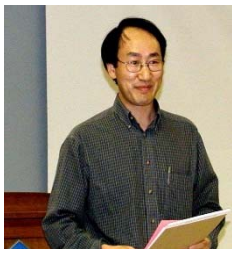
29 Prof. Yaoguo Li



Name:Yaoguo Li
Organization:Associate Professor of Geophysics. Director of CGEM, Department of Geophysics, Colorado School of Mines
E-mail: ygli@mines.edu

Education

1992: Ph.D., Geophysics, University of British Columbia, Vancouver, Canada

1983: B.A.Sc., Geophysics, Wuhan College of Geology, Wuhan, China

Work Experience

1999-present: Associate Professor, Department of Geophysics, Colorado School of Mines, Golden, CO

1993-1997: Research Associate, UBC-Geophysical Inversion Facility, Department of Earth and Ocean Sciences, University of British Columbia, Vancouver, B.C.

1992-1993: Post-doctoral Fellow, UBC-Geophysical Inversion Facility, Department of Geophysics and Astronomy, University of British Columbia, Vancouver, B.C.

1983-1985: Technician, Qinghai Research Institute of Geology, China

Research Interests

Joint inversion with petrophysical data

Efficient numerical algorithms for large scale geophysical inversions

Processing and inversion gravity gradiometry data with application to both petroleum and mineral exploration

Time-lapse (4D) monitoring of aquifers and reservoirs

Interpretation of magnetic data affected by remanent magnetization and self-demganetization

Services&Awards

2007: SERDP Project of the Year: MM-1414 Improving detection and discrimination of UXO in magnetic environments (Principal Investigator)

2005: Best Student Paper Award at 75th SEG Annual Meeting: Davis, K., Y. Li, and M. Nabighian, Automatic detection of UXO anomalies using extended Euler deconvolution, (advisor and co-author)

2005: December, Outstanding Teacher Award, graduating class and ASCSM

2004: Best Student Paper Award at 74th SEG Annual Meeting: Krahenbuhl, R., and Y. Li, Hybrid optimization for a binary inverse problem, (advisor and co-author)

2001: December, Outstanding Teacher Award, graduating class and ASCSM

2001: May, Outstanding Teacher Award, graduating class and ASCSM.

2000: Honorable Mention for the Best Paper in Geophysics, 1999, D. W. Oldenburg and Y. Li, Estimating depth of investigation in DC resistivity and IP surveys.

1999: Co-recipient, Gerald Hohmann Award for Excellence in Applied Electrical Methods.

1995: Honorable Mention for the Best Paper in Geophysics, 1994: D. W. Oldenburg and Y. Li, Inversion of induced polarization data.

Committee Responsibilities and Professional Activities

2011 to present: Associate Editor, Geophysics

2007: Technical Chair, Symposium on Geophysics in Engineering and Environment Problems (SAGEEP), Denver, Colorado

2006-present: Member, Graduate Council, CSM

2006-2009: Chair, Graduate Advisory Committee, Department of Geophysics, CSM

2004-2006: Chair, Undergraduate Advisory Committee, Department of Geophysics, CSM

1998-2006: Member of Editorial Board, Journal of Applied Geophysics

American Geophysical Union (AGU)

Society of Exploration Geophysicists (SEG)

Major Publications

H. Rim, and Y. Li. 2015. Advantages of borehole vector gravity in density imaging. Geophysics, 80, G1-G13,

Y. Li, M. Nabighian, and D. Oldenburg. 2014. Using an equivalent source with positivity for low-latitude reduction to the pole without striation. Geophysics, 79, J81-J90,

T. Irons, and Y. Li. 2014. Pulse and Fourier transform surface nuclear magnetic resonance: comprehensive modelling and inversion incorporating complex data and static dephasing dynamics. Geophysical Journal International, 199, 1372-1394,

J. Sun, and Y. Li. 2014. Adaptive Lp inversion for simultaneous recovery of both blocky and smooth features in a geophysical model. Geophysical Journal International, 197, 882-899

Q. Liang, C. Chen, and Y. Li. 2014. 3D inversion of gravity data in spherical coordinates with application to the GRAIL data. Journal of Geophysical Research: Planets, 119, 1359 - 1373,

S. Li, and Y. Li, 2014. Inversion of magnetic anomaly on rugged observation surface in the presence of strong remanent magnetization. Geophysics, 79, J11-J19,

E. Anderson, W. Zhou, Y. Li, M. Hitzman, T. Monecke, J. Lang, and K. Kelley. 2014. Three-dimensional distribution of igneous rocks near the Pebble porphyry Cu-Au-Mo deposit in southwestern Alaska: Constraints from regional-scale aeromagnetic data. Geophysics, 79, B63-B79,

T. Irons, M. Quinn, Y. Li, and J. McKenna. 2014. A numerical assessment of the use of surface nuclear magnetic resonance to monitor internal erosion and piping in earthen embankments Near Surface Geophysics, 12, 325-334,

N. Foks, R. Krahenbuhl, and Y. Li. Adaptive sampling of potential-field data: A direct approach to compressive inversion. Geophysics, 79, IM1-IM9

Y. Li, and J. Sun. Total magnetization vector inversion using guided fuzzy c-means clustering SEG Technical Program Expanded Abstracts 2014: pp 1285-1290

L. Foks, and Y. Li. Base of salt inversion using triangular facets.SEG Technical Program Expanded Abstracts 2014: pp 1291-1296