

1. Name

Kevin L. Rens, PhD, PE

2. Education

PhD, Civil Engineering (Structures), Iowa State University, 1994

MS, Civil Engineering (Structures) Iowa State University, 1989

BS, Civil Engineering, Iowa State University, 1988

3. Academic Experience

University of Colorado Denver, Professor and Chair, 2009-present, full time.

University of Colorado Denver, Professor, 2007-present, full time.

University of Colorado Denver, Founding Director, Construction Engineering, 2014-2019

University of Colorado Denver, Associate Professor, 2001-2007, full time.

University of Colorado Denver, Assistant Professor, 1995-2001, full time.

Highlight: Has been the Principal Advisor for 10 Ph.D. students in Civil Engineering and on the order of 50+ M.S. in Civil engineering graduate students since 1995 and responsible for the work and findings of their scholarly work.

4. Non-Academic Experience

Western Engineering and Research Corporation, Denver, Co., Consultant, 1995-2005

Todd and Sargent, Ames, Iowa, Engineer 1994-1995

5. Certifications or Professional Registrations

Professional Engineer, Colorado #31355 (Original Issue Date: 07/17/1996; Active)

Professional Engineer, Iowa # 23916 (Original Issue Date: 02/21/2017; Active)

6. Responsible Charge of Engineering Work within the Academic Setting

Per NSPE Position Statement No. 09-1766 (Latest Revision January 2023) - "NSPE recognizes the responsibility of engineering faculty to formulate curricula and to teach students to prepare them for the professional practice of engineering. To fulfill this responsibility as it relates to the public health, safety, and welfare, engineering faculty teaching advanced engineering subjects should be licensed professional engineers. It is expected that faculty who are not licensed will practice under the responsible charge of a colleague who is licensed until such time as they have met the licensing requirements and become licensed. **An engineering educator who heads an engineering department or division, or who is dean of an engineering college or school, is considered to be in responsible charge of the program and faculty** and should be a licensed professional engineer at the time of appointment." Dr. Rens has served as Department Chair and in responsible charge of the programs, faculty, and students from 2009 - present.

Highlight: Dr. Rens has served as the Department Chair for Department of Civil Engineering and oversees the management, operations, and direction of undergraduate (B.S.) and graduate degrees (M.S. and Ph.D.) in civil engineering, construction management, and construction engineering and management. Dr. Rens led the design, development, and implementation of the BS in Construction Management and BS in Construction Engineering and Management

degree programs during his tenure as Department Chair. Further, under his leadership the BS in Civil Engineering degree program has received the maximum accreditation (6 years) in each of their reviews under his watch (2011, 2017, & 2023).

Highlight: As sole principal investigator (PI), Dr. Rens has maintained sustainable continuous external funding with the City and County of Denver (CCD), Colorado, from 1997 to present. To date, he has been responsible for overseeing the work of over numerous students at all levels including High School, BS, MS, PhD, and post doc. This externally funded research has amassed on the order of \$10,000,000.00 in external financial support from CCD and included the inspection, rating, maintenance, and rehabilitation of Denver public infrastructure (multiple times) such as 650 bridges, 1,600 miles of pavement, 3,200 miles of street subsystems, and 5,200 alleys. Students have used this infrastructure data for scholarly work on independent studies, report, thesis, and dissertations. Actual annual research expenditures for the period 2011-present and students supported in parenthesis are as follows:

• 2011	\$415,245	(26)
• 2012	\$198,000	(15)
• 2013	\$458,000	(30)
• 2014	\$884,044	(37)
• 2015	\$1,101,803	(42)
• 2016	\$1,204,001	(74)
• 2017	\$807,100	(44)
• 2018-present	\$1,634,485	(35)

As part of this research work, he has served as the Project Engineering/Manager for many infrastructure rehabilitation projects for the CCD. These projects are hard bid to the contractor and Dr. Rens's responsibilities include: field inspection, compliance to engineering drawings and specs, construction change orders, payment applications, shop drawing review, materials evaluation, etc. Recent projects managed since 2011 include:

