TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Soon-Jae (Jeff) Lee Title: Associate Professor

Email: SL31@txstate.edu

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
Ph.D.	2007	Clemson University, SC	Civil Engineering	Characterization of recycled aged CRM binders
M.S.	1999	Kangwon National University, South Korea	Regional Construction Engineering	Fatigue resistance characteristics of recycled asphalt mixtures
B.S.	1997	Kangwon National University, South Korea	Regional Construction Engineering	

C. University Experience

Position	University	Dates
Associate Professor, Engineering Technology	Texas State University	09/2014 ~ present
Core Faculty, Material Science, Engineering, and Commercialization Program	Texas State University	09/2012 ~ present
Assistant Professor, Engineering Technology	Texas State University	09/2008 ~ 2014/08
Research Associate, Civil Engineering	Clemson University	09/2007 ~ 08/2008
Research Assistant, Civil Engineering	Clemson University	05/2004 ~ 08/2007
Lecturer, Regional Construction Engineering	Kangwon National University	09/2002 ~ 07/2003

D. Relevant Professional Experience

Position	Entity	Dates
Visiting Researcher	Korea Institute of Civil Engineering and Building Technology, South Korea	05/2015 ~ 11/2015
Asphalt Team Manager, Korea Laboratory Accreditation Scheme (KOLAS)	Institute of Advanced Construction Materials, South Korea	03/1999 ~ 04/2004

E. Other Professional Credentials (licensure, certification, etc.)

- "Foundations of Online Course Design and Development" Office of Distance and Extended Learning, Texas State University (Fall 2018)
- "Managing Gravel Road Maintenance" Certificate, Transportation Research Board (April 2012)
- "Soil for Pavements" Certificate, Engineering Continuing Education (August 2011)
- "Soil Basics for Engineers" Certificate, Engineering Continuing Education (August 2011)
- **Leadership in Energy and Environmental Design (LEED) Accredited Professional (May 2009)**
- Korea Laboratory Accreditation Scheme (KOLAS) Test Inspection Agent Certificate: No. 99-C03-073 (June 1999)

- The License (1st Class) of Civil Engineer: No. 96205110028V (October 1996)

II. TEACHING

A. Teaching Honors and Awards:

Fall 2015 awarded "**Favorite Professor**" from The Alfred H. Nolle Chapter of the Alpha Chi, National College Honor Society
Fall 2013 awarded "**Favorite Professor**" from The Alfred H. Nolle Chapter of the Alpha Chi, National College Honor Society

"Graduating Student Recognition of Campus Support Program". Named by **ten alumni** from the School as one of the faculties that contributed significantly to their success and development.
2012: Daniel Putegnat; Justin Font; Branden Wallace; Jonathan Stein; Joseph Nelson
2011: Brandon Manley; Francis Rigney; Cody Brown
2010: Krestianna Flores
2009: Nathan J Drees

B. Courses Taught:

Texas State University (2008 ~ present)
CSM 3363 Heavy Civil and Highway Construction Systems (2013 ~ present)
CSM 3366 Soils and Foundation (2012 ~ present)
CSM 4361 Construction Estimating (2008 ~ 2011)
CSM 4364 Construction Project Management and Scheduling (2008 ~ 2012, 2017)
CSM 4368 Environmentally Conscious Design and Construction (2009)
CSM 4369 Construction Contracts, Liability and Ethics (2008 ~ 2010)
TECH 4390 Internship (2009 ~ 2011)
TECH 5362 Construction Contracts and Estimating (2008 ~ 2011)
TECH 5365 Construction Scheduling and Management (2008 ~ 2013)
TECH 5384 Problems in Technology (LEED) (2010 ~ present)
TECH 5384 Problems in Technology (Costs Associated with Conversion of Surfaced Roads to Un-surfaced Roads) (2011)
TECH 5384 Problems in Technology (Construction Contracts) (2011)
TECH 5384 Problems in Technology (Benefit and Risk Analysis to Determine Construction Inspection Needs) (2012)
TECH 5384 Problems in Technology (Life Cycle Economic Analysis of Porous Friction Course Paving Projects, Given Expected Environmental and Safety Benefits) (2012)
TECH 5384 Problems in Technology (Strategies to Maintain the Functionality of the Rural Low-Volume Highways Impacted by Local Energy Development) (2012)
TECH 5384 Problems in Technology (Pavement Maintenance Practices at Small to Medium Sized Airports in Texas) (2013)
TECH 5384 Problems in Technology (Sustainable Residential Construction and Its Use of Sustainable Materials for Creating Energy Efficient Dwellings) (2014)
TECH 5384 Problems in Technology (Guidelines for the Treatment of Soil & Base Materials) (2017)
TECH 5398 Directed Project (2016)
(Design-Bid Build and Construction Manager At-Risk in Texas Public Schools)
TECH 5399 Thesis (2011 ~ present)
MSEC 7303 Research MSEC (2015 ~ present)
MSEC 7304 Collaborative Research/Commercialization Experience (2015 ~ present)
MSEC 7999 Dissertation (2016 ~ present)

C. Graduate Theses/Dissertations or Exit Committees:

Supervisor:
Benjamin Broughton, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: The Impact of Authentic Leadership Traits on Construction Superintendent Effectiveness
(Spring 2012).

Steven Cade Humphries, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Examination of Cost Benefits for Converting Surfaced Roads to Un-surfaced Roads in Texas
(Fall 2012).

Hyunhwan Kim, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Performance Properties of CRM Asphalt Binders Containing Wax Warm Additives
(Summer 2014).

Evan Humphries, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Evaluation of Current Practices for and Cost Benefits of Pavement Maintenance at Small to Medium Sized Airports in Texas
(Spring 2015).
Evan has been selected as a recipient of a research stipend in the amount of $10,000 as part of the *Graduate Research Award Program on Public-Sector Aviation Issues* for the academic year 2013-2014. This award is sponsored by the Federal Aviation Administration of the U.S. Department of Transportation Research/National Academies.

Mithil Mazumder, MS in Technology Management, Department of Engineering Technology
Thesis Title: Properties of Polymer Modified Asphalt Binders Containing Wax Warm Additives
(December 2016).

Ahmed Ali, MS in Technology Management, Department of Engineering Technology
Thesis Title: MSCR Characterization of Polymer Modified Binders Containing Wax Additives (May 2018).

Hyunhwan Kim, Ph.D. in Materials Science, Engineering and Commercialization (MSEC) Program
Thesis Title: Characterization of Rubberized Asphalt Binders with Wax Warm Additives
(December 2016).

Mithil Mazumder, Ph.D. in Materials Science, Engineering and Commercialization (MSEC) Program
Thesis Title: Characterization of Crack Sealant Materials and Implementation Techniques
(May 2019, Expected).

Committee Member:
Zhuo Wang, MS in Industrial Technology, Department of Engineering Technology
Thesis Title: Effects of Fine Recycled-Concrete Aggregates Moisture Conditions on Rheological Behaviors of Self-Consolidating Concrete and Mortar
(Spring 2012).

Kyu-Dong Jeong, Ph.D in Engineering, Department of Regional Infrastructures Engineering, Kangwon National University, South Korea
Thesis Title: Estimation of Cracking Resistance of Recycled Asphalt Mixtures Based on Tensile Energy
(Fall 2015).

D. Courses Prepared and Curriculum Development:

CSM 3363 Heavy Civil and Highway Construction Systems

CSM 3366 Soils and Foundation
CSM 4361 Construction Estimating
CSM 4364 Construction Project Management and Scheduling
CSM 4368 Environmentally Conscious Design and Construction
CSM 4369 Construction Contracts, Liability and Ethics
TECH 5362 Construction Contracts and Estimating
TECH 5365 Construction Scheduling and Management

Developed Syllabi:
CSM 3366 Soils and Foundation
TECH 5302 Fundamentals of Construction Contracts and Liability Issues
TECH 5304 Fundamentals of Construction Estimating
TECH 5360 Construction Company Financial Control

Lab Development:
Pavements and Materials Research Laboratory

E. Funded External Teaching Grants and Contracts:

1) TEXO Education and Research Foundation, 2012, PI (Lee, S.-J.), CoPI (Winek, G.), "Soils and Foundations", Amount: $12,000.
2) TEXO Education and Research Foundation, 2011, PI (Lee, S.-J.), CoPI (Winek, G.), "Air Distribution System Trainer and Residential Electricity Trainer", Amount: $10,000.
3) TEXO Education and Research Foundation, 2010, PI (Winek, G.), CoPI (Lee, S.-J.), "Four Total Station Systems", Amount: $20,000.

F. Submitted, but not Funded, External Teaching Grants and Contracts:

G. Funded Internal Teaching Grants and Contracts:

1) Student Computing Resources, 2010, PI (Lee, S.-J.), CoPIs (Kim, Y. J. and Winek, G.) "Major Upgrade of the RFM 4236: Computer Integrated Construction Laboratory to Offer High-Performance Computing and Visualization for Engineering Technology Students", Amount: $56,096.50.

