysical methods for monitoring geologic CO₂ sequestration, SEG Expanded Abstracts, pp. 1567-1570
- Benson, S. M., Hoversten, G.M., **Gasperikova, E.**, and Haines, M., 2004, "Monitoring Protocols and Life-Cycle Costs for Geologic Storage of Carbon Dioxide," In, E.S. Rubin, D.W. Keith and C.F. Gilboy (Eds.), Proceedings of 7th International Conference on Greenhouse Gas Control Technologies (GHGT-7), IEA Greenhouse Gas Programme, Vancouver, BC, 1259-1265.
- Gasperikova, E.**, 2003. A new-generation EM system for the detection and classification of buried metallic objects: SEG Expanded Abstracts, pp. 2379-2382.
- Hoversten, G. M., Newman, G. A., **Gasperikova, E.**, and Kauahikaua, J. P., 2002, Magnetotelluric investigations of the Kilauea volcano, Hawaii: AGU, San Francisco, December 6-10, F 1439.

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- Morrison, H.F., Becker, A., Smith, J.T., **Gasperikova, E.**, 2002. Detection and classification of buried metallic objects, EAGE Expanded Abstracts, Florence.
- Hoversten, G.M., Newman, G.A., **Gasperikova, E.**, Morrison, H.F., and Berg, J., 1999. Reservoir characterization using cross-well EM inversion: A feasibility study for the Snorre Field, North Sea, SEG Development & Production Forum, Kananaskis, Canada.
- Hoversten, G.M., Smith, J.T., **Gasperikova, E.**, Morrison, H.F., 1997. Sharp boundary inversion of 2D magnetotelluric data, EAGE Expanded Abstracts, Geneva, F023.
- Morrison, H.F., Nichols, E.A., Hoversten, G.M., **Gasperikova, E.**, 1997. Continuous magnetotelluric profiling, EAGE Technical abstracts, Moscow, B2.3.
- Morrison, H.F., and **Gasperikova, E.**, 1996. Mapping of induced polarization using natural fields, SEG Expanded Abstracts, Denver, p. 603-606.
- Gasperikova, E.**, Frangos, W., Tripp, A.C., and Wright, P.M., 1994. A Borehole-to-Surface DC Resistivity experiment, Geothermal Research Council.

Technical Reports

- Gasperikova, E.**, H.F. Morrison, and U. Conti, 2018, MBUD2 – Development and testing of a new version of MBUD for cued classification of marine UXO. SERDP MR-2321. Final Technical Report, LBNL-2001165.
- Zhang, Y., A. Agarwal, **E. Gasperikova**, T.M. Daley, and C.M. Oldenburg, 2018, Scenario Development for Monitoring of Leakage from Plugged and Abandoned CO₂ Wells, Carbon Dioxide Capture for Storage in Deep Geological Formations, Final Technical Report.
- Gasperikova, E.**, T. Daley, Z. Wang, R. Dilmore, W. Harbert, L. Huang, K. Gao, T. Chen, M. Zhang, D. Appiou, X. Yang, T. Buscheck, K. Mansoor, S. Carroll, C. Yonkofski, T. Johnson, J. Burghardt, C. Strickland, C. Brown, 2017, Geophysical Techniques for CO₂ Plume Monitoring. Technical report.
- Gasperikova, E.** and V. Vytla, 2015, MRS modeling and Berkeley Water Detector (BWD) field experiment. LBNL Report.
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- Morrison, H. F., **E. Gasperikova**, A. Ratti, 2014, A Hybrid MRS-TEM System for Mapping Shallow Aquifers.
- Gasperikova, E.** and H. F. Morrison, 2014, Spectral Self Potential Anomalies in Geothermal Fields, Technical Report.
- Gasperikova, E.**, 2014, Analysis of 2012-2013 MT data collected for SSP analysis and 2003 MT data at the Hawaiian National Park, Project Report.
- Gasperikova, E.**, V. Vytla, T. Jobe, L. Kennedy, and X. Zhu, 2012, Cued survey with a hand-held UXO discriminator at Camp Beale, CA: ESTCP Demonstration Report.
- Gasperikova, E.**, 2010, Demonstration Report: Hand-held UXO discriminator at the Aberdeen Proving Ground - SERDP Project MR-1667, Berkeley, CA, LBNL-4260E.
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- Morrison, H. F., Becker, A., Smith, J. T., **Gasperikova, E.**, 2003, 2002, 2001. Detection and classification of buried metallic objects, Annual Reports, SERDP.
- Hoversten, M., Newman, G., Morrison, H., **Gasperikova, E.**, Berg, J. I., 2000. Reservoir characterization using crosswell EM inversion: A feasibility study for the Snorre Field, North Sea, LBNL Report 46469.
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Invited Talks and Presentations