- \$1.9M Evans over SanteFe viaduct Rehabilitation (2011-2013)
- \$1.2M Evergreen Bridge Project replacement (2013-2019)
- \$0.5M Holly St. at Highline Canal Bridge Rehabilitation (2019-2020)
- \$2.8M 48th Avenue Viaduct rehabilitation (2021-2022)
- \$5.8M 20th Street Bridge over the Platte River (2021-2023)
- \$8.2M 8th Avenue Viaduct rehabilitation (Current, active)
- \$1.5M 6th Avenue Viaduct rehabilitation (Current, active)
- \$0.2M 56th Avenue bridge at central park BLVD repair (Current, active)

Students get the opportunity to work on these projects and learn valuable skill sets. In addition, case studies of specific events are regularly brought into the classroom for demonstrations and examples. Typical rehabilitation work on the above bridges and viaducts includes: Concrete deck repairs, Asphalt mill and overlay, Concrete abutment repair, Support bearing repair, expansion joint replacement, Railing repair, and steel girder sandblast and repaint.

7. Current Membership in Professional Organizations

American Society of Civil Engineers

National Society of Black Engineers (Life member)

8. Honors and Awards

UCD – College of Engineering – Outstanding Teaching Award (2000, 2001)

UCD – College of Engineering – Outstanding Research Award (2002)

UCD – College of Engineering – Outstanding Service Award (2004)

UCD – College of Engineering – Outstanding Faculty Mentor Award (2013)

UCD – Campus – Urban engaged Scholar (2019)

9. Service Activities

CE Department Chair, 2009-present

- Lead author for successful ABET accreditations 2011, 2017, and 2023

Numerous faculty, staff, and dean search committees,

ASCE Technical Council on Forensic Engineering-Forensic Engineering Division 1990-present, past council chair (twice).

ASCE Journal of Performance of Constructed facilities: Author, Referee, Associated Editor

10. Professional Development 2019-present

National Center for Transportation Durability Symposium (2022)

ASCE 9th Forensic Congress (2022)

The International Academic Forum Conference on Education (2019-2023)

Ironman Sports Engineering Conference Symposium (2022)

Civil Engineering Department visits: Nelson Mandela University (2018)Southern Utah (2022)

University of Wisconsin (2019)University of Louisville (2019)University of Houston

(2019) SUNY Albany (2021);

Repair Evaluation Maintenance Rehabilitation City and County of Denver Bridge Infrastructure (1996-present)

11. Active Professional Licensure: Colorado (1996-present) and Iowa (2017-present)



State of Iowa

Engineering and Land Surveying Examining Board

Certifies

Kevin Lee Rens

having given satisfactory evidence of professional qualifications
as required by the Code of Iowa is duly authorized
to practice in the State of Iowa as a Professional Engineer.

In witness thereof the Board grants License Number P23916.
This 21st day of February, 2017





STATE OF IOWA
IOWA DEPARTMENT OF COMMERCE
PROFESSIONAL LICENSING AND REGULATION

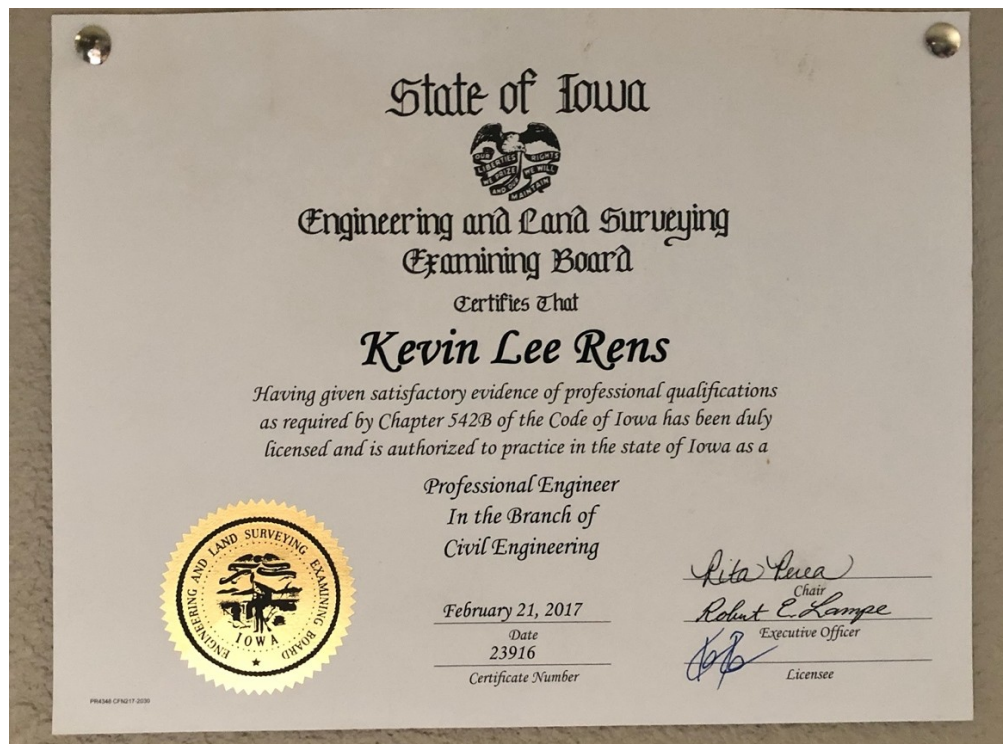
This is to certify that the below named has been granted a license as:
Professional Engineer.