H. Submitted, but not Funded, Internal Teaching Grants and Contracts:

I. Other:

Undergraduate Student Research Supervision:

Travis Calhoun (Fall 2011 ~ Spring 2013)
Christopher Harper (Summer 2011 ~ Summer 2012)
James Gates (Fall 2011)
Brady Wallace (Fall 2010 ~ Spring 2012)
Brandon Manley (Spring 2010 ~ Fall 2010)

Graduate Student Research Supervision:

Cade Humphries (Fall 2014 ~ Summer 2015) – Improved Crack Sealant Application Methods

Manuel Lander (Summer 2014 ~ Spring 2015) – Effect of Crumb Rubber on Viscosity of Rubberized Asphalt Binders Containing Wax Additives
Harnish Sharma (Spring 2015) – Energy Harvesting on Flexible Pavements
Aidil Misra (Spring 2013 ~ Spring 2014) – Evaluation of New Additive for Crumb Rubber Modified Asphalt Binders
Daniel Putegnat (Fall 2011) – Life Cycle Economic Analysis of Porous Friction Course Paving Projects, Given Expected Environmental and Safety Benefits
Taylor Haese (Fall 2011) – Benefit and Risk Analysis to Determine Construction Inspection Needs
Jarrett Sims (Fall 2011) – Change Order in Highway Construction

Graduate Student Direct Project Supervision:

Nick Turtle (Summer 2016 ~ Fall 2016) – Comparative Analysis of Design-Bid Build and Construction Manager At-Risk in Texas Public Schools

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Books

a. Scholarly Monographs:

b. Textbooks:

c. Edited Books:

d. Chapters in Books:

e. Creative Books:

2. Articles

a. Refereed Journal Articles: (*corresponding author and #Texas State student)

2018

1) Mazumder, M.#, Kim, H. H., **Lee, S.-J.**, "Comparison of field performance of crack treatment methods in asphalt pavement: crack filling versus crack sealing." **Journal of Transportation Engineering, Part B: Pavements, ASCE** (Accepted for Publication)
2) Ali, A.#, Kim, H. H., Mazumder, M.#, Lee, M.-S., **Lee, S.-J.***, "MSCR characterization of polymer modified asphalt binder containing wax additives." **International Journal of Pavement Research and Technology** (Accepted for Publication)
3) Kim, H. H., Mazumder, M.#, **Lee, S.-J.**, Lee, M.-S., "Effect of production process on performance properties of warm rubberized binders." **Journal of Traffic and Transportation Engineering** (Accepted for Publication)
4) Kim, H. H., Mazumder, M.#, Lee, M.-S., **Lee, S.-J.***, "Effect of blending time on viscosity of rubberized binders with wax additives." **International Journal of Pavement Research and Technology** (Accepted for Publication)
5) Mazumder, M.#, Kim, H. H., **Lee, S.-J.**, Lee, M.-S., "Cost effectiveness of crack treatment methods: a field study." **Journal of Traffic and Transportation Engineering** (Accepted for Publication)
6) Mazumder, M.#, Ahmed, R.#, Ali, A.#, **Lee, S.-J.** *, "SEM and ESEM techniques used for the analysis of asphalt binder and mixture: a state of the art review." **Construction and Building Materials,** Vol. 186, pp. 313-329 (October 2018)
7) Mazumder, M.#, Sriraman, V., Kim, H. H., **Lee, S.-J.**, "Life cycle assessment (LCA) of crack sealing and filling treatment in hot mix asphalt (HMA) pavement." **Innovative Infrastructure Solutions** (2018) 3:61 https://doi.org/10.1007/s41062-018-0161-4 (July 2018)
8) Kim, H. H., Mazumder, M.#, **Lee, S.-J.** *, Lee, M. S., "Characterization of recycled CRM binder containing wax warm additive." **Journal of Traffic and Transportation Engineering,** Vol. 5, No. 3, pp. 197-206 (June 2018)
9) Kim, Y. J., Cho, B.-Y., **Lee, S.-J.**, Jiong, Hu, Wilde, J., "Investigation of rheological properties of blended cement paste using rotational viscometer and dynamic shear rheometer." **Advances in Materials Science and Engineering,** Vol. 17, pp. 1-6 (February 2018)

2017

1) Kim, H. H., Mazumder, M.[#], **Lee, S.-J.**, "Investigation of micromorphology and rheology of warm binders depending on aging" **Journal of Materials in Civil Engineering, ASCE,** Vol. 29, No. 11 (November 2017)
2) Kim, H. H., Mazumder, M.[#], Torres, A., Lee, M.-S., **Lee, S.-J.***, "Characterization of CRM binders with wax additives using an atomic force microscopy (AFM) and an optical microscopy" **Advances in Civil Engineering Materials, ASTM**, Vol. 6, No. 1, pp. 1-22 (October 2017)
3) Kim, H. H., Mazumder, M.[#], **Lee, S.-J.**, "Recycling of aged asphalt binders with wax warm additives" **International Journal of Road Materials and Pavement Design** (March 2017)

2016

1) Broughton, B.[#], **Lee, S.-J.***, Ryu, S. J, Talley, Kimberly "Authentic leadership and construction superintendent effectiveness." **Journal of Construction Engineering and Project Management**. Vol. 6, No. 4, pp. 15-23 (December 2016).
2) Kim, H. H.[#], Mazumder, M.[#], Lee, M. S., **Lee, S.-J**., "Identification of the microstructural components of crumb rubber modified binder (CRMA) and the feasibility of using environmental SEM (ESEM) coupled with energy dispersive X-ray spectroscopy (EDX)." **International Journal of Highway Engineering**. Vol. 18, No. 6, pp. 95-107 (December 2016)
3) Humphries, E.[#], Putegnat, D.[#], **Lee, S.-J.***, "Porous friction course asphalt paving: expected environmental and public safety benefits." **Journal of Advanced Construction Materials,** Vol. 21, pp. 31-40 (December 2016)
4) Mazumder, M.[#], Sriraman, V., Kim, H. H.[#], **Lee, S.-J.,** "Quantifying the environmental burdens of the hot mix asphalt (HMA) pavements and the production of warm mix asphalt (WMA)." **International Journal of Pavement Research and Technology** Vol. 9, No. 6, pp. 190-201. (June 2016).
5) Kim, H. H.[#], **Lee, S.-J.**, "Evaluation of rubber contents on cracking resistance of CRM binders with wax additives." **Canadian Journal of Civil Engineering,** Vol. 43, No. 4, pp. 326-333. (April 2016).
6) Kim, H. H.[#], Jeong, K. D., Lee, M. S., **Lee, S.-J**., "Correlation between Superpave binder properties and engineering properties of recycled aged CRM mixtures." **International Journal of Highway Engineering,** Vol. 18, No. 2, pp. 1-10. (April 2016).
7) Mazumder, M.[#], Kim, H. H.[#], **Lee, S.-J.*,** "Performance properties of polymer modified asphalt binders with wax additives**." International Journal of Pavement Research and Technology,** Vol. 9, No. 2, pp. 128-139. (March 2016).

2015

1) Mazumder, M.[#], Kim, H. H.[#], **Lee, S.-J.***, "Perpetual pavement: future pavement network." **Journal of Advanced Construction Materials,** Vol. 19, pp. 35-49. (December 2015).
2) Kim, H. H.[#], Jeong, K. D., Lee, M. S., **Lee, S.-J.*,** "Effect of FT-paraffin wax contents on performance properties of CRM asphalt binders." **Journal of Materials in Civil Engineering, ASCE,** Vol. 27, No. 11, 04015011 (November 2015).
3) Kim, H. H.[#], **Lee, S.-J.***, "Effect of crumb rubber on viscosity of rubberized asphalt binders containing wax additives." **Construction and Building Materials,** Vol. 95, pp. 65-73. (October 2015).
4) Kim, H. H.[#], Humphries, E.[#], Hu, Jiong, **Lee, S.-J.,** "Tight budgets and roadway maintenance: the need for further study of the conversion/reconversion scenario for low-volume roadways." **International Journal of Highway Engineering,** Vol. 17, No. 3, pp. 107-122. (June 2015).

5) Humphries, E.[#], **Lee, S.-J**., "An evaluation of pavement preservation and maintenance activities at general aviation airports in Texas." **Transportation Research Record: Journal of the Transportation Research Board,** Vol. 2471, pp. 48-57. (May 2015).

6) Kim, H. H.[#], Broughton, B.[#], Lee, M. S., **Lee, S.-J.**, "Microsurfacing successes and failures." **International Journal of Highway Engineering**, Vol. 17, No. 2, pp. 91-98. (April 2015).

2014

1) Kim, H. H.[#], Jeong, K. D., Lee, M. S., **Lee, S.-J.*,** "Performance properties of CRM binders containing wax additives." **Construction and Building Materials**. Vol. 66, No. 9, pp. 356-360. (September 2014).

2) Humphries, C.[#], Humphries, E.[#], **Lee, S.-J.*,** Jeong, K. D., "A method for assessing costs associated with conversion/reconversion of low-volume roadways**." International Journal of Pavement Research and Technology**. Vol. 7, No. 3, pp. 203-210. (May 2014).

3) Jiong, Hu, **Lee, S.-J**., Kim, Y. J., Mahgoub, M., "Inspection and nondestructive evaluation of concrete bridge with environmental deterioration." **Geotechnical Special Publications on Climatic Effects on Pavement and Geotechnical Infrastructure, ASCE.** pp. 193-203 (March 2014).

4) Kim, Y. J., Kotwal, A.[#], Kim, H. H., **Lee, S.-J**.*, "Stiffness prediction of recycled aged CRM binders using an artificial neural network." **International Journal of Pavement Research and Technology.** Vol. 7, No. 1, pp. 9-17. (January 2014).

2013

1) Kim, H. S., **Lee, S.-J**.*, "A laboratory investigation of different standards of phase separation in crumb rubber modified asphalts." **Journal of Materials in Civil Engineering, ASCE,** Vol. 25, No. 12, pp. 1-5. (December 2013).

