

FULL LIST OF PUBLICATION (CATEGORIZED)

Dr. Choon B. Park
(As of February 2009)

Case Studies **(MASW, Reflection, and Earthquake)**

- Miller, R.D., J. Xia, and C.B. **Park**, 2005, Seismic techniques to delineate dissolution features (Karst) at a proposed power plant site: Society of Exploration Geophysicists, Investigations in Geophysics no. 13, Dwain K. Butler, ed., *Near-Surface Geophysics*, p. 663-679.
- Park**, C.B., and Miller, R.D., 2005a, Seismic characterization of wind turbine sites near Lawton, Oklahoma, by the MASW method: *Kansas Geological Survey Open-file Report 2005-22*.
- Park**, C.B., and Miller, R.D., 2005b, Seismic characterization of wind turbine sites in Kansas by the MASW method: *Kansas Geological Survey Open-file Report 2005-23*.
- Penumadu, D. and C.B. **Park**, 2005, Multichannel analysis of surface wave (MASW) method for geotechnical site characterization: Proceedings of the Geo-Frontiers conference, Austin, Texas, January 23-26, 2005.
- Miller, R.D., J.M. Ivanov, T.S. Anderson, C.B. **Park**, M.L. Moran, and R. Ballard, 2004, Deployment and testing of wavefield imaging systems to detect underground facilities: Proceedings of the Military Sensing Symposia Specialty Group on Battlefield Acoustic and Seismic Sensing, August 23-26, Laurel, Maryland, Published on CD.
- Park**, C.B., and R.D. Miller, 2004, MASW to map shear-wave velocity of soil: Kansas Geological Survey Open-file Report 2004-30
- Miller, R.D., T.S. Anderson, J. Ivanov, J.C. Davis, R. Olea, C.B. **Park**, D.W. Steeples, M. L. Moran, and J. Xia, 2003, 3-D characterization of seismic properties at the Smart Weapons Test Range, YPG [Exp. Abs.]: Soc. Expl. Geophys., NSG2.3.
- Miller, R.D., J. Ivanov, C. **Park**, D. Laflen, and J. Blair, 2003, Otay Mesa, California, Tunnel Search Mission, 28 Jan 2003, Seismic search for underground anomalies: Kansas Geological Survey Open-file Report 2003-61.
- Park**, C.B., and R.D. Miller, 2003, MASW for shear wave velocity evaluation of soil before and after deep dynamic compaction operations: Kansas Geological Survey Open-file Report 2003-64.
- Miller, R.D., **Park**, C.B., Anderson, T.S., Ballard, R.F., Park, K., Xia, J., and Moran, M.L., 2002, Wavefield imaging to detect underground facilities: Proceedings of the Military Sensing Symposia Specialty Group on Battlefield Acoustic and Seismic Sensing, September 24-26, Laurel, Maryland, Published on CD.
- Xia, J., Li, P.H., Lewis, M.J., Miller, R.D., and **Park**, C.B., 2002, Using surface wave method to define a sinkhole impact area in a noisy environment: Proceedings of the SAGEEP 2002, Las Vegas, Nevada, 13CAV7.
- Miller, R.D., Xia, J., **Park**, C.B., and Ivanov, J., 2001, Shear wave velocity field to detect anomalies under asphalt: Proceedings of the 52nd Highway Geology Symposium, May 16, Baltimore, Maryland.
- Miller, R.D., Xia, J., **Park**, C.B., Hunter, J.A., and Harris, J.B., 2001, Comparing shear-wave velocity profiles from multi-channel analysis of surface wave with borehole measurements: submitted to the Tenth International Conference on Soil Dynamics and Earthquake Engineering (SDEE) in Philadelphia in October 2001.
- Xia, J., Miller, R.D., and **Park**, C.B., 2001, Feasibility of determining Q of near-surface materials from Rayleigh waves: SEG 2001, p. 1381-1384.
- Xia, J., Miller, R.D., and **Park**, C.B., 2001, Feasibility of using the MASW method to define sinkhole impact area at Calvert Cliffs Nuclear Power Plant, Maryland: Kansas Geological Survey Open-file Report 2001-19.
- Harris, J.B., R.D. Miller, J. Xia, J.A. Hunter, C.B. **Park**, D.R. Laflen, and R.L. Good, 2000, Near-surface shear wave reflection surveys in the Fraser River delta, B.C., Canada [Exp. Abs.]: Soc. Expl. Geophys., p. 1327-1330.
- Ivanov, J., C.B. **Park**, R.D. Miller, and J. Xia, 2000, Mapping Poisson's Ratio of unconsolidated materials from a joint analysis of surface-wave and refraction events: Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2000), Arlington, Va., February 20-24, p. 11-19.