License Number: P23916 Expires: December 31, 2024

Status: Active

Kevin Lee Rens

585 ST. ANDREWS LANE
LOUISVILLE, Colorado 80027



12. Publications and Presentations 2019-Present

Ghafoori, M., Clevenger, C.M., Abdallah, M., Rens, K (2023, April). Assessment of Physical Demand in Bridge Rehabilitation Work by Physiological Status Monitoring. 59th ASC annual international conference proceedings. Associated Schools for Construction, Liverpool, UK.

Tobby Lie, Kevin Rens, and Farnoush Baneai-Kashani (2023, January) Physics guided neural networks for bridge deterioration forecasting. Transportation Research Board, Washington DC.

Baneai-Kashani, Farnoush, Rens, Kevin Lee (2022, November). Ongoing Intelligent Decision Management Tools for Repair, Evaluation, Maintenance, and Rehabilitation of Bridge Infrastructure. TriDurLE Honolulu Hawaii

Tara L. Cavalline, Rui Liu, Laura Sullivan-Green, Phil Hailes, Norbert J. Delatte, Kenneth L. Carper, Paul Bosela Sr., Kevin Rens, Simon Adamtey, Jonathan G.M. Wood (2022, November) Failure Case Studies of Concrete Structures. 9th Forensic Congress, American Society of Civil Engineers

Rui Liu, Hossein Ataei, Kevin Rens, Tara L. Cavalline, Phil Hailes, Laura Sullivan-Green, Paul Bosela Sr., Norb Delatte, Jacelyn Rice-Boayue, Simon Adamtey, Lameck Onsarigo (2022, November) A Practical Application of Code of Ethics in Failure Case Studies, 9th Forensic Congress, ASCE

Yang Zhou, Carnot Nogueira, Kevin Rens, and Chengyu Li (2021) Long term performance of a curved box girder viaduct. ASCE Journal of Performance of Constructed facilities, 35 (1)

Wanting Wang, Chengyu Li, Kevin Rens, and Carnot Nogueira (2020) Failure Analysis of Pot Bearings in a curved viaduct. ASCE Journal of Performance of Constructed facilities. 34 (5)

Harold Schuch, Carnot Nogueira, Fred Rutz, and Kevin Rens (2019) Photogrammetric Modelling of a Stone Bridge for Structural Analysis. 9th International Conference on Arch Bridges (ARCH'19) Porto, Portugal 2-4

Nogueira, C. L., Rens, K. L., Acoustoelastic Response of Concrete under Uniaxial Compression, ACI Materials Journal. May 2019. Volume 116 Issue 3. Page 21-23

Wanting Wang, A. Hager, K.L. Rens, and C. Nogueira (2018) Monitoring Temperature differential and volumetric water content between asphalt pavement and subgrade layers. Forensic Engineering 8th congress Austin Texas

13. Publications and Presentations 2014-2019

Hager, Angela, Stephan Durham, and Kevin Rens **Sustainable Design of Pervious Concrete Pavement Systems** (Paper 17-01336) Transportation Research Board 2017

Nogueira, C. L., Rens, K. L., *Effect of Acoustoelasticity on Ultrasonic pulses and Damage of concrete under tensile Stresses*, ACI Materials Journal, V. 115 (3) 2018:381-391.

Nogueira, C. L., Rens, K. L., *Experimental analysis of cement-based materials under shear stress*, ELSEVIER Construction and Building Materials, 170 (2018) 392–401.