2) Humphries, E.[#], Humphries, C.[#], Kim, H. H.[#], **Lee, S.-J**.*, "Milling: a potential maintenance tool for flushed and rutting roadway surfaces in Texas." **Journal of Advanced Construction Materials.** Vol. 18, pp. 49-60. (December 2013).

3) Kim, S. U., Lee, S. J., **Lee, S.-J**., Kim, K. W., "Evaluation of rut resistance of polymer-modified asphalt concretes." **Advanced Materials Research**, Vol. 687, pp. 282-288. (April 2013).

4) Kotwal, A.[#], **Lee, S.-J.**, Kim, Y. J., "Traffic signal systems: a review of current technology in the United States." **Science and Technology**, Vol. 3, No. 1, pp. 33-41. (January 2013).

5) Kim, H. S., **Lee, S.-J.**, Amirkhanian, S., Jeong, K. D., "Quantification of oxidative aging of polymer-modified asphalt mixes made with warm mix technologies." **Journal of Materials in Civil Engineering**, **ASCE**. Vol. 25, No. 1, pp. 1-9. (January 2013).

2012

1) **Lee, S.-J**.*, Kim, Y. J., Kotwal, A.[#], Jeong, K. D., "Modeling rutting properties of rubberized asphalt concrete mixtures." **Journal of Advanced Construction Materials** Vol. 17, pp. 59-68. (December 2012).

2) Broughton, B.[#], **Lee, S.-J**.*, "Microsurfacing as a preventative maintenance program in Texas." **International Journal of Pavement Research and Technology.** Vol. 5, No. 6, pp. 405-410. (November 2012)

3) Kim, H. S., **Lee, S.-J.,** Amirkhanian, S., "Influence of warm mix additives on polymer modified asphalt mixture properties." **Journal of Transportation Engineering, ASCE**. Vol. 138, No. 8, pp. 991-997. (August 2012).

4) Broughton, B.[#], **Lee, S.-J**.*, Kim, Y. J., "30 years of microsurfacing: a review." **ISRN Civil Engineering**. Vol. 2012, Article ID 279643, doi:10.5402/2012/279643. (May 2012).

5) Kim, Y. J., Hu, Jiong, **Lee, S.-J.,** Yoo, B. H., "Mechanical properties of aerated lightweight aggregate concrete." **Magazine of Concrete Research**. Vol. 64, No. 3, pp. 189-199. (March 2012).

2011

1) **Lee, S.-J.*,** Kim, H. S., "Evaluation of polymerized asphalt mixture using warm mix technologies." **Journal of Advanced Construction Materials**. Vol. 16, pp. 61-67. (December 2011).

2) Kim, H. S., **Lee, S.-J.,** Amirkhanian, S., "Impact of warm mix additives on rheological properties of polymer modified asphalt binders." **Canadian Journal of Civil Engineering**. Vol. 38, No. 12, pp. 1414-1426. (December 2011).

3) Jeong, K. D., Hwang, S. D., **Lee, S.-J.*,** Kim, K. W., "Evaluation of rutting potential of open graded friction course (OGFC) mixes using asphalt pavement analyzer." **KSCE Journal of Civil Engineering**. Vol. 15, No. 7, pp. 1259-1262. (September 2011).

4) Kim, Y. J., Hu, J. **Lee, S.-J.,** Broughton, B.[#], "Prediction of compressive strength of aerated lightweight aggregate concrete by artificial neural network." **Applied Mechanics and Materials**. Vols. 84-85, pp. 177 - 181. (August 2011).

5) Kim, H. S., **Lee, S.-J.,** Amirkhanian, S., Park, T. S., "Performance evaluation of recycled PMA binders containing warm mix asphalt additives." **Journal of Testing and Evaluation, ASTM**. Vol. 39, No. 4, pp. 1 - 7. (July 2011).

6) Jeong, K. D., **Lee, S.-J.*,** Kim, K. W., "Laboratory evaluation of flexible pavement materials containing waste polyethylene (WPE) film." **Construction and Building Materials**. Vol. 25, No. 4, pp. 1890-1894. (April 2011).

7) **Lee, S.-J.*,** Hu, Jiong, Kim, H. S., Amirkhanian, S., "Aging analysis of rubberized binders and mixes using gel permeation chromatography." **Construction and Building Materials**. Vol. 25, No. 3, pp. 1485-1490. (March 2011).

8) Kim, H. S., **Lee, S.-J.*,** Amirkhanian, S., "Rheology of warm mix asphalt binders with aged binders." **Construction and Building Materials**. Vol. 25, No. 1, pp. 183-189. (January 2011).

2010

1) Kim, Y. J., Hu, Jiong, **Lee, S.-J.,** Yoo, B. H., "Mechanical properties of fiber reinforced lightweight concrete containing surfactant." **Advances in Civil Engineering**. Vol. 2010, Article ID 549642, doi:10.1155/2010/549642. (December 2010).

2) **Lee, S.-J.*,** Kim, H. H., Kim, K. W., "Effect of supplementary cementing materials on the workability of blended cement pastes." **Journal of Advanced Construction Materials**. Vol. 15, pp. 63-69. (December 2010).

3) Kim, H. S., **Lee, S.-J.*,** Amirkhanian, S., "Rheology investigation of crumb rubber modified asphalt binders.**" KSCE Journal of Civil Engineering.** Vol. 4, No. 6, pp. 839-843. (November 2010).

4) Akisetty, C. K**.,** Gandhy, T., **Lee, S.-J.*,** Amirkhanian, S., "Analysis of rheological properties of rubberized binders containing warm asphalt additives**." Canadian Journal of Civil Engineering**. Vol. 37, No. 5, pp. 763-771. (May 2010).

5) Jeong, K. D., **Lee, S.-J.*,** Amirkhanian, S., Kim, K. W., "Interaction effects of crumb rubber modified asphalt binders." **Construction and Building Materials**. Vol. 24, No. 5, pp. 824-831. (May 2010).

6) Akisetty, C. K., **Lee, S.-J.*,** Amirkhanian, S., "Laboratory investigation of the influence of warm mix additives on long-term performance properties of crumb rubber modified binders." **The International Journal of Pavement Engineering**. Vol. 11, No. 2, pp. 153-160. (April 2010).

7) Akisetty, C. K., **Lee, S.-J.*,** Rogers, W., Amirkhanian, S., "Engineering properties of CRM mixtures containing warm mix additives." **Journal of Testing and Evaluation**, **ASTM**. Vol. 38, No. 1, pp. 65-72. (January 2010).

8) Kim, H. S., **Lee, S.-J.*,** Amirkhanian, S., "Effects of warm mix asphalt additives on performance properties of polymer modified asphalt binders." **Canadian Journal of Civil Engineering.** Vol. 37, No. 1, pp. 1-8. (January 2010).

2009

1) **Lee, S.-J.*,** Copher, T., Amirkhanian, S., "Laboratory evaluation of moisture susceptibility of hot mix asphalt mixtures containing waste fiberglass." **Journal of Advanced Construction Materials**. Vol. 14, pp. 54-64. (December 2009).

2) **Lee, S.-J.*,** Amirkhanian, S., Kim, K. W., "Laboratory evaluation of the effect of short-term oven aging on asphalt binder in asphalt mixtures using gel permeation chromatography." **Construction and Building Materials.** Vol. 23, No. 9, pp. 3087-3093. (September 2009).

3) **Lee, S.-J.*,** Amirkhanian, S., Putman, B., "Characterization of recycled aged RAP binders containing crumb rubber modifier using gel permeation chromatography." **Journal of Materials in Civil Engineering, ASCE.** Vol. 21, No. 8, pp. 382-391. (August 2009).

4) Akisetty, C. K., **Lee, S.-J.*,** Amirkhanian, S., "Effects of compaction temperature on volumetric properties of rubberized mixes containing warm mix additives." **Journal of Materials in Civil Engineering, ASCE.** Vol. 21, No. 8, pp. 409-415. (August 2009).

5) **Lee, S.-J.*,** Amirkhanian, S., Park, N. W., Kim, K. W., "Characterization of warm mix asphalt binders containing artificially long-term aged binders." **Construction and Building Materials.** Vol. 23, No. 3, pp. 2371-2379. (March 2009).

6) **Lee, S.-J.*,** Kim, H. S., Amirkhanian, S., Kim, K. W., "Relation of mechanical properties of recycled aged CRM mixtures with binder molecular size distribution." **Construction and Building Materials.** Vol. 23, No. 2, pp. 997-1004. (February 2009).

7) Akisetty, C. K., **Lee, S.-J.*,** Amirkhanian, S., "High temperature properties of rubberized binders containing warm asphalt additives." **Construction and Building Materials.** Vol. 23, No. 1, pp. 565-573. (January 2009).

2008

1) **Lee, S.-J.*,** Purcell, K., Amirkhanian, S., "Utilization of waste roofing shingles in flexible pavements." **Journal of Advanced Construction Materials.** Vol. 13, pp. 61-69. (December 2008).

2) **Lee, S.-J.*,** Kim, H. S., Akisetty, C. K., Amirkhanian, S., "Laboratory characterization of recycled crumb rubber modified asphalt mixture after extended aging." **Canadian Journal of Civil Engineering.** Vol. 35, No. 11, pp. 1308-1317. (November 2008).

3) **Lee, S.-J.*,** Amirkhanian, S., Shatanawi, K., Kim, K. W., "Short-term aging characterization of asphalt binders using gel permeation chromatography and selected Superpave binder tests." **Construction and Building Materials.** Vol. 22, No. 11, pp. 2220-2227. (November 2008).