- Miller, R.D., J. Xia, C.B. **Park**, J. Ivanov, D. Laflen, and J.M. Anderson, 2000, Detecting fracture-related voids and abandoned lead/zinc mines and appraising the subsidence potential near Baxter Springs, Kansas: Kansas Geological Survey Open-file Report 2000-75.
- Miller, R.D., C.B. **Park**, J. Xia, J.M. Ivanov, and D.R. Laflen, 2000, Potential of MASW to delineate fractures in the Winterset Limestone at the Johnson County Landfill, Kansas: Kansas Geological Survey Open-file Report 2000-50.
- Miller, R.D., C.B. **Park**, J.M. Ivanov, J. Xia, D.R. Laflen, and C. Gratton, 2000, MASW to investigate anomalous near-surface materials at the Indian Refinery in Lawrenceville, Illinois: Kansas Geological Survey Open-file Report 2000-4.
- Miller, R.D., J. Xia, C.B. **Park**, and J. Ivanov, 2000, Shear wave velocity field from surface waves to detect anomalies in the subsurface: Proceedings of the First International Conference on the Application of Geophysical Methodologies to Transportation Facilities and Infrastructure, St. Louis, December 11-15, 2000.
- Xia, J., R.D. Miller, C.B. **Park**, J.A. Hunter, and J.B. Harris, 2000, Comparing shear-wave velocity profiles from MASW with borehole measurements in unconsolidated sediments, Fraser River Delta, B.C., Canada: *Journal of Environmental and Engineering Geophysics*, v. 5, n. 3, p. 1-13.
- Xia, J., R.D. Miller, and C.B. **Park**, 2000, Advantages of calculating shear-wave velocity from surface waves with higher modes: [Exp. Abs.]: Soc. Expl. Geophys., p. 1295-1298.
- Xia, J., R.D. Miller, C.B. **Park**, and J. Ivanov, 2000, Construction of 2-D vertical shear-wave velocity field by the multichannel analysis of surface wave technique: Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2000), Arlington, Va., February 20-24, p. 1197-1206.
- Miller, R.D., Xia, J., **Park**, C.B., and Ivanov, J., 1999, Multichannel analysis of surface waves to map bedrock: *Leading Edge*, v. 18, n. 12.
- Miller, R.D., Xia, J., **Park**, C.B., and Ivanov, J., 1999, Using MASW to map bedrock in Olathe, Kansas [Exp. Abs.]: Soc. Explor. Geophys., p. 433-436.
- Miller, R.D., Xia, J., **Park**, C.B., Davis, J.C., Shefchik, W.T., and Moore, L., 1999, Seismic techniques to delineate dissolution features in the upper 1000 ft at a power plant site [Exp. Abs.]: Soc. Explor. Geophys., p. 492-495.
- Miller, R.D., Xia, J., **Park**, C.B., and Ivanov, J., 1999, Shear wave velocity field to detect anomalies in the subsurface [Abs.]: Proceedings of the Int'l Conference on Applications of Geophysical Technologies, Dec. 11-15, 2000, St. Louis, Missouri.
- Miller, R.D., Xia, J., and **Park**, C.B., 1999, MASW to investigate subsidence in the Tampa, Florida area: Kansas Geological Survey Open-file Report 99-33.
- Miller, R.D., Xia, J., C. **Park**, Ivanov, J., Geier, N., and Laflen, D., 1999, Using MASW to map bedrock in Olathe, Kansas: Kansas Geological Survey Open-file Report 99-9.
- Xia, J., Miller, R.D., **Park**, C.B., Hunter, J.A., and Harris, J.B., 1999, Evaluation of the MASW technique in unconsolidated sediments [Exp. Abs.]: Soc. Explor. Geophys., p. 437-440.
- Xia, J., Miller, R.D., **Park**, C.B., and Hunter, J., 1998, Comparison of shear wave velocities from MASW technique and borehole measurements in unconsolidated sediments of the Fraser River Delta: Kansas Geological Survey Open-file Report 98-58.
- Miller, R.D., J.M. Anderson, D.R. Laflen, B.C. Bennett, and C.B. **Park**, 1995, High resolution seismic reflection survey at Mud Mountain Dam near Enumclaw, Washington: Kansas Geological Survey Open-file Report 95-8.
- Miller, R.D., Steeples, D.W., Anderson, J.M., Dettman, D.B., Xia, J., **Park**, C.B., and Musson, L.C., 1993, Shallow seismic reflection survey at the Southern Clean Fuels Coal Liquefaction Facility near Wilsonville, Alabama: Kansas Geological Survey Open-file Report 93-4.
- Miller, R.D., Xia, J., Keithline, J., Steeples, D.W., Musson, L.C., Anderson, J.M., Dettman, D.B., **Park**, C.B., Deputy, J.O., Brohammer, M.C., and Hoch, J.M., 1993, Seismic reflection survey of faulting near Charleston, South Carolina: Kansas Geological Survey Open-file Report 93-27.
- Steeple, D.W., Bennett, B.C., **Park**, C.B., Miller, R.D., and Knapp, R.W., 1990, Microearthquakes in Kansas and Nebraska 1977-1989: U.S. Nuclear Regulatory Commission, Washington, D.C., Final Report NUREG/CR-5629-RA, NRC FIN D2007, Contract no. NRC-04-87-084.
- Steeple, D.W., Bennett, B.C., **Park**, C.B., Miller, R.D., Knapp, R.W., 1990, Microearthquakes in Kansas and Nebraska, 1977-89; U.S. Nuclear Regulatory Commission, Washington, D. C.: Kansas Geological Survey Open-file Report 90-10.

