EUNSEO CHOI

(901) · 678 · 4923 ◇ echoi2@memphis.edu
Center for Earthquake Research and Information ◇ University of Memphis
http://www.ceri.memphis.edu/people/echoi2/

EDUCATION

Ph.D. in Geophysics
California Institute of Technology, Pasadena, CA, 2008.
Advisor: Michael Gurnis
Thesis title: *Computational approaches to localized deformation within the lithosphere and for crust-mantle interactions*
http://resolver.caltech.edu/CaltechETD:etd-09212008-122525

B.Sc. in Geology
Seoul National University, South Korea, 1999.
Advisor: Moonsup Cho
Thesis title: *Petrogenesis of Amphibolite in Yeon-cheon and Cheon-gok Area (South Korea).*

POSITIONS HELD

Associate Professor

- September 2018 - Present. Center for Earthquake Research and Information, University of Memphis,

Assistant Professor

- January 2013 - August 2018. Center for Earthquake Research and Information, University of Memphis,

Postdoctoral Research Scientist

- Institute for Geophysics, University of Texas, Austin, 2012.2 to 2012.12. Advisor: Luc Lavier
- Lamont-Doherty Earth Observatory of Columbia University, 2008.10 to 2012.1. Advisor: W. Roger Buck

RESEARCH INTERESTS

Overview of public projects on Open Science Framework

- https://osf.io/wd6jz/

On-going and recent research topics

- Faults formation and evolution associated with plate boundary processes.
- 3D structures at mid-ocean ridges including oceanic core complexes.
- Seismo-tectonics of intra-plate seismic zones
- Applying advances in computational techniques (e.g., adaptive mesh refinement, acceleration using co-processors) to DynEarthSol3D.
- Coupling tectonic models to surface processes (SNAC-CHILD coupling).

PUBLICATIONS

Journal articles

- Fadugba, O. I., E. Choi, and C. A. Powell (2019), Effects of Preexisting Structures on the Seismicity of the Charlevoix Seismic Zone, *J. Geophys. Res. Solid Earth*, 124(7), 2019JB017831, doi:10.1029/2019JB017831.
- Perrin, C., F. Waldhauser, E. Choi, and C. H. Scholz (2019), Persistent fine-scale fault structure and rupture development: A new twist in the Parkfield, California, story, *Earth Planet. Sci. Lett.*, 521, 128138, doi:10.1016/j.epsl.2019.06.010.
- Tian, X., and E. Choi (2017), Effects of axially variable diking rates on faulting at slow spreading mid-ocean ridges, *Earth Planet. Sci. Lett.*, 458, 14-21, doi:10.1016/j.epsl.2016.10.033.
- Logan, L. C., L. L. Lavier, E. Choi, E. Tan, and G. A. Catania (2016), Semi-brittle rheology and ice dynamics in DynEarthSol3D, *The Cryosphere*, 11, 117-132, doi:10.5194/tc-11-117-2017.
- Hong, T.-K., E. Choi, S. Park, and J. S. Shin (2016), Prediction of ground motion and dynamic stress change in Baekdusan (Changbaishan) volcano caused by a North Korean nuclear explosion, *Sci. Rep.*, 6, 21477, doi:10.1038/srep21477.
- Choi, E., and K. D. Petersen (2015). Making Coulomb angle-oriented shear bands in numerical tectonic models. *Tectonophysics*, 657, 94101. doi:10.1016/j.tecto.2015.06.026
- Wu, G., L. Lavier and E. Choi (2015). Modes of continental extension in a crustal wedge, *Earth Planet. Sci. Lett.*, 421, 89-97, doi:10.1016/j.epsl.2015.04.005.
- Ta, T., K. Choo, E. Tan, B. Jang and E. Choi (2015). Accelerating DynEarthSol3D on Tightly Coupled CPU-GPU Heterogeneous Processors, *Comp. & Geosci.*, 79, 27-37, doi:10.1016/j.cageo.2015.03.003.
- Feng, L., M. J. Bartholomew, E. Choi (2015). Spatial arrangement of dcollements as a control on development of thrust fault systems,*J. Struct. Geol*, 75, 49-59, doi:10.1016/j.jsg.2015.03.002.
- Choi, E., W. R. Buck, L. L. Lavier, and K. D. Petersen (2013), Using core complex geometry to constrain fault strength, *Geophys. Res. Lett.*, 40, doi:10.1002/grl.50732.
- Logan, L., Catania, G., Lavier, L., and Choi, E. (2013). A novel method for predicting fracture in floating ice. Journal of Glaciology, 59(216), 750758, doi:10.3189/2013JoG12J210.
- Choi, E., Tan, E., Lavier, L. L., and Calo, V. M. (2013). DynEarthSol2D: An efficient unstructured finite element method to study long-term tectonic deformation. Journal of Geophysical Research: Solid Earth, 116, doi:10.1002/jgrb.50148.
- Choi, E. and W. R. Buck (2012). Constraints on the Strength of Faults from the Geometry of Rider Blocks in Continental and Oceanic Core Complexes, *J. Geophys. Res.*, 117, B04410, doi:10.1029/2011JB008741.
- Choi, E., L. Seeber, M. S. Steckler, and R. Buck (2011). One-sided transform basins and inverted curtains: Implications for releasing bends along strike-slip faults, *Tectonics*, 30, TC6006, doi:10.1029/2011TC002943.
- Choi, E. and W. R. Buck (2010). Constraints on shallow mantle viscosity from morphology and deformation of fast-spreading ridges, *Geophys. Res. Lett.*, 37, L16302, doi:10.1029/2010GL043681.
- Choi, E. and M. Gurnis (2008). Thermally-induced brittle deformation in mid-ocean ridge systems, *Earth Planet. Sci. Lett.*, 269 (1-2), 259-270, doi:10.1016/j.epsl.2008.02.025.
- Choi, E., L. Lavier, and M. Gurnis (2008). Thermomechanics of the mid-ocean ridge segmentation, *Phys. Earth Planet. Int.*, 171, 374-386, doi:10.1016/j.pepi.2008.08.010.