4) **Lee, S.-J.*,** Amirkhanian, S., Shatanawi, K., Thodesen, C., "Influence of compaction temperature on rubberized asphalt mixes and binders." **Canadian Journal of Civil Engineering.** Vol. 35, No. 9, pp. 908-917. (September 2008).

5) **Lee, S.-J.*,** Akisetty, C. K., Amirkhanian, S., "Recycling of laboratory-prepared long-term aged binders containing crumb rubber modifier." **Construction and Building Materials.** Vol. 22, No. 9, pp. 1906-1913. (September 2008).

6) Lee, S.-J.*, Akisetty, C. K., Amirkhanian, S. "The effect of crumb rubber modifier on the performance properties of rubberized binders in HMA pavements." Construction and Building Materials. Vol. 22, No. 7, pp. 1368-1376. (July 2008).

7) Lee, S.-J.*, Amirkhanian, S., Kwon, S. Z., "The effects of compaction temperature on CRM mixtures made with the SGC and the Marshall compactor." Construction and Building Materials. Vol. 22, No. 6, pp. 1122-1128. (June 2008).

1998 - 2007

1) Lee, S.-J.*, Amirkhanian, S., Putman, B., Kim, K. W., "A laboratory study of the effects of compaction on the volumetric and rutting properties of CRM asphalt mixtures." Journal of Materials in Civil Engineering, ASCE. Vol. 19, No. 12, pp. 1079-1089. (December 2007).

2) Kim, K. W., Cho, B. J, Lee, S.-J., Doh, Y. S., "Suggestion for determination of minimum S_D for rut-resistable asphalt concretes." Journal of Korean Society of Road Engineers. Vol. 9, No. 4, pp. 193-204. (December 2007).

3) Shen, J., Amirkhanian, S., Lee, S.-J., "HP-GPC characterization of rejuvenated aged CRM binders." Journal of Materials in Civil Engineering, ASCE. Vol. 19, No. 6, pp. 515-522. (June 2007).

4) Shen, J., Amirkhanian, S., Lee, S.-J., Putman, B., "Recycling of laboratory-prepared RAP mixtures containing crumb rubber modified binders in HMA." Transportation Research Record: Journal of the Transportation Research Board. No. 1962, pp. 71-78. (November 2006).

5) Shen, J., Amirkhanian, S., Lee, S.-J., "The effect of rejuvenating agents on recycled aged CRM binders." The International Journal of Pavement Engineering. Vol. 6, No. 4, pp. 273-279. (December 2005).

6) Kim, K. W., Choi, S. J., Lee, M. U., Hong, S. K., Ahn, K. A., Lee, S.-J., "Deformation strength and permanent deformation characteristics of modified-asphalt concretes." Journal of Advanced Construction Materials. Vol. 6, pp. 71-88. (September 2003).

7) Kim, K. W., Lee, M. U., Kim, S. T., Lee, S.-J., "Analysis of apparatus variables for deformation strength test of asphalt concrete based on correlation with rutting and prediction model for rutting." Journal of Korean Society of Road Engineers. Vol. 4, No. 4, pp. 41-52. (December 2002).

8) Kim, K. W., Hong, S. K., Oh, H. L., Lee, S.-J., "Effect of curing temperature and time on measuring fundamental properties of asphalt mixture." Journal of Korean Society of Road Engineers. Vol. 4, No. 4, pp. 13-21. (December 2002).

9) Kim, K. W., Lee, M. U., Kim, J. Y., Lee, S.-J., "New experimental technique for estimating high-temperature deformation resistance of asphalt concrete." Journal of Advanced Construction Materials. Vol. 7, pp. 73-90. (September 2002).

10) Kim, K. W., Kim, J. I., Lee, S.-J., Choi, S. J., "Experimental study for determination of optimum waste vinyl contents in asphalt concrete." Journal of Korean Society of Agricultural Engineers. Vol. 44, No. 5, pp. 88-95. (September 2002).

11) Kim, K. W., Li, X. F., Jeong, S. H., Lee, S.-J., Lee, G. H., "Evaluation of characteristics improvement of waste-polyethylene asphalt concrete." Journal of Korean Society of Road Engineers. Vol. 4, No. 1, pp. 161-170. (March 2002).

12) Kim, K. W., Lee, S.-J., Lee, G. H., Lee, S. H., Lee, B. D., "Estimation of mechanical properties of sand asphalt concrete based on physical properties of binder." Journal of Korean Society of Road Engineers. Vol. 4, No. 1, pp. 149-159. (March 2002).

13) Kim, K. W., Ahn, K. A., Kim, S. U., Li, X. F., Lee, S.-J., "Effect of PMA binder on strength characteristics of asphalt concretes." Journal of Advanced Construction Materials. Vol. 6, pp. 59-83. (August 2001).

14) Kim, K. W., Lee, S. H., Doh, Y. S., Lee, S.-J., "Correlation between mechanic properties of asphalt concrete and properties of modified binder." Journal of Advanced Construction Materials. Vol. 5, pp. 63-74. (August 2000).

15) Kim, K. W., Lee, S.-J., Li, X. F., Lee, J. Y., "Fatigue resistance characteristics of modified-and-recycled asphalt mixtures," Journal of Korean Society for Civil Engineer. Vol. 20, No. 2-D, pp. 149-157. (January 2000).

16) Kim, K. W., Kwon, S. J., Lee, J. Y., Lee, S.-J., "Characteristics of polymer-modified dry-mix CRM asphalt concretes." Journal of Korean Society for Civil Engineer. Vol. 20, pp. 57-65. (January 2000).

17) Kim, K. W., Kwon, S. J., Lee, S.-J., Doh, Y. S., "Evaluation of cold-mix recycled asphalt mixture with a polymer modifier." Journal of Korean Society of Agricultural Engineers. Vol. 40, pp. 53-61. (December 1998).

18) Jeong, K. D., Lee, S.-J., Cha, S. M, Kim, K. W., "Quality improvement of cold-recycled asphalt mixture for domestic application." Journal of Korean Society for Civil Engineer. Vol. 18, No. III-4, pp. 463-474. (July 1998).

a*. Under Review Refereed Journal Articles:

1) Mazumder, M.[#], Kim, H. H., **Lee, S.-J.**, Lee, M.-S., "Evaluation of crack treatment methods using HDM-III modeling." **RMPD** (Submitted, September 2017)

2) Mazumder, M., Kim, H. H., Lee, M. S., **Lee, S.-J.** *, A review on different aspects of crack treatment methods." **Advances in Civil Engineering** (Submitted, May 2018)

3) Kim, H. H., Lee, M.-S., **Lee, S.-J.***, "Performance evaluation of polymer modified asphalt (PMA) binders containing ground tire rubber (GTR)." **International Journal of Pavement Research and Technology** (Re-submitted, December 2018)

4) Mazumder, M.[#], Kim, H. H., **Lee, S.-J.**, Lee, M.-S., "Crack treatment performance on pavement marking, joint and shoulder lanes in Texas." **JTTE** (Submitted, October 2018)

5) Mazumder, M., Ahmed, R., Lee, M. S., **Lee, S.-J.** *, Optical characterization of warm mix asphalt (WMA) binders." **Advances in Civil Engineering** (Submitted, December 2018)

b. Non-refereed Articles:

3. Conference Proceedings

a. Refereed Conference Proceedings: (* denotes corresponding author)

1) Mazumder, M., Kim, H. H., **Lee, S.-J.**, "Comparison of field performance of crack treatment methods in asphalt pavement: crack filling versus crack sealing." ***Transportation Research Board***, 97th Annual Meeting, Washington, D.C. (January 7-11, 2018).

2) **Lee, S.-J.***, Hong, S. I., "Experience of Asphalt Rubber Pavement and Recycled Tire Use in Korea" *Proceedings of R2P Conference*, Las Vegas, (September 6-7, 2017).

3) Hong, S. I., Jang, J. W., **Lee, S.-J.**, "In-Service Performance Evaluation of CRMA and PSMA Pavements" *Proceedings of Korea Asphalts Society*, Korea, (April 22, 2017).

4) **Lee, S.-J.***, "Rubberized Asphalt Pavements in the United States" *Proceedings of Korea Society of Road Engineers*, Korea, (June 1-3, 2016).

5) Lee, M. S., Nam, J. H., **Lee, S.-J**.*, "Crack-Seat-Overlay to minimize reflective cracking for flexible pavements" *Proceedings of Korea Asphalts Society*, Korea, (March 31, 2016).

6) Kim, H. H., **Lee, S.-J**.*, "Recycling of rubberized binders with wax warm additives" *Proceedings of Korea Asphalts Society*, Korea, (March 31, 2016).

7) Kim, H. H., **Lee, S.-J**.*, "Can we recycle WMA with wax additives?" *Proceedings of Korean Society of Road Engineers*, Korea, (October 31, 2015).

8) Humphries, E., **Lee, S.-J**.*, "Crack sealing vs. crack filling" *Proceedings of Korean Society of Road Engineers*, Korea, (October 31, 2015).

9) Humphries, E., **Lee, S.-J**., "An evaluation of pavement preservation and maintenance activities at general aviation airports in Texas: current practices, perceived effectiveness, costs, and planning." ***Transportation Research Board***, 94th Annual Meeting, Washington, D.C. (January 11-15, 2015).

10) Kim, H. H., **Lee, S.-J.*,** Jeong, K. D., Hwang, S. D., "Effect of wax additive on high temperature properties of rubberized asphalt binders." *The 13th International Symposium for Advanced Technologies in Asphalt Pavements*, Chuncheon, South Korea, (September 25 – 26, 2014).