Data Processing (MASW Dispersion and Reflection)

- Park**, C.B. and Ryden, N., 2007b, Offset selective dispersion imaging: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2007), Denver, April 1-5, Proceedings on CD Rom.
- Ivanov, J., C.B. **Park**, R.D. Miller, and J. Xia, 2005, Analyzing and filtering surface-wave energy by muting shot gathers: *Journal of Environmental & Engineering Geophysics*, v. 10, no. 3, p. 307-322.
- Park**, C.B., Miller, R.D., and Ivanov, J., 2002, Filtering surface waves: Pro-ceedings of the SAGEEP 2002, Las Vegas, Nevada, 12SEI9.
- Park**, C.B., Ryden, N., Miller, R.D., and Ulriksen, P., 2002, Time break correction in multichannel simulation with one receiver (MSOR): Proceedings of the SAGEEP 2002, Las Vegas, Nevada, 12SEI3.
- Ivanov, J., **Park**, C.B., Miller, R.D., Xia, J., and Overton, R., 2001, Modal separation before dispersion curve extraction by MASW method: Proceedings of the SAGEEP 2001, Denver, Colorado, SSM-3.
- Park**, C.B., Miller, R.D., and Xia, J., 2001, Higher modes of surface waves over unconsolidated sediments: Proceedings of the 5th International Symposium on Recent Advances in Exploration Geophysics (RAEG2001), Kyoto, p. 9-17.
- Kim, K.Y., C.B. **Park**, R.D. Miller, and J. Xia, 2000, Direct stacking along corridors of hyperbolic trajectories for shallow seismic data [Exp. Abs.]: Soc. Expl. Geophys., p. 1291-1294.
- Park**, C.B., R.D. Miller, and J. Xia, 2000, Detection of higher mode surface waves over unconsolidated sediments by the MASW method: Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2000), Arlington, Va., February 20-24, p. 1-9.
- Park**, C.B., Miller, R.D., Xia, J., Hunter, J.A., and Harris, J.B., 1999, Higher mode observation by the MASW method [Exp. Abs.]: Soc. Explor. Geophys., p. 524-527.
- Park**, C.B., Miller, R.D., and Xia, J., 1999, Multimodal analysis of high frequency surface waves (SAGEEP 99), Oakland, Calif., March 14-18, p. 115-121.
- Park**, C.B., Miller, R.D., and Xia, J., 1998, Imaging dispersion curves of surface waves on multi-channel record: [*Expanded Abstract*]: Soc. Explor. Geophys., 1377-1380.