- E. Tan, E. Choi, and others (2006). GeoFramework: Coupling multiple models of mantle convection within a computational framework, *Geochem. Geophys. Geosyst.*, 7, Q06001, doi:10.1029/2005GC001155.
- Choi, E. and M. Gurnis (2003). Deformation in transcurrent and extensional environments with widely spaced weak zones, *Geophys. Res. Lett.*, 30(2), 1076, doi:10.1029/2002GL016129.

TEACHING EXPERIENCE

- *Global Geophysics*: Undergraduate/graduate level course taught at U. of Memphis. http://www.ceri.memphis.edu/people/echoi2/ceri8211/.
- *Computational Methods for Geodynamics*: Graduate level course taught at U. of Memphis. http://www.ceri.memphis.edu/people/echoi2/ceri8315/.
- *Geodynamics*: Graduate level course at U. of Memphis. http://www.ceri.memphis.edu/people/echoi2/ceri8353/.
- *Honors Forum: How the Earth Works through Hands-on Experiments*: A course for freshman honors student. To be taught in Fall 2017.

STUDENT ADVISING

Chair of Graduate Student Committee

- Hee Choi, M.Sc., 2018-2019
- Arushi Saxena, Ph.D., 2016-present
- Hao Lu. Ph.D., 2016-present
- Xiaochuan Tian, M.Sc., 2014-2015
- Md. Sabber Ahamed, Ph.D., 2013-present

Undergraduate Mentoring

- Sungho Lee, Seoul National University. 2019.8.7 - present
- Julia Schwartz, The University of Memphis. 2019.5 - present
- Erika Storvick, William Jewell College. GLADE REU program, 2017.7-2017.8
- Hokyum Kim, Seoul National University. 2014.1-2015.1

RESEARCH GRANTS

- NSF EarthCube *Workshop proposal: Analog Modeling of Tectonic Processes 2020* ,March 22-24, 2020
- SCEC Award 18095 *The influence of rheology on post-seismic and interseismic deformation on rough faults* (PI: Eric Daub), 2018-2019
- FedEx Institute of Technology Corps of Research Scientists grant *Development of Online Course for High Performance Computing Best Practices* (PI: Nathan de Yonker), 2018-2020
- NSF MGG *Fully three-dimensional numerical models for along-axis variations in magmatic and tectonic processes at slow-spreading mid-ocean ridges* (PI: Choi), 3/15/17-3/14/19.
- NSF Earth Cube Building Blocks:*Collaborative Proposal: GeoTrust: Improving Sharing and Reproducibility of Geoscience Applications* (PI: Malik), 10/01/16-9/30/18.