11) Yun, Y.-B.., Lee, M.-S., Jeong, S.-H., **Lee, S.-J.,** Kim. K. W., "Rut-related Performance of polymer-modified warm-mix asphalt mixtures in comparison with tensile property." *The 13th International Symposium for Advanced Technologies in Asphalt Pavements*, Chuncheon, South Korea, (September 25 – 26, 2014).

12) Kim, H. H, **Lee, S.-J.*,** Jeong, K. D., Lee, M. S., "Evaluation of rubberized asphalt binders depending on FT-paraffin wax contents." *The 12th ISAP Conference on Asphalt Pavements*, Raleigh, North Carolina, (June 1 – 5, 2014).

13) Kim, H. H, **Lee, S.-J.*,** Jeong, K. D., Hwang, S. D., "Effect of crumb rubber on asphalt binders containing LEADCAP additive." *The 12th ISAP Conference on Asphalt Pavements*, Raleigh, North Carolina, (June 1 – 5, 2014).

14) Hu, J., Kim, Y. J., **Lee, S.-J**., "Behavior of self-consolidation concrete with coarse and fine recycled concrete aggregate." *The 5th North American Conference on the Design and Use of Self-Consolidation Concrete*, Chicago, Illinois, (May 12-15, 2013).

15) Broughton, B., **Lee, S.-J**.*, "Microsurfacing as a preventative maintenance program." *The 12th International Symposium for Advanced Technologies in Asphalt Pavements*, Vol. 12, pp. 3-20, Seoul, South Korea (July 4-5, 2012).

16) Broughton, B., **Lee, S.-J.*,** "Microsurfacing in Texas." *Transportation Research Board*, 91th Annual Meeting, Washington, D.C. (January 22-26, 2012).

17) Kim, Y. J., Hu, J. **Lee, S.-J.,** Broughton, B., "Prediction of compressive strength of aerated lightweight aggregate concrete by artificial neural network." *2011 International Conference on Green Power, Materials and Manufacturing Technology and Applications (GPMMTA)*, Vols. 84-85, pp. 177-182, Chongqing, China (August 2011).

18) **Lee, S.-J.*,** Kim, H. S., Kim, Y. J., Amirkhanian, S., "Characterization of recycled aged polymer modified asphalt binders containing warm mix additives." *The 11th International Symposium for Advanced Technologies in Asphalt Pavements*, Vol. 11, pp. 259-265, Chuncheon, South Korea (June 3-4, 2010).

19) Kim, H. S., **Lee, S.-J.*,** Amirkhanian, S., Kim, K. W., "Aging of low-energy polymerized asphalt mixes." *The 1th International Symposium for Advanced Technologies in Asphalt Pavements*, Vol. 11, pp. 109-114, Chuncheon, South Korea (June 3-4, 2010).

20) Kim, H. S., **Lee, S.-J.,** Amirkhanian, S., Park, T. S., "Evaluation of polymer modified asphalts containing warm mix additives in rheology" *Urban Transport 2009*, Vol. 92, pp. 471-478, Bologna, Italy (June 22-24, 2009).

21) Akisetty, C. K., **Lee, S.-J.*,** Amirkhanian, S., "Volumetric change of warm rubberized mixes depending on compaction temperature." *Proceedings of the 2008 Airfield and Highway Pavements Conference*, ASCE, p. 18, Bellevue, Washington (October 15-18, 2008).

22) Park, N. W., Baek, S. H., **Lee, S.-J.,** Doh, Y. S., Kim, K. W., "Characterization of deformation strength of OGFC mixtures." *Proceedings of Korean Society of Road Engineers*, pp. 153-158, Seoul, South Korea (October 14, 2008).

23) **Lee, S.-J.*,** Kim, H. S., Amirkhanian, S., Kim, K. W., "Prediction of engineering properties of recycled aged rubberized mixes using GPC." *Urban Transport 2008*, Vol. 91, pp. 469-478, Malta, (September 1-3, 2008).

24) Akisetty, C. K., Lee, S.-J.*, Amirkhanian, S., "Properties of rubberized warm asphalt binders – a preliminary analysis." *23rd ARRB Conference*, Adelaide, South Australia (July 30 - August 1, 2008).

25) Purcell, K. M., Lee, S.-J.*, Amirkhanian, S., "Laboratory investigation of moisture susceptibility of hot mix asphalt mixtures with waste roofing shingles." *23rd International Conference on Solid Waste Technology and Management*, Philadelphia, PA (March 30-April 2, 2008).

26) Lee, S.-J.*, Kim, H. S., Akisetty, C. K., Amirkhanian, S. "Laboratory investigation of recycled aged CRM mixtures." *The fifth International Conference on Maintenance and Rehabilitation of Pavements and Technological Control, MAIREPAV5*, Vol. 5. pp. 469 -474, Park City, Utah (August 8-10, 2007).

27) Lee, S.-J.*, Amirkhanian, S., Kwon, S. Z., "Aging and recycling properties of rubberized binders." *The fifth International Conference on Maintenance and Rehabilitation of Pavements and Technological Control, MAIREPAV5*, Vol. 5. pp. 343-348, Park City, Utah (August 8-10, 2007).

28) Lee, S.-J.*, Amirkhanian, S., Kim, K. W., "Development of color flexible pavement applicable to elementary school zone." *Second International Conference on Safety and Security Engineering, SAFE 2007*, Vol. 2, pp. 419-428, Malta (June 25-27, 2007).

29) Lee, S.-J.*, Amirkhanian, S., Putman, B., Kim, K. W., "Laboratory investigation of volumetric and rutting properties of CRM asphalt mixtures due to compaction conditions." *Transportation Research Board*, 86th Annual Meeting, Washington, D.C. (January 21-25, 2007).

30) Lee, S.-J.*, Amirkhanian, S., Thodesen, C., Shatanawi, K., "Effects of compaction temperature on rubberized asphalt mixes." *Asphalt Rubber 2006*, Vol. 3, pp. 583-597, Palm Springs, California (October 25-27, 2006).

31) Lee, S.-J.*, Amirkhanian, S., Shatanawi, K., "Effects of crumb rubber on aging of asphalt binders." *Asphalt Rubber 2006*, Vol. 3, pp. 779-795, Palm Springs, California (October 25-27, 2006).

32) Kim, K. W., Lee, S.-J., Amirkhanian, S., "Estimation of rutting characteristics of waste tire rubber-modified asphalt binder using GPC." *Urban Transport 2006*, Vol. 89, pp. 463-473, Prague, Czech Republic (July 12-14, 2006).

33) Lee, S.-J.*, Amirkhanian, S., Shatanawi, K., "Effect of reaction time on physical and chemical properties of rubber-modified binders." *International Rubber Conference 2006*, Compendium of papers CD-ROM, Lyon, France (May 16-18, 2006).

34) Lee, S.-J.*, Amirkhanian, S., Kim, K. W., "Performance characteristics of asphalt mixtures with waste vinyl." *21st International Conference on Solid Waste Technology and Management*, Philadelphia, PA (March 26-29, 2006).

35) Shen, J., Amirkhanian, S., Lee, S.-J., and Putman, B., "Recycling of laboratory-prepared RAP mixtures containing crumb rubber modified binders in HMA." *Transportation Research Board*, 85th Annual Meeting, Washington, D.C. (January 9-13, 2006).

36) Kim, K. W., Lim, D. S., Jung, J. H., Jeong, K. D, Lee, S.-J., "Statically-reviewed problems in new penetration grade specification for asphalt binders." *5th International Conference on Pavement Technologies*, Vol. 2, pp. 668-673, Seoul, Korea (May 10~12, 2005).

37) Shen, J., Amirkhanian, S., Lee, S.-J.*, "HP-GPC characterization of recycled aged rubber modified binders." *5th International Conference on Pavement Technologies*, Vol. 1, pp. 241-250, Seoul, Korea (May 10~12, 2005).

38) Shen, J., Amirkhanian, S., Lee, S.-J.*, "Influence of aging on HP-GPC profiles of recycled aged rubber modified binders." *5th International Conference on Pavement Technologies*, Vol. 1, pp. 279-286, Seoul, Korea (May 10~12, 2005).

39) Shen, J., Amirkhanian, S., Lee, S.-J., "Effects of rejuvenating agents on recycled aged rubber modified binders." *Transportation Research Board*, 84th Annual Meeting, Washington, D.C. (January 22-26, 2005).

40) Kim, K. W., Choi, S. J., Kwon, O. S., Lee, S.-J., "Correlation analysis between deformation strength and rut parameters of asphalt concrete with minimized experimental error." *Proceedings of Korean Society of Pavement Engineers*, pp. 29-34 (October 17, 2003).

41) Lee, S.-J., Doh, Y. S., Kim, K. W., "Joint sealing effect on reflection cracking of overlaid polymer-modified asphalt concretes." 4th Asia Symposium on Polymers in Concrete, *ASPIC 2003*, Vol. 4, pp. 411-418, Chuncheon, Korea (March 1~2, 2003).

42) Kim, K. W., Lee, S.-J., Lee, M. U., Kim, S. T., "Problems in new Korean penetration grade of asphalt cement." *Proceedings of Korean Society for Civil Engineer*, pp. 160-163, (November 8, 2002).

43) Kim, K. W., Kim, J. K., Kim, B. C., Lee, S.-J., Jeong, K. D., "Evaluation of mix design result difference between Superpave and Marshall method." *Proceedings of Korean Society of Pavement Engineers*, pp. 75-80 (October 11, 2002).