Field Approach

(MASW)

- Park**, C.B., and Shawver, J.B., 2009, Multi-source offset MASW survey: To be presented in SAGEEP 2009, Fort Worth, Texas, March 29-April 2.
- Yeluru, P., Baker, G., **Park**, C.B., and Taylor, L., 2008, New developments in seismic surface waves data acquisition and processing: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2008), Philadelphia, April 6-10, Proceedings on CD Rom.
- Park**, C.B., 2005, MASW-Horizontal resolution in 2-D shear-wave velocity (V_s) mapping: Kansas Geological Survey Open-file Report 2005-4.
- Kim, J.H., and C.B. **Park**, 2003, Processing of downhole S-wave seismic survey data by considering direction of polarization: SEG-Korea, v. 5, no. 4, 321-328.
- Miller, R.D., K. G. Park, J. Ivanov, C. B. **Park**, and D. Laflen, 2003, A 2-C towed geophone spread for variable surface conditions: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2003), San Antonio, Texas, April 6-10, SEIS06.
- Kim, J.H., **Park**, C.B., and Park, K.G., 2002, P- and S-wave down-hole surveys at the KGS BH1 test site in Lawrence, Kansas: Kansas Geological Survey open-file report 2002-31.
- Park**, C.B., Miller, R.D., and Miura, H., 2002, Optimum field parameters of an MASW survey: Proceedings of the SEG-Japan 2002, Tokyo, Japan.
- Park**, C.B., Ryden, N., Westerhoff, R., and Miller, R.D., 2002, Lamb waves observed during MASW surveys [Exp. Abs.]: Soc. Expl. Geophys., p. 1400-1403.

- Xia, J., Miller, R.D., **Park**, C.B., Wightman, E., and Nigbor, R., 2002, A pitfall in shallow shear-wave refraction surveying: *Journal of Applied Geophysics*, v. 51, no. 1, 1-9.
- Xia, J., Miller, R.D., **Park**, C.B., and Tian, G., 2002, Determining Q of near-surface materials from Rayleigh waves: *Journal of Applied Geophysics*, v. 51, no. 2-4, p. 121-129.
- Miller, R.D., Xia, J., and **Park**, C.B., 2001, Love waves: A menace to shallow shear wave reflection surveying; SEG 2001, p. 1377-1380.
- Park**, C.B., Miller, R.D., and Xia, J., 2001, Offset and resolution of dispersion curve in multichannel analysis of surface waves (MASW): *Proceedings of the SAGEEP 2001*, Denver, Colorado, SSM4

Inversion Analysis

(MASW)

- Ryden, N., and C.B. **Park**, 2006, Fast simulated annealing inversion of surface waves on pavement using phase-velocity spectra: *Geophysics*, v. 71, n. 4, p. 49-58.
- Xia, J., R.D. Miller, C.B. **Park**, and G. Tian, 2003, Inversion of high frequency surface waves with fundamental and higher modes: *Journal of Applied Geophysics*, v. 52, no. 1, 45-57.
- Xia, J., Miller, R.D., **Park**, C.B., Hunter, J.A., Harris, J.B., and Ivanov, J., 2002, Comparing shear-wave velocity profiles inverted from multichannel surface wave with borehole measurements: *Soil dynamics and Earthquake Engineering (SDEE)*, v. 22, p. 181-190.
- Xia, J., Miller, R.D., and **Park**, C.B., 2001, Inversion of phase velocities of surface waves with higher modes: submitted to the Tenth International Conference on Soil Dynamics and Earthquake Engineering (SDEE) in Philadelphia in October 2001.
- Xia, J., Miller, R.D., and **Park**, C.B., 1999, Estimation of near-surface shear-wave velocity by inversion of Rayleigh waves: *Geophysics*, v. 64, no. 3, p. 691-700.