- NSF Earth Cube *Earth System Bridge: Spanning Scientific Communities with Interoperable Modeling Frameworks* (PI: Pecham), 9/17/13-9/16/16.
- NSF EAR 12-27083 *Landslide dynamics from seismic wave inversion, satellite remote sensing, and numerical modeling* (PI: Ekstrom, G.; CO-PI: Choi, E. and Stark, C.), 9/1/12-8/31/15.
- NSF EAR 09-11565 *3D Models of Faulting during Oblique Continental Extension* (PI: Buck, W. R.; CO-PI: Choi, E.), 7/1/09-6/30/12.

Computing Resource Allocations

- XSEDE Preliminary 3D Models for the Formation of Oceanic Core Complexes. TG-EAR150025 10/01/2017-09/30/2018.
- XSEDE Fully three-dimensional numerical models for along-axis variations in magmatic and tectonic processes at slow-spreading mid-ocean ridges. TG-OCE170013 02/01/2016-01/31/2017.
- TeraGrid (now XSEDE) Research Allocation, 1.7 million cpu-hours, 6/30/10-12/31/11.

CONFERENCE PRESENTATIONS AND INVITED TALKS

(: invited)*

Talks

- *2019 CIG Webinar series https://geodynamics.org/cig/events/webinars/, https://youtu.be/qRPV17Xx2aQ
- *Improving Reproducibility of Numerical Tectonic Models. Workshop on Analog Modeling of Tectonic Processes, Austin TX, May 17-19, 2017.
- *3D numerical models for variable modes of faulting along slow spreading mid-ocean ridges. Dept. of Earth Sciences, Texas A&M, Feb. 3, 2017.
- *Quantity make Quality: Advances enabled by HPC in Geodynamics. Dept. of Earth Sciences, Undergraduate and Graduate class, Texas A&M, Feb. 2, 2017.
- Effects of axially variable diking rates on faulting at slow spreading mid-ocean ridges. E. Choi and X. Tian. AGU Fall Meeting T32A-07, Dec. 12-16, 2016, San Francisco, CA.
- Coupled Flow and Geomechanical Study of Intraplate Seismicity in the New Madrid Seismic Zone. R. Asaithambi, B. Jha and E. Choi. AGU Fall Meeting T54B-07, Dec. 12-16, 2016, San Francisco, CA.
- *3D numerical models for variable modes of faulting along slow spreading mid-ocean ridges. Dept. Geology, Southern Illinois University, Nov. 3, 2016.
- *3D numerical models for variable modes of faulting along slow spreading mid-ocean ridges. Wednesday Luncheon Seminar, School of Earth and Environmental Sciences, Seoul National University, South Korea. June 8, 2016.
- *Along-axis variations in diking rates and faulting styles at slow-spreading mid-ocean ridges. Seminar series in the Department of Geological and Environmental Sciences, Chonnam National University, South Korea. June 1, 2016.
- **Strong ground motions and dynamic stress changes around Baekdu (Changbai) volcano induced by nuclear explosions*. Department of Earth Sciences Colloquium, the University of Memphis, February 8, 2016.
- *Strong ground motions and dynamic stress changes around Baekdu (Changbai) volcano induced by nuclear explosions* by Choi et al., ES-SSA meeting September 6-7, 2015 in Memphis, TN.