44) Kim, K. W., Lee, S.-J., Doh, Y. S., Rhee, S. K., Park, T. S., "Estimation of relative performance of overlaid asphalt concretes against reflective cracking due to shear and bending fracture mode." *Bearing Capacity of Roads, Railways and Airfields, BCRA '02*, pp. 539-547, Lisbon, Portugal (June 24, 2002).

45) Kim, K. W., Oh, H. R., Lee, S.-J., Kwon, S. J., "Importance of curing time and temperature of asphalt mixture in measured mechanical properties." *4th International Conference on Road & Airfield Pavement Technology*, pp. 756-763, Kunming, China (April 23, 2002).

46) Kim, K. W., Li, X. F., Lee, S.-J., Kim, S. U., "Assessment of applicability of waste vinyl asphalt concretes." *Proceedings of Korean Society of Agricultural Engineers*, Korea, pp. 111-114 (October 12, 2001).

47) Kim, K. W., Lee, S.-J., Oh, H. R., Lee, Y. G., Kim, J. Y., "Problems in measurement and implementation of Marshall stability of asphalt mixture." *Proceedings of Korean Society of Pavement Engineers*, Korea, pp. 173-179, (October 13, 2001).

48) Kim, K. W., Lee, S.-J., Doh, Y. S., Li, X. F., Oh, S. K., "Research trends in asphalt pavement recycle in Korea." *'00 Advanced Technologies in Asphalt Pavements*, Korea, pp. 3-24, (February 2000).

49) Kim, K. W., Lee, J. Y., Lee, S.-J., Jeong, I. K., "Preliminary evaluation of RAP for hot in-place recycling." *Proceedings of Korean Society for Civil Engineer*, Korea, No. IV, pp. 109-112 (October 1998).

50) Kim, K. W., Jeong, K. D., Lee, S.-J., Jeong, I. K., Lee, J. Y., "Fatigue resistance of recycled asphalt concretes using cold-planned reclaimed asphalt pavement." *'98 Advanced Technologies in Asphalt Pavements*, Korea, pp. 113-144 (August 1998).

51) Kim, K. W., Jeong, K. D., Lee, J. Y., Lee, S.-J., Park, T. S., "Evaluation of modified and cold-recycled asphalt mixtures." *5th International Conference on the Bearing Capacity of Roads and Airfields*, Trondheim, Norway, pp. 1609-1618 (June 1998).

52) Kim, K. W., Jeong, K. D., Lee, S.-J., Doh, Y. S., "Applicability of cold-recycled asphalt mixture for base course materials." *International Seminar on Emulsified Asphalt Mixture*, Korea, pp. 73-86 (June 1998).

53) Kim, K. W., Jeong, K. D., Lim, S. B., Lee, S.-J., "Evaluation of recycled asphalt mixture for asphalt-treated base course materials." *Proceedings of Korean Society for Civil Engineer*, Korea, pp. 17-20 (October 1997).

54) Kim, K. W., Jeong, K. D., Lee, S.-J., Doh, Y. S., Cha, S. M., "Evaluation of cold-modified recycled asphalt mixture for stabilized base course material." *'97 Advanced Technologies in Asphalt Pavements*, Korea, pp. 121-148 (August 1997).

b. Non-refereed:

4. Abstracts:

5. Reports:

1) Lee, S.-J., Quite Pavement Technology in the United States, Korea Institute of Civil Engineering and Building Technology (KICT), December 2017.
2) Mazumder, M., Kim, H. H., Humphries, E., and Lee, S.-J., Crack Sealing vs. Crack Filling (Project 0-6832), Texas Department of Transportation (TxDOT), August 2017.
3) Lee, S.-J., Current Status of Micro-Trenching Method in the United States, Korea Institute of Civil Engineering and Building Technology (KICT), November 2016.
4) Hu, J., Kim, Y. J. and Lee, S.-J., Synthesis on Cost-Effectiveness of Extradosed Bridges (Project 0-6729), Texas Department of Transportation (TxDOT), March 2016
5) Kim, Y. J., Hu, J., Lee, S.-J., Kotwal, A. and Dickey, J., Geosynthetic Reinforced Steep Slopes (Project 0-6792), Texas Department of Transportation (TxDOT), March 2016
6) Lee, S.-J., Current Status of Reclaimed Asphalt Pavement in Hot-Mix Asphalt, Korea Institute of Civil Engineering and Building Technology (KICT), December 2015.
7) Lee, S.-J., Program Revision and Improvement of Korea Pavement Design Guide; Environmental Loading, Korea Institute of Civil Engineering and Building Technology (KICT), November 2015.
8) Humphries, E. and Lee, S.-J., An Evaluation of Pavement Preservation and Maintenance Activities at General Aviation Airports in the FAA Southwest Region: Current Practices, Perceived Effectiveness, Costs and Planning, U.S. Department of Transportation Federal Aviation Administration, January 2015.
9) Lee, S.-J. and Kim, H. H., Application Analysis of CRM Asphalt Binders Containing Warm Mix Additives, Korea Institute of Construction Technology (KICT), November 2013.
10) Humphries, C., Broughton, B. Humphries, E. and Lee, S.-J., Economics Analysis of Low-Volume Road Surfacing Alternatives (Project 0-6677), Texas Department of Transportation (TxDOT), January 2013.
11) Broughton, B. and Lee, S.-J., Microsurfacing in Texas (Project 0-6668), Texas Department of Transportation (TxDOT), January 2012.

6. Book Reviews:

1) Estimating in Building Construction, 8th Edition by Frank R. Dagostino and Steven J. Peterson (October 2012)

7. Other:

B. Works not in Print

1. Papers Presented at Professional Meetings:

2. Invited Talks, Lectures, and Presentations:

1) "Evaluation of Tacking Coating Performance and Specifications", Do-Kyeong Construction., Korea (May 16, 2018).
2) "MSCR Application for SBS, SIS and CRM Binders" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (May 15, 2018).
3) "MSCR Application for Recycled Binders" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (July 12, 2017).
4) "Crumb Rubber Modified Asphalt Pavements and Quiet Pavement", Highway, Singapore (May 18, 2017).
5) "Crumb Rubber Modified Asphalt Pavements", Samwoh, Singapore (May 18, 2017).
6) "Hot In-Place Recycling" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (May 12, 2017).
7) "Crumb Rubber Modified Asphalt Pavements" Road Maintenance Department of Seoul City, Seoul, Korea (May 25, 2016).
8) "Optimization of Tack Coat for HMA Placement" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (March 22, 2016).
9) "Crack and Seat Method to Minimize Reflective Cracking" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (March 15, 2016).
10) "Recycling of Warm Mix Asphalt with Wax Additives" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (December 8, 2015).
11) "Green Asphalt Technology" Kunsan National University, Korea (November 25, 2015).
12) "Effective Crack Treatment Methods" Korea Institute of Civil Engineering and Building Technology (KICT), Ilsan, Korea (October 13, 2015).
13) "Effective Time Management and Scheduling in Construction" Kangwon National University, Korea (June 4, 2013).
14) "Technology and Quality Control of RAP Asphalt Mixtures in the United States" Korea Institute of Construction Technology (KICT), Ilsan, Korea (May 16, 2013).
15) "Microsurfacing / Polymer Slurry Seal" Kumho Petrochemical, Daejeon, Korea (July 16, 2012).
16) "Microsurfacing in Texas" Korea Institute of Construction Technology (KICT), Ilsan, Korea (June 26, 2012).
17) "Cost Effectiveness of Road Conversion Based on Traffic Volume" Kangwon National University, Korea (June 2, 2012).
18) "Life cycle cost analysis (LCCA) of warm mix asphalt (WMA)" Korea Institute of Construction Technology (KICT), Ilsan, Korea (June 2, 2011).
19) "Leadership in construction" Kangwon National University, Korea (May 31, 2011).
20) "Oxidative aging of warm mix asphalt binders and mixes" Korea Institute of Construction Technology (KICT), Ilsan, Korea (June 28, 2010).

21) "Sustainability in the built environment" Kangwon National University, Korea (June 7, 2010).

22) "Use of warm mix asphalt technology in CRM mixes." Korea Institute of Construction Technology (KICT), Ilsan, Korea (June 5, 2008).

23) "Recycling of aged CRM binders and mixes." Kangwon National University, Korea (May 19, 2008).

24) "Asphalt Rubber Technology Service and use of crumb rubber modifier in HMA pavements." Korea Institute of Construction Technology (KICT), Ilsan, Korea (May 12, 2005).

3. Consultancies:

4. Workshops:

5. Other:

1) Invited as the session chair at the *13th International Symposium for Advanced Technologies in Asphalt Pavements*, Chuncheon, South Korea (2014).

2) Research Scholar (Visiting Professor)
Professor Chang-Woo Hong, Department of Civil Engineering, Korea National University of Transportation, South Korea (2011 ~ 2012).

3) Invited as the session chair at the *11th International Symposium for Advanced Technologies in Asphalt Pavements*, Chuncheon, South Korea (2010).

C. Grants and Contracts

1. Funded External Grants and Contracts:

1) **Korea Agency for Infrastructure Technology Advancement (KAIA),** 2017, **PI (Lee, S.-J.)**, CoPI (Kim, H. H.) "Development of Rubberized Asphalt Binder for Double-Layer Low-Noise Pavements", Amount: **$140,186**, January 2018 – December 2020.

2) **Korea Agency for Infrastructure Technology Advancement (KAIA),** 2018, **PI (Lee, S.-J.),** CoPI (Kim, H. H.), "Development of Long-Lasting Asphalt Overlay Methods by an Effective Pre-treatment of Existing Aged Concrete Pavement; Evaluation Method and Specification on Bonding Strength of Emulsified Asphalt", Amount: **$230,096**, April 2018 – June 2022.