Methodology

(MASW and Reflection)

- Park**, C.B., and Carnevale, M., 2009, 3-D MASW: To be presented in SAGEEP 2009, Fort Worth, Texas, March 29-April 2.
- Ryden, N., Lowe, M.J.S., Cawley, P., and **Park**, C.B., 2007, Non-contact surface wave testing while moving: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2007), Denver, April 1-5, Proceedings on CD Rom.
- Ryden, N., M. J. S. Lowe, P. Cawley, and C. B. **Park**, 2006, Non-contact surface wave measurements using a microphone: *Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2006)*, Seattle, Washington, April 2-6, p. 1110-1115.
- Ivanov, J., R.D. Miller, C.B. **Park**, and N. Ryden, 2003, Seismic search for underground anomalies [Exp. Abs.]: *Soc. Expl. Geophys.*, NSG3.2.
- Park, K., C. B. **Park**, and R.D. Miller, 2003, A local damping scheme for nonreflecting boundary conditions in surface wave modeling: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2003), San Antonio, Texas, April 6-10, SUR03.
- Park**, C.B., Miller, R.D., and Xia, J., 1999, Multi-channel analysis of surface waves (MASW): *Geophysics*, v. 64, no. 3, p. 800-808.
- Park**, C.B., Miller, R.D., and Xia, J., 1999, Detection of near-surface voids using surface waves (SAGEEP 99), Oakland, Calif., March 14-18, p. 281-286.
- Park**, C.B., Miller, R.D., and Xia, J., 1998, Ground roll as a tool to image near-surface anomaly: [*Expanded Abstract*]: *Soc. Explor. Geophys.*, 874-877.
- Park**, C.B., Miller, R.D., and Xia, J., 1996, Multi-channel analysis of surface waves using Vibroseis (MASWV): [*Expanded Abstract*]: *Soc. Explor. Geophys.*, 68-71.
- Park**, C.B., Miller, R.D., Steeples, D.W., and Black, R.A., 1996, Swept impact seismic technique (SIST): *Geophysics*, 61, 1789-1803.

Park, C.B., Steeples, D.W., Black, R., and Miller, R.D., 1993, A new coded seismic technique [Expanded Abstract]: Soc. Explor. Geophys., 512-514.

Overview

(MASW)

Park, C.B. and Ryden, N., 2007a, Historical overview of the surface-wave method: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2007), Denver, April 1-5, Proceedings on CD Rom.

Park, C.B., Miller, R.D., Xia, J., and Ivanov, J., 2007, Multichannel analysis of surface waves (MASW)—active and passive methods: *The Leading Edge (TLE)*, v. 26, no. 1, p. 60-64.

Park, C.B., 2006, Multichannel analysis of surface waves-active and passive methods: *Proceedings of the Korean Society of Exploration Geophysicists (K-SEG)* Ann. Conference, Daejeon, Korea, May 26-27.

Park, C.B., 2005, Shear-wave velocity (Vs) profiling by surface wave (MASW) method: Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2005), Atlanta, Georgia, April 3-7, 2005.

Park, C.B., R.D. Miller, J. Xia, and J. Ivanov, 2004, MASW—An easy seismic method to map shear-velocity of the ground: Invited paper at the 2004 annual meeting of the Korean Society of Engineering Geology (KSEG), Kang Won National University, Chun Cheon, Korea, April 30-May 1, 2004.

Xia, J., R.D. Miller, C.B. **Park**, J. Ivanov, G. Tian, C. Chen, 2004, High-frequency Rayleigh wave and its application in near-surface geophysics: Proceedings of the International Conference on Environmental and Engineering Geophysics, June 6-9, Wuhan, China, p. 30-38.

Xia, J., R.D. Miller, C.B. **Park**, J. Ivanov, G. Tian, and C. Chen, 2004, Utilization of high-frequency Rayleigh waves in near-surface geophysics: *The Leading Edge*, v. 23, n. 8, p. 753-759.

Xia, J., R.D. Miller, C.B. **Park**, J. Ivanov, G. Tian, C. Chen, 2004, High-frequency Rayleigh wave and its application in near-surface geophysics: *Proceedings of the International Conference on Environmental and Engineering Geophysics*, June 6-9, Wuhan, China, p. 30-38.