- Gasperikova, E.**, Dobson, P., Spycher, N., 2014, 3D resistivity structure and its impact on the Tatun conceptual model. In: Tatun volcano geothermal conceptual model forum, Taipei, Taiwan, December 2014.
- Gasperikova, E.**, G. K. Rosenkjær, K. Arnason, and G. A. Newman, 2013, 3D MT Characterization of Geothermal Fields in Iceland: Advanced 3D Geophysical Imaging Technologies for Geothermal Resource Characterization, Workshop in Uppsala.
- Gasperikova, E.**, H. Zhang, B. Parker, A. Tryggvason, O. Gudmundsson, T. Seher, G. A. Newman, M. Fehler, and K. Arnason, 2013, Advanced 3D Geophysical Imaging Technologies for Geothermal Resource Characterization, 2013 ESD Review.
- Gasperikova, E.**, 2011, Hand-held UXO discriminator, SERDP In-Progress review, Washington D.C.
- Gasperikova, E.**, J. T. Smith, Kappler, K., H. F. Morrison, A. Becker, 2011, Design and performance of a hand-held UXO discriminator, Society of Exploration Geophysicists Annual Meeting, San Antonio, TX.
- Gasperikova, E.**, 2010, Demonstration of the Berkeley UXO Discriminator (BUD) at live sites, ESTCP In-Progress review, Washington D.C.
- Gasperikova, E.**, 2010, Hand-held UXO discriminator, SERDP In-Progress review, Washington D.C.
- Gasperikova, E.**, J. T. Smith, Kappler, K., H. F. Morrison, A. Becker, 2009, BUD cued survey results from San Luis Obispo, CA, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Gasperikova, E.**, 2009, Non-seismic geophysical techniques for CO₂ monitoring, Society of Exploration Geophysicists Summer Research Workshop, Banff, Canada, August 23-27, 2009.
- Gasperikova, E.**, 2009, Demonstration of the Berkeley UXO Discriminator (BUD) at live sites, ESTCP In-Progress review, Washington D.C.
- Gasperikova, E.**, 2009, Detection and classification of buried metallic objects/Hand-held UXO discriminator, SERDP In-Progress review, Washington D.C.
- Gasperikova, E.**, Y. Zhang, and S. Hubbard, 2009, Using Self Potential and Multiphase Flow Modeling to Optimize Groundwater Pumping, HydroLunch Seminar, UC Berkeley.

- Gasperikova, E.**, Y. Zhang, and S. Hubbard, 2008, Using Self Potential and Multiphase Flow Modeling to Optimize Groundwater Pumping, AGU, San Francisco, CA.
- Gasperikova, E.**, J. T. Smith, H.F. Morrison, A. Becker, and K. Kappler, 2008, UXO discrimination using a multiple-component AEM system: SEG, Las Vegas
- Gasperikova, E.**, 2008, Hand-held UXO discriminator, Brief to SERDP Scientific Advisory Board, Washington D.C.
- Gasperikova, E.**, J. T. Smith, H. F. Morrison, A. Becker, 2008, UXO Identification Using Berkeley UXO Discriminator (BUD), IEEE International Geoscience & Remote Sensing Symposium, Boston, MA
- Gasperikova, E.**, J. T. Smith, H. F. Morrison, A. Becker, 2007, Berkeley UXO Discriminator (BUD) at Camp Sibert, AL, Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.
- Gasperikova, E.**, J. T. Smith, H. F. Morrison, A. Becker, 2007, UXO Detection and Discrimination with Berkeley UXO Discriminator (BUD), UXO Forum, Orlando, FL.
- Gasperikova, E.**, 2002, Invited speaker for the Departmental seminar, Department of Geology and Environmental Science, James Madison University.
- Gasperikova, E.**, 2001, Invited speaker for the Departmental seminar, Department of Geological Sciences, University of Idaho.
- Gasperikova, E.**, 1999, Invited speaker for the Departmental seminar, Department of Geology and Geophysics, Stanford University.

Professional affiliations

Society of Exploration Geophysicists (SEG)
 Bay Area Geophysical Society (BAGS)
 Near-Surface Geophysics (NSG)
 European Association of Geoscientists and Engineers (EAGE)
 American Geophysical Union (AGU)

Professional and Community Services

- Assistant Editor, Geophysics, 2018 - present
 - Associate Editor for Electrical and Electromagnetic Methods, Geophysics – 2011 - present
 - Special Issue Editor of Journal of Applied Geophysics – 2006
 - SERDP Peer Reviewer
 - Reviewer for: Geophysics; Geophysical Prospecting; Hydrogeology Journal; Near Surface Geophysics; Journal of Geophysical Research; Earth, Planets and Space
 - Reviewer for Journal of Environmental and Engineering Geophysics – 2002-2003
 - Reviewer for Pure and Applied Geophysics - 2002
 - Reviewer for AAPG – 2000
-
- President, Bay Area Geophysical Society (BAGS), 2017 - present
 - Society of Exploration Geophysicists Council Member, 2017 - present
 - Member, Research Committee, Society of Exploration Geophysicists (SEG), 2008 - present
 - Member, Organizing Committee, 2017 SEG/EAGE Summer Research Workshop on Geophysical Monitoring of CO₂ Storage and EOR Projects
 - Member, Organizing Committee, 2012 SEG/EAGE Summer Research Workshop on Low Frequencies
 - Member, Organizing Committee, 2012 SEG Workshop ‘Integration of Seismic and EM: Where do we stand?’
 - Co-chair and Member, Organizing Committee, 2011 SEG Workshop ‘Geophysics and Engineering: Convergence of Disciplines’
 - Chair and Organizer, 2011 SEG Workshop ‘Advances in Geothermal Systems Exploration, Characterization and Challenges Ahead’
 - Session Chairman and Technical Program Reviewer, 2010 SEG Annual Meeting

- Session Chairman and Technical Program Reviewer, SAGEEP Annual Meeting
- Colloquium Committee member, Department of Materials Science and Mineral Engineering, University of California at Berkeley, 1997-1998
- President of Student Section of the University of California-Berkeley Geophysical Society, 1995-1999

- Council member, The Best Practices Diversity Council– 2005-2013
- Chair, LBNL Childcare Committee – 2007-2008
- Chair, ESD Diversity Committee - 2005 to 2011
- Advisor, summer students
- Mentor, students and young scientists
- Role model, Middle School and High School TechBridge Program for girls at Chabot Space and Science Center
- Participant, Dinner with a Scientist for 4th and 5th grade students and teachers organized by Oakland Unified School District
- Feldenkrais Awareness Through Movement Employee Activity Association Club Leader and a Licensed Feldenkrais Practitioner
- Building 90 and 74 Emergency Team member