3) **Texas Department of Transportation (TxDOT),** 2014, **PI (Lee, S.-J**.), CoPIs, (Humphries, Evan, Hu, J. and Kim, Y. J.), "Improved Crack Sealant Application Methods", Amount: **$229,640,** September 2014 – August 2017.

4) **YU-JIN Construction,** 2016, PI (Kim, K. W.), CoPI (Lee, S.-J.), "Development of Crack Sealant", Amount: **$41,390**, February 2016 – December 2016.

5) **Federal Aviation Administration (FAA),** 2013, **PI (Lee, S.-J.),** CoPI (Humphries, Evan), "An Evaluation of Pavement Preservation and Maintenance Activities at General Aviation Airports in the FAA Southwest Region: Current Practices, Perceived Effectiveness, Costs, and Planning", Amount: **$60,000**, September 2013 – October 2014.

6) **Korea Institute of Construction Technology (KICT),** 2013, **PI (Lee, S.-J.),** CoPIs (Hu, J. and Kim, Y. J.), "Development of Low-Carbon Low-Cost Asphalt Pavement: Evaluation of New Additive for Crumb Rubber Modified Asphalt Binders, Amount: **$19,355**, February 2013 – November 2013.

7) **TxDOT,** 2012, PI (Hu, J.), CoPIs, (Lee, S.-J.), "Feasibility Study of Two-lift Concrete Paving", Amount: **$136,947,** September 2012 – August 2013.

8) **TxDOT**, 2012, PI (Kim, Y. J.), CoPIs, (Lee, S.-J.), "Synthesis on Geosynthetic-Reinforced Steep Slopes", Amount: **$49,984**, September 2012 – August 2013.

9) **TxDOT,** 2011, **PI (Lee, S.-J.),** CoPIs (Hu, J., Kim, Y. J. and Winek, G.) "Costs Associated with Conversion of Surfaced Roads to Un-surfaced Roads", Amount: **$118,112**, September 2011 – August 2012.

10) **TxDOT,** 2011, PI (Hu, J.), CoPIs (Lee, S.-J.), "Synthesis on Cost Effectiveness of Extradosed Bridges", Amount: **$49,995**, September 2011 – August 2012.

11) **Pittsburg Flexicore,** 2011, PI (Kim, Y. J.), CoPIs (Lee, S.-J.) "Review of Quality System Manual (QSM) for Precast/Prestressed Concrete: PCI Level II", Amount: **$6,000**, September 2011 – March 2012.

12) **TxDOT,** 2010, **PI (Lee, S.-J.),** CoPIs (Hu, J., Gaedicke, C. and Kim, Y. J.), "Synthesis of Microsurfacing Successes and Failures", Amount: **$49,931**, November 2010 – August 2011.

13) **TxDOT,** 2009, PI (Hu, J.), CoPIs (Lee, S.-J.), "Evaluation, Prevention and Repair of Microbial Acid-Produced Attack of Concrete", Amount: **$252,557**, September 2009 – August 2011.

14) South Carolina Department of Health and Environmental Control (SC DHEC), CoPI, 2007, "Phase Angle Study", Amount: $50,000.

15) SC DHEC, CoPI, 2007, "Vestenamer Study", Amount: $120,000.

16) SC DHEC, CoPI, 2007, "Warm Asphalt Study", Amount: $90,000.

17) SC DHEC, CoPI, 2007, "Rubber Microsurfacing Phase 1 Study", Amount: $50,000.

18) SC DHEC, CoPI, 2007, "Chemical Analysis Study", Amount: $75,000.

19) SC DHEC, CoPI, 2006, "Low-Temperature Binder Study", Amount: $50,000.

20) SC DHEC, CoPI, 2006, "Rubber-Modified Mix Performance Research", Amount: $75,000.

21) SC DHEC, CoPI, 2005, "Rubber-Modified Asphalt Research", Amount: $100,000.

22) Ministry of Construction and Transportation (South Korea), CoPI, 2002, "Quality Enhancement Method for Increasing Performance Life of Recycled Asphalt Pavement", Amount: $170,000

23) Seumkang Industry Corporation (South Korea), CoPI, 2002, "Practical Application of Expeditious-Deicing Asphalt Pavement", Amount: $25,000.

24) Ministry of Construction and Transportation (South Korea), CoPI, 2001, "Mix Design Development based on Performance Characteristics", Amount: $35,000.

25) Samsam Construction Corporation (South Korea), CoPI, 2001, "Recycling Technique of Waste Concrete Recycled Aggregate", Amount: $50,000.

26) Korea Highway Corporation (South Korea), CoPI, 2000, "Tensile Adhesive Performance of Waterproofing System for Concrete Bridge Decks by Temperature and Wheel Tracking Test", Amount: $50,000.

2. Submitted, but not Funded, External Grants and Contracts:

1) **Texas Department of Transportation (TxDOT),** 2018, **PI (Lee, S.-J.)**, CoPIs, (Wilde, W., Aguayo, F., Kim, H. H., and Kim, Y. J.), "Update Seal Coat Application Rate Design Method", Amount: **$243,100,** September 2018 – August 2020.

2) **Texas Department of Transportation (TxDOT),** 2018, PI (Kim, Y. J.), CoPIs, (Lee, S.-J.), "Synthesis of Precast Column Designs for Texas Bridges", Amount: **$64,500,** September 2018 – August 2019.

3) **Texas Department of Transportation (TxDOT),** 2017, **PI (Lee, S.-J**.), CoPIs, (Aguayo, F., Kim, H. H., and Kim, Y. J.), "Establishing Best Practices for Construction and Design of Cement Treated Materials", Amount: **$559,900,** January 2018 – August 2021.

4) **Texas Department of Transportation (TxDOT),** 2015, **PI (Lee, S.-J**.), CoPIs, (Humphries, Evan, Torres, A. and Kim, Y. J.), "Comparative Analysis of Tack Coat, Underseal Membrane, and Underseal Technologies", Amount: **$481,140,** January 2016 – August 2020.

5) **Texas Department of Transportation (TxDOT),** 2015, PI (Ghebrab, T.), CoPI (Lee, S.-J.), "Chemical Solutions for Concrete Durability Problems", Amount: $309,697, January 2016 – August 2017.

6) **Texas Department of Transportation (TxDOT),** 2015, **PI (Lee, S.-J**.), CoPIs, (Humphries, Evan, Hu, J. and Kim, Y. J.), "Audible Lane Departure Warning for Seal Coat Surfaces", Amount: **$335,646,** September 2015 – August 2018.

7) **Texas Department of Transportation (TxDOT),** 2014, PI, "Sustainable Perpetual Asphalt Pavements and Comparative Analysis of Lifecycle Cost to Traditional 20-year Pavement Design", Amount: $114,145.

8) **TxDOT,** 2014, CoPI, "Innovative Deflectometer for Pavement Inspection", Amount: $273,303.

9) **TxDOT,** 2014, CoPI, "Validation of RAP and/or RAS in Hydraulic Cement Concrete", Amount: $120,286.

10) **TxDOT,** 2014, CoPI, "Evaluating Limestone Cements Containing > 15% Limestone", Amount: $124,100.

11) **Airport Cooperative Research Program (ACRP)**, 2014, PI, "Pavement Maintenance Guidelines for General Aviation Airport Management", Amount: $300,000.

12) TxDOT, 2013, PI, "Optimize Use and Performance of Cape Seals", Amount: $127,104.

13) TxDOT, 2013, CoPI, "Synthesis: Evaluating Limestone Cements Containing > 15% Limestone", Amount: $49,575.

14) DOE SBIR/STTR Programs, 2012, CoPI, "Durable Asphalt" Phase I Pre-Application

15) TxDOT, 2012, PI, "Study of Short Term Skid Improvements by Light Texturing with a Milling Machine," Amount: $324,362.

16) TxDOT, 2012, PI, "Seal Coat Quality: Does Low Cost Mean Low Quality?" Amount: $294,230.

17) TxDOT, 2012, PI, "Best Practice for Flexible Pavement Structure Widening Projects," Amount: $146,706.

18) TxDOT, 2011, PI, "Evaluation of Bonus/Penalty Pay Adjustment Systems for HMA and Ride Specifications of Concrete and Asphalt Pavements", Amount: $229,382.

19) TxDOT, 2011, CoPI, "Synthesis Study of Traffic Signal Systems", Amount: $49,995.

20) TxDOT, 2010, CoPI, "Synthesis of Best Practices for the Placement of Long and Short Patches for Ride Quality", Amount: $49,635.

21) TxDOT, 2010, CoPI, "Evaluation of TxDOT Traffic Forecasting Techniques", Amount: $179,707.

22) TxDOT, 2010, PI, "Evaluate Binder and Mixture Aging for Warm Mix Asphalt", Amount: $361,099.

23) NCHRP 09-49 – Transportation Research Board, 2010, CoPI, "Performance of WMA Technologies: State I – Moisture Susceptibility", Amount: $450,000.

24) NHARP, 2009, PI, "Investigation of Low Energy & Low Carbon-dioxide Pavements at a Molecular Level", Amount: $200,000.

25) TxDOT, 2009, PI, "Developing a Fundamental Understanding of the Chemistry of Warm Mix Additives", Amount: $201,136.

26) NCHRP 07-47 – Transportation Research Board, 2007, CoPI, "Evaluation of the Environmental and Performance Properties of Warm Mix Asphalt Technologies", Amount: $900,000.