- *Magma explains low estimates of lithospheric strength based on flexure of ocean island loads* by W. Roger Buck et al., EGU Annual Meeting 2015.
- *Making SNAC, StGermain and Pyre interoperable through BMI* at EarthCube workshop: Numerical Model Metadata for Solid Earth Sciences, April 30 - May 2, 2015. Portland State University, Portland, OR.
- **Quantity makes quality: Advances in geodynamics enabled by large-scale parallel computing*. Guest lecture in an undergrad earth science class for the civil engineering department at Michigan State University. April 14, 2015.
- *A new set of focal mechanisms and a geodynamic model for the Eastern Tennessee Seismic Zone* by M. Cooley et al., GSA Southeastern Section - 64th Annual Meeting (1920 March 2015) Paper No. 6-10, Chattanooga, TN.
- **Development of Core Complex Domes Due to Along-Axis Variation in Diking* Buck, W. R., E. Choi and X. Tian. Abstract T53D-05 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *Linking Tectonics and Surface Processes through SNAC-CHILD Coupling*. CERI Colloquium, 2014.08.29.
- **DynEarthSol3D: An Unstructured-Mesh Finite Element Solver for Long-Term Tectonic Deformations Involving Strain Localization*. 2014 CIG Crustal Deformation Modeling Workshop, Li Ka Shing Conference Center, Stanford University, June 23-27, 2014.
- **SNAC Clinic*.
  CSDMS Annual Meeting 2014, Boulder, Colorado. May 20-22, 2014.
- **Fault strength and the formation of rider blocks and domes in continental and oceanic core complexes* by W. Roger Buck and Eunseo Choi. Geophysical Research Abstracts, Vol. 16, EGU2014-13046, EGU General Assembly 2014, Vienna, Austria, April 27 May 02, 2014.
- **Constraining Normal Fault Strength Using Rider Blocks*
  Dept. Earth and Env. Sci., Tulane Univ. Jan. 25, 2013.
- *Bridging Surface and Tectonic Processes with SNAC and CHILD*
  Frontiers in Computational Physics: Modeling the Earth System, Boulder, Colorado, 2012.12.20.
- *Finite Element Analysis of Lithospheric Deformation: Introduction to DynEarthSol2D*
  Frontiers in Computational Physics: Modeling the Earth System, Boulder, Colorado, 2012.12.19.
- **Constraining Normal Fault Strength with the Geometry of Rider Blocks*
  CIG Workshop on Mantle and Lithospheric Dynamics, Davis, California, USA, 2012.07.30-08.01.
- **Bridging surface dynamics and tectonic modeling with SNAC*
  CSDMS 2011 Annual Meeting: Impact of time and process scales, Boulder, Colorado, USA, 2011.10.28.
- *Diking as an integral part of rifting process*
  2011 SIAM Conference on Mathematical & Computational Issues in the Geosciences, Long Beah, CA, 2011.3.24.
- *Axial morphology and shallow mantle viscosity at fast-spreading ridges. 2. "Inverted Curtains": Why some continental transform basins are asymmetric?*
  Geochemistry and Geodynamics Friday Seminar, Woods Hole Oceanographic Institute, 2010.10.8.
- **SNAC Tutorial*.
  GLADE 2010: From grains to global tectonics, Scripps Institution of Oceanography, La Jolla, CA, 2010.07.29.
- *A numerical approach to localized deformations in oceanic lithosphere*.
  Joint MG&G and SG&T Seminar, Lamont-Doherty Earth Observatory, 2009.1.09.