Park, C.B., N. Ryden, and P. Ulriksen, 2003, The MASW method-what and where it is, Exhibition of the European Association of Geoscientists and Engineers (EAGE) 65th Conference and Exhibition, Stavanger, Norway, 2-5 June 2003.

Park, C.B., Miller, R.D., and Xia, J., and Ivanov, J., 2001, Characterization of geotechnical sites by Multichannel Analysis of Surface Waves (MASW) method: submitted to the Tenth International Conference on Soil Dynamics and Earthquake Engineering (SDEE) in Philadelphia in October 2001.

Park, C.B., R.D. Miller, J. Xia, and J. Ivanov, 2000, Multichannel seismic surface-wave methods for geotechnical applications: Proceedings of the First International Conference on the Application of Geophysical Methodologies to Transportation Facilities and Infrastructure, St. Louis, December 11-15, 2000.

Xia, J., R.D. Miller, and C.B. **Park**, 2000, Multichannel analysis of surface wave theory and applications: Kansas Geological Survey Open-file Report 2000-25.

Park, C.B., Miller, R.D., and Xia, J., 1999, Detection of near-surface voids using surface waves [Abs.]: Proceedings of the Int'l Conference on Applications of Geophysical Technologies, Dec. 11-15, 2000, St. Louis, Missouri.

Park, C. B., 1998, Shear-wave (S) velocity profiling from multichannel ground roll data, Proceedings of the Korean Geoengineering Society, annual meeting, Seoul, Korea.

Park, C.B., Miller, R.D., and Xia, J., 1997, Summary report on surface-wave project at Kansas Geological Survey (KGS): Kansas Geological Survey Open-file Report 97-80.

Park, C.B., Miller, R.D., and Xia, J., 1997, Multi-channel analysis of surface waves (MASW)-A summary report of technical aspects, experimental results, and perspective: Kansas Geological Survey Open-file Report 97-10.

Park, C. B., 1995, Characterization of geotechnical sites by multichannel analysis of surface waves, Proceedings of the Korean Ground Society, 95th annual meeting, Seoul, Korea, 15-21.

Passive MASW

- Park**, C.B., 2008, Imaging dispersion of passive surface waves with active scheme: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2003), Philadelphia, April 6-10, Proceedings on CD Rom.
- Park**, C.B., and Miller, R.D., 2008, Roadside passive multichannel analysis of surface waves (MASW): *Journal of Environmental & Engineering Geophysics*, v. 13, no. 1, p. 1-11.
- Park**, C.B., Miller, R.D., and N. Ryden, 2006, Roadside seismic survey utilizing traffic noise: Proceedings of the NDE Conference on Civil Engineering, St. Louis, MO, August 14-18, p. 317-324.
- Park**, C.B., and R.D. Miller, 2006, Roadside passive MASW: *Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2006)*, Seattle, Washington, April 2-6, p. 1116-1127.
- Park**, C.B., Miller, R.D., N. Ryden, J. Xia, and J. Ivanov, 2005, Combined use of active and passive surface waves: *Journal of Environmental & Engineering Geophysics*, v. 10, no. 3, p. 323-334.
- Park**, C.B. and R.D. Miller, 2005c, Multichannel analysis of passive surface waves-modeling and processing schemes: Proceedings of the Geo-Frontiers conference, Austin, Texas, January 23-26, 2005.
- Park**, C., R. Miller, D. Laflen, N. Cabrillo, J. Ivanov, B. Bennett, and R. Huggins, 2004, Imaging dispersion curves of passive surface waves [Exp. Abs.]: Soc. Expl. Geophys., p. 1357-1360.