27) NCHRP 07-46 – Transportation Research Board, 2007, CoPI, "Improved Mix Design, Evaluation, and Materials Management Practices for Hot Mix Asphalt with High Reclaimed Asphalt Pavement Content", Amount: $400,000.

28) EPA Regional Environmental Priority Projects, 2007, CoPI, "Utilization of Used Truck Oil Filters in Hot Mix Asphalt", Amount: $71,337.

29) EPA OSWER Innovations Pilot Projects, 2006, CoPI, "The Use of Shredded Truck Oil Filters as a Modifier for Asphaltic Concrete Mixtures", Amount: $92,453.

3. Funded Internal Grants and Contracts:

1) Texas State Research Enhancement Program (REP), 2012, PI, "Quantification of Warm Mix Asphalt Aging Using HP-GPC", Office of Sponsored Programs (OSP), Texas State University, TX, Amount: $8,000.

2) Texas State REP, 2010, PI (Kim, Y. J.), CoPI (Lee, S.-J.), "Performance Properties and Prediction Models of Low-Energy and Low Carbon-Dioxide Polymerized Binders", OSP, Texas State University, TX, Amount: $8,000.

3) Texas State REP, 2009, PI, "Evaluation of Eco-Friendly Polymer Modified Asphalts in Rheology", OSP, Texas State University, TX, Amount: $8,000.

4. Submitted, but not Funded, Internal Grants and Contracts:

1) Texas State Research Enhancement Program (REP), 2014, PI, "Characterization of Waste Roofing Shingles in Flexible Pavements", Office of Sponsored Programs (OSP), Texas State University, TX, Amount: $8,000

2) Texas State One-Time Research Support from the Associate Vice President for Research, 2009, PI, "Investigation of Interaction and Oxidative Aging for Low Energy Asphalt Pavements", Texas State University, TX, Amount: $95,000.

D. Fellowships, Awards, Honors:

- **Texas State University's Presidential Distinction Awards for Excellence in Scholarly/Creative Activity (2018)**
- **Texas State University's Presidential Distinction Awards for Excellence in Scholarly/Creative Activity (2017)**
- **Texas State University's Presidential Awards for Excellence in Scholarly/Creative Activity (2010)**

- Excellent Korean Technology (KT) by Ministry of Science and Technology
  - "Polymer Modified Asphalt Binder and Its Production Method." Acquisition No. 1392 (March 2003)

IV. SERVICE

A. University:

- Serving in **Presidential Awards selection committee for Excellence in Scholarly Creative Activities and Presidential Seminar** (2011 ~ 2012)
- Serving as a member of the graduate faculty (2008 ~ present)
- Serving in College Research Enhancement Program Committee (2012, 2014, 2016, 2018)
- Serving in College Laboratory Safety Committee (2016 ~ present)
- Serving in College Principal Investigators' Council (2017 ~ present)
- Serving in College Graduate Scholarship Committee (2018)
- Serving in COSE Ad Hoc Presidential Awards Committee (2018)
- Serving in MRI White paper selection committee (2010)
- Serving as a member of Core Doctoral faculty in MSEC program (2010 ~ present)
- Serving in MSEC admission committee (2016 ~ present)
- Serving as search committee member for Civil Engineering professor position (2017 ~ present)
- Attending MSEC curriculum meetings (2010)
- Attending annual graduation commencement ceremonies (2009 ~ present)
- Attending Homecoming Tailgating (2008 ~ present)

B. Departmental:

- Bobcat Day (2008 ~ present)
- ACCE meeting (2009)
- ASC competition (2009 ~ 2011)
- Serving as an advisor for transfer students (2009)
- Serving in Department Personnel Committee (2014 ~ present)
- Serving in Graduate Program Committee (2009 ~ present)
- Serving in Department Website Committee (2010 ~ present)
- Serving in Department Scholarship Committee (2011 ~ present)
- Serving as search committee Chair of Technician position (2017)
- Serving as search committee Chair of CSM Professor of Practice position (2017 ~ present)
- Serving as search committee member for CSM Professor of Practice position (2016, 2017)
- Serving as search committee member for CSM Assistant/Associate Professor position (2011)
- Serving as search committee member for CSM Assistant/Associate Professor position (2009)
- Serving as search committee member for CIM Assistant/Associate Professor position (2009, 2012)
- Serving as search committee member for CIM Program Director position (2009, 2012)
- Serving as search committee member for CSM Senior Lecturer position (2009)
- Serving in the ACCE accreditation committee (2008 ~ 2013)

- Serving in the concrete lab layout committee (2008, 2009)
- Serving as an advisor for AGC students (2008 ~ 2012)
- Serving as an advisor for ASC student competition (2008 ~ 2011, 2015)
- Participating in the Construction and Concrete Industry Job Fair (2009 ~ present)
- Participating in the Construction Advisory Board Meeting (2008 ~ present)
- Participating in the Construction Mixer (2009 ~ 2011)
- Participating in the CIM Annual Meeting & Open House (2009)
- Participating in Annual Awards Day Ceremony (2009 ~ present)
- Serving in Pre-Construction to Construction Committee (2017 ~ present)
- Serving as a Chair of Laboratory Safety Committee (2016 ~ present)
- Coordinating CSM Senior Exit Survey, Alumni Survey, and Employer Survey (2016 ~ present)
- Serving as a Chair of CM Master Program Proposal Committee (2017 ~ present)
- Serving as a Chair of Department Personnel Committee (Spring 2017)

C. Community:

- Attending Bobcat Backyard Ribbon Cutting (2009)

D. Professional:

- Invited Guest Editor for Advances in Civil Engineering (2018)
- Editorial Board Member, Journal of Insight – Engineering and Technology (2018)
- Editorial Board Member, Journal of Materials (2012 ~ 2017)
- Reviewer, Fuel (Elsevier) (2013)
- Reviewer, Journal of Materials in Civil Engineering (ASCE) (2007 ~ present)
- Reviewer, Journal of Transportation Engineering (ASCE) (2012)
- Reviewer, The International Journal of Pavement Engineering (2008, 2010 ~ 2012, 2014, 2016)
- Reviewer, Journal of Transportation Research Record (TRR) (2007, 2008)
- Reviewer, Construction and Building Materials (Elsevier) (2007 ~ present)
- Reviewer, Canadian Journal of Civil Engineering (2015)
- Reviewer, Road Materials and Pavement Design (2007, 2017)
- Reviewer, Industrial & Engineering Chemistry Research (2008, 2009)
- Reviewer, Materials Chemistry and Physics (2016)
- Reviewer, International Journal of Pavement Research and Technology (Elsevier) (2008 ~ present)
- Reviewer, Journal of Hazardous Materials (Elsevier) (2009)
- Reviewer, Journal of Advanced Construction Materials (2009 ~ present)
- Reviewer, Journal of Testing and Evaluation, ASTM (2009 ~ present)
- Reviewer, Journal of Cleaner Production (Elsevier) (2018)

- Reviewer, Journal of Civil Engineering and Management (2010 ~ 2012)
- Reviewer, Journal of Engineering Research (JER) (2016)
- Reviewer, Journal of Korean Asphalt Society (2016 ~ present)
- Reviewer, Journal of Environmental Informatics (2010)
- Reviewer, Environmental Engineering and Management Journal (2013)
- Reviewer, International Journal of Chemical Reactor Engineering (2010)
- Reviewer, Materials Research (2011)
- Reviewer, American Journal of Engineering Education (2011, 2012)
- Reviewer, Scientific Research and Essays, 2012
- Reviewer, The 1st International Conference on Transport Infrastructure (ICTI) (2008)
- Reviewer, The 11th International Symposium on Advanced Technologies in Asphalt Pavements (ATAP) (2010)
- Reviewer, The 12th International Symposium on Advanced Technologies in Asphalt Pavements (ATAP) (2012)
- Reviewer, The 13th International Symposium on Advanced Technologies in Asphalt Pavements (ATAP) (2014)
- Reviewer, The 9th International Conference on the Bearing Capacity of Roads, Railways and Airfields (2013)
- Scientific Committee Member, The 11th International Symposium on Advanced Technologies in Asphalt Pavements (ATAP) (2010)
- Scientific Committee Member, The 12th International Symposium on Advanced Technologies in Asphalt Pavements (ATAP) (2012)
- Scientific Committee Member, The 13th International Symposium on Advanced Technologies in Asphalt Pavements (ATAP) (2014)
- RMC-1 Construction, Pavements, and Maintenance Technical Advisory Panel (TAP) 1 meeting, TxDOT (2008 ~ present)
- Qatar National Research Fund (QNRF) Reviewer, Invited and served as the QNRF reviewer for the National Priorities Research Program (NPRP) (2011 ~ present)
- Scientific Committee Member – Asphalt Pavements, Korean Society of Road Engineers (2014 ~ present)
- Scientific Committee Member – Maintenance and Recycling, Korean Society of Road Engineers (2014 – present)

E. Organizations

1. Honorary:

2. Professional:

- Member of RMC 1 TAP committee (Construction and Maintenance), TxDOT (2008 ~ Present)
- Member of Transportation Research Board (2005 ~ Present)
- Member of American Society of Civil Engineers (2007 ~ Present)
- Member of Korean Society of Road Engineers (2000 ~ Present)

- Member of Korean Society of Civil Engineers (1997 ~ Present)
- Member of Korean American Construction, Engineering, and Project Management Association (2012 ~ Present)
- Board Member, Korea Asphalts Society (2015 – present)

F. Services Honors and Awards
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