Posters

- *Evolution of lithospheric drip and its impact on the seismicity in the Central and Southeastern US*, Arushi Saxena et al., Abstract T33C-0417 presented at 2018 AGU Fall Meeting, Washington D.C., 10-14 Dec 2018.
- *Sciunits: Reusable Research Objects*, Tanu Malik et al., Abstract N34B-10 presented at 2018 AGU Fall Meeting, Washington D.C., 10-14 Dec, 2018.
- *Time-variable strength of axial lithosphere at slow-spreading ridges and the lifespan of oceanic core complexes*, Hao Lu and Eunseo Choi, Abstract T33G-0498 presented at 2018 AGU Fall Meeting, Washington D.C., 10-14 Dec, 2018.
- *Modeling interactions between plate-boundary forces and evolving resistance at mid-ocean ridges as the origin of non-uniform seafloor growth*, Hee Choi et al., Abstract T33G-0495 presented at 2018 AGU Fall Meeting, Washington D.C., 10-14 Dec, 2018.
- *Coupling long-term and short-term physics of an earthquake on complex fault*, Khurram Aslam et al., Abstract T11F-0218 presented at 2018 AGU Fall Meeting, Washington D.C., 10-14 Dec, 2018.
- *Modeling damage evolution of the near-fault region as a result of rupture on a geometrically complex fault*. Khurram S. Aslam et al., Poster presented at Workshop on Modeling Earthquake Source Processes, October 8-10, 2018, Pasadena, CA.
- *GeoTrust: A Integrated Workbench for Publishing, Sharing, and Reproducing Geoscience Applications*. Tanu Malik et al., 2018 EarthCube All Hands Meeting, 6-8 June, 2018, Washington D.C.
- *GeoTrust: Improving Sharing and Reproducibility of Geoscience Applications (geotrusthub.org)*. Tanu Malik et al., Poster presentation at Workshop on Coupling of Tectonic and Surface Processes. April 25-27, 2018, Boulder, CO. AGU
- *DI43A-0335 Modeling Submarine Lava Flow with ASPECT*. Erika Regan Storvick et al., presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- *T33D-0749 Combined effects of along-axis and temporal variations in diking rates on faulting styles at slow spreading ridges*. Hao Lu et al., presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- *IN43A-0068 GeoTrust Hub: A Platform For Sharing And Reproducing Geoscience Applications*. Tanu Malik et al., presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- *T51A-0445 Effects of Pre-existing Structures on the Seismicity of the Charlevoix Seismic Zone*. Oluwaseun Idowu Fadugba et al., presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- *T54A-05 Stress concentration on Intraplate Seismicity: Numerical Modeling of Slab-released Fluids in the New Madrid Seismic Zone*, Arushi Saxena et al., presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- *T51D-0504 A bottom-driven mechanism for distributed faulting: Insights from the Gulf of California Rift*, Patricia Persaud et al., presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.
- *Paper No. 29-4 Possible causes of low velocity in the upper mantle benearth the Mississippi Embayment*, Christine Powell et al., presented at GSA Annual Meeting in Seattle, Washington, USA, 2017. Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi:10.1130/abs/2017AM-305499.
- *Enhancing Reproducibility of Geoscience Applications using GeoTrust*. E. Choi, presented at 2017 Crustal Deformation Modeling Tutorial and Workshop, Monday, June 26 - Friday, June 30 Colorado School of Mines, Golden, Colorado
- *Calving Geometry of Thwaites Glacier Linked to Semi-brittle Ice Dynamics*. Liz C. Logan et al. AGU Fall Meeting P31A-2085, Dec. 12-16, 2016, San Francisco, CA.

- *Oedometer test as a benchmark for geodynamic models involving strain-weakening plasticity*. C. Lee and E. Choi. AGU Fall Meeting T23C-2952, Dec. 12-16, 2016, San Francisco, CA.
- *Possible Triggering Of Volcanic Eruption In Baekdusan (Changbaishan) Volcano By A North Korea Underground Nuclear Explosion Test?* T.-K. HONG et al. AOGS 13th Annual Meeting SE17-A008, July 31-Aug. 5, 2016, Beijing, China
- *Improved Thermo-Mechanical theory in long-term tectonic modeling*. Md. S. Ahamed and E. Choi. CIG All Hands Meeting, June 20-22, 2016, Davis, CA.
- *Coupling long-term tectonic loading with short-term earthquake slip*. Md. S. Ahamed and E. Choi. CIG All Hands Meeting, June 20-22, 2016, Davis, CA.
- *3D Numerical Models of the Effect of Diking on the Faulting Pattern at Incipient Continental Rifts and Steady-State Spreading Centers* by X. Tian et al., AGU Fall Meeting 2015, T51E-2945.
- *Making Coulomb angle-oriented shear bands in numerical tectonic models* by E. Choi and K.D. Petersen, at the 14th International Workshop on Modeling of Mantle and Lithospheric Dynamics, Oleron, France, Aug. 31-Sep. 5, 2015.
- *EarthCube - Earth System Bridge: Spanning Scientific Communities with Interoperable Modeling Frameworks*, Peckham, S., C. DeLuca, D. Gochis, J. Arrigo, A. Kelbert, E. Choi, R. Dunlap. Abstract IN31D-3754 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *Linking Tectonics and Surface Processes through SNAC-CHILD Coupling: Preliminary Results Towards Interoperable Modeling Frameworks*, Choi, E., A. Kelbert and S. Peckham. Abstract T33B-4683 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *Modes of continental extension in a lithospheric wedge*, Wu, G., L. Lavier and E. Choi. Abstract T13A-4613 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *3D Numerical Models for Along-axis Variations in Diking*, Tian, X. and E. Choi. Abstract T43A-4708 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *A New Set of Focal Mechanisms and a Geodynamic Model for the Eastern Tennessee Seismic Zone*, Cooley, M., C. Powell, and E. Choi. Abstract T13B-4635 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *Incorporating elastic and plastic work rates into energy balance for long-term tectonic modeling*, Ahamed, Md S. and E. Choi. Abstract T41A-4592 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *DynEarthSol3D: numerical studies of basal crevasses and calving blocks*, Logan, E., L. Lavier, E. Choi, E. Tan, and G. Catania. Abstract C33A-0367 presented at 2014, Fall Meeting, AGU, San Francisco, CA, 15-19 December.
- *DynEarthSol3D: An Efficient and Flexible Unstructured Finite Element Method to Study Long-Term Tectonic Deformation*, E. Tan, E. Choi, L. Lavier and V. Calo, AOGS 11th Annual Meeting, Sapporo, Japan. July 28 - August 1, 2014.
- *Incorporating elastic and plastic work rates into energy balance for long-term tectonic modeling*, Md. S. Ahamed and E. Choi. CIG Mantle and Lithospheric Dynamics Workshop, Joint with the Canadian Geophysical Union 2014, Banff, Canada, May 4-8, 2014.
- *Modeling the evolution of a thrust system: a geological application of DynEarthSol2D*, L. Feng, E. Choi, M. Bartholomew. CSDMS Annual Meeting 2014, Boulder, Colorado. May 20-22, 2014.
- *DynEarthSol3D: An Efficient and Flexible Unstructured Finite Element Method to Study Long-Term Tectonic Deformation*, E. Tan, E. Choi, L. Lavier and V. Calo. CIG-EarthScope Institute for Lithospheric Dynamics, Tempe, AZ. 2014. Feb. 3-4.