Pavement MASW

- Ryden, N., C.B. **Park**, and P. Ulriksen, 2004, A framework for inversion of wavefield spectra in seismic non-destructive testing of pavements: Proceedings of the 2nd International Conference on Site Characterization (ISC-2), Porto, Portugal, September 19-22, 2004.
- Ryden, N. and C.B. **Park**, 2004, Seismic joint analysis for non-destructive testing of asphalt and concrete slabs: Proceedings of the Geo-Frontiers conference, Austin, Texas, Jan 23-26, 2005.
- Ryden, N., C.B. **Park**, P. Ulriksen, and R.D. Miller, 2004, Multimodal approach to seismic pavement testing: *Journal of Geotechnical and Geoenvironmental Engineering*, v. 130, p. 636-645.
- Ryden, N., C.B. **Park**, P. Ulriksen, and R.D. Miller, 2003, Lamb wave analysis for non-destructive testing of concrete plate structures: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2003), San Antonio, Texas, April 6-10, INF03.
- Ryden, N., and C.B. **Park**, 2003, Surface waves in inversely dispersive media: Special Publication: Near Surface Geophysics: Exhibition of the European Association of Geoscientists and Engineers (EAGE).
- Ryden, N., C.B. **Park**, P. Ulriksen, and R.D. Miller, 2003, A Multimodal Approach to Seismic Pavement Testing, *Journal of Geotechnical and Geoenvironmental Engineering*, American Society of Civil Engineering (ASCE).
- Ryden, N., **Park**, C.B., Ulriksen, P., and Miller, R.D., 2002, Branching of dispersion curves in surface wave testing of pavements: Proceedings of the SAGEEP 2002, Las Vegas, Nevada, 12SE17.
- Ryden, N., Ulriksen, P., **Park**, C.B., and Miller, R.D., 2002, Portable seismic acquisition system (PSAS) for pavement MASW: Proceedings of the SAGEEP 2002, Las Vegas, Nevada, 13IDA7.
- Park**, C.B., Ivanov, J., Miller, R.D., Xia, J., and Ryden, N., 2001, Seismic investigation of pavements by MASW method—geophone approach: Proceedings of the SAGEEP 2001, Denver, Colorado, RBA-6.
- Park**, C.B., Ivanov, J., Miller, R.D., Xia, J., and Ryden, N., 2001, Multichannel analysis of surface waves (MASW) for pavement-feasibility test: Proceedings of the 5th SEGJ International Symposium, Tokyo, p. 25-30.
- Ryden, N., Ulriksen, P., **Park**, C.B., Miller, R.D., Xia, J., and Ivanov, J., 2001, High frequency MASW for non-destructive testing of pavements-accelerometer approach: Proceedings of the SAGEEP 2001, Denver, Colorado, RBA-5.

Software
(MASW and Reflection)

Park, C.B., 2006, SurfSeis-active and passive MASW (User's Manual v 2.0): Kansas Geological Survey.

Miller, R.D., B.C. Bennett, C.B. **Park**, and J. Xia, 1996, User's Manual, WinSeis seismic processing software: Kansas Geological Survey, 144 pp.

Underwater MASW

Hunter, J.A., S.E. Pullan, R.L. Good, R.A. Burns, M. Douma, R.D. Miller, C.B. **Park**, and J. Xia, 2005, Measuring sub-seabottom seismic velocities—Some unusual experiments: *Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2005)*, Atlanta, Georgia, April 3-7, p. 370-386.

Kaufmann, R.D., J. Xia, R.C. Benson, L.B. Yuhr, D.W. Casto, and C.B. **Park**, 2005, Evaluation of MASW data acquired with a hydrophone streamer in a shallow marine environment: *Journal of Environmental & Engineering Geophysics*, v. 10, n. 2, p. 87-98.

Park, C.B., Miller, R.D., Xia, J., Ivanov, J., Sonnichsen, G.V., Hunter, J.A., Good, R.L., and Burns, R.A., 2005, Underwater MASW to evaluate stiffness of water-bottom sediments: *The Leading Edge (TLE)*, v. 24, no. 7, p. 724-728.

Ivanov, J., C.B. **Park**, R.D. Miller, J. Xia, J.A. Hunter, R.L. Good, and R.A. Burns, 2000, Joint analysis of surface-wave and refraction events from river-bottom sediments [Exp. Abs.]: *Soc. Expl. Geophys.*, p. 1307-1310.

Park, C.B., R.D. Miller, J. Xia, J. Ivanov, J.A. Hunter, R.L. Good, and R.A. Burns, 2000, Multichannel analysis of underwater surface waves near Vancouver, B.C., Canada [Exp. Abs.]: *Soc. Expl. Geophys.*, p. 1303-1306.