- *Bounds on fault strength based on geometry of rider blocks*, E. Choi, W. R. Buck, L. Lavier and K. D. Petersen, AGU Fall Meeting. San Francisco, CA, 2012.12.
- *3D Numerical Models for Faulting Patterns in Oblique Rifts*, E. Choi and W. R. Buck, AGU Fall Meeting. San Francisco, CA, 2011.12.
- *Landslide Rupture and Length-Depth Scaling*, Stark, C. P., E. Choi, and M. Convertino, CSDMS 2011 Annual Meeting: Impact of time and process scales, Boulder, Colorado, USA, 2011.10.28-30.
- *Evolution of Fault Populations in 2- and 3-Dimensions*, E. Choi and W. R. Buck, AGU Fall Meeting. San Francisco, CA, 2010.12.
- *1. Asymmetric Basins at "Inverted Curtains" along Strike-Slip Faults*, E. Choi and L. Seeber, GLADE 2010: From grains to global tectonics. Scripps Institution of Oceanography, La Jolla, CA, 2010.7.26-29.
- *3D Numerical Models for Continental and Oceanic Core Complexes*, Choi, E. and W. R. Buck, AGU Chapman Conference on Detachments in Oceanic Lithosphere: Deformation, Magmatism, Fluid Flow, and Ecosystems. Agros, Cyprus, 2010.5.8-16.
- *Can ridge axial deformations constrain mantle viscosity?*, Choi, E. and W. R. Buck, Ridge2000 Integration and Synthesis Workshop: Developing a holistic view of oceanic spreading center processes. 2009.10.1-3, St. Louis, MO.
- *Applications of Rate-Dependent Plasticity in Tectonic Modeling*, Choi, E. and W. R. Buck, MARGINS Workshop: Rupturing Continental Lithosphere: Synthesis and New Perspectives. Charleston, SC, 2009.4.30-5.2.
- *Thermally-induced Brittle Deformation in Oceanic Lithosphere and the Spacing of Fracture Zones*, Choi, E. and M. Gurnis, AGU Fall Meeting. San Francisco, CA, 2007.12.
- *Factors Controlling the Variations in the Mid-Ocean Ridge Segmentation*, Choi, E., L. Lavier, and M. Gurnis, AGU Fall Meeting. San Francisco, CA, 2006.12.
- *Coupling Codes through GeoFramework*, Choi, E. et al., AGU Fall Meeting. San Francisco, CA, 2004.12.