Nogueira, C. L., Rens, K. L., *Ultrasonic wave propagation in EPS lightweight concrete and effective elastic properties*, ELSEVIER Construction and Building Materials, 184 (2018) 634–642.

Y. Zhou, C. L. Nogueira, C. Li, K. Rens, *Long Term Durability Problems of Steel Girder Bridges Due to Temperature Variation*, 4th World Congress and Exhibition on Construction and Steel Structure, Trending Technologies and Techniques in Construction and Steel Structure, October 16-18, 2017, Atlanta, USA

US Patent 9278808 “System and Method of Using Differential Elevation Induced Energy for the Purpose of Storing Water underground.” William McIntyre and Kevin Rens. 2016

Samir Mizyed, K.L. Rens, and CY Li *Repair and Rehabilitation of cracked concrete piers using post-tensioned CFRP Rods: 8th Avenue Viaduct Case Study*. ASCE Congress on technical Advancement, Duluth Minnesota 2017

Wanting Wang, A. Hager, K.L. Rens, and C. Nogueira *Monitoring Temperature differential and volumetric water content between asphalt pavement and subgrade layers*. Forensic Engineering 8th congress 2018 Austin Texas

14. Publications and Presentations 1990-2013

- 2013 Liu, Rens, K.L., R. Liu, and S Foltz. Sustainable Approach for Optimal Steel Sheet Pile Structure Assessment, Maintenance, and Rehabilitation. *Journal of Performance of Constructed Facilities* Volume 27 Number 2. Page 21-36
- 2012 Liu, R., Solis, A., Durham, S.A., & Rens, K.L. ““Green” concrete technologies for sustainable development”. *International Journal of Constructed Environment*. Volume 2 issue 2. Page 21-36
- 2012 Liu, R., Durham, S.A., & Rens, K.L. Optimization of cementitious material content for sustainable concrete mixture. *ASCE Journal of Materials in Civil Engineering*. Volume 24 Number 6
- 2011 Rens, K.L., Liu, R. & Foltz, S. D. A sustainable approach for optimal steel sheet pile structure assessment, maintenance, and rehabilitation. *ASCE Journal of Performance of Constructed Facilities*. In Press.
- 2011 Liu, R., S.A. Durham, K.L. Rens, “Effects of Post Mercury Control Fly Ash on Fresh and Hardened Concrete Properties.” *Journal of Construction and Building Materials*, Volume 25, Number 8, pp 3283-3290.
- 2010 Reiner, M., S.A. Durham, and K.L. Rens. “Development and Analysis of High Performance Green Concrete in the Urban Infrastructure.” *International Journal of Sustainable Engineering*. Volume 3, Issue 3. pp 198-210.
- 2010 Jiang, Xin and K.L. Rens “Bridge Health Index for the City and County of Denver Colorado I: Current Methodology” *Journal of Performance of Constructed Facilities*, Volume 24, number 6, pp 580-587.
- 2010 Jiang, Xin and K.L. Rens ”Bridge Health Index for the City and County of Denver Colorado II: The Denver Bridge Health Index” *Journal of Performance of Constructed Facilities*, Volume 24, Number 6, 588-596
- 2010 Rens, Kevin and A.J. Rens “Leading, Learning, and Living the Shackleton Way: Education and Practice 2010, *ASCE Journal of Leadership and Management in Engineering* Volume 10, Number 1 23 pp 32-40.
- 2010 Rens, K. and Staley, B. “Rating City and County of Denver Urban Pavement Constructability Using a Profiler”. *ASCE Journal of Practice Periodical on Structural Design and Construction*. Volume 15, Number 1, pp 44-49.
- 2008 Kim, T. and K.L. Rens “Concrete Maturity Method Using Variable Temperature Curing for Normal and High Strength Concrete I: Experimental Study” *ASCE Journal of Materials in Civil Engineering*. Volume 20 Number 12, 735-741.
- 2008 Kim T and K.L. Rens “Concrete Maturity Method Using Variable Temperature Curing for Normal Strenght Concrete mixes II: Theoretical Study”, *ASCE Journal of Materials in Civil Engineering*. Volume 20 Number 12, 727-734.

- 2008 Rutz, F.R. and K.L. Rens “Wind Pressure and Strain Measurements on Bridges: Part I Instrumentation/Data Collection System” *ASCE Journal of Performance of Constructed Facilities*. Volume 22, Number 1, pp 2-11.
- 2008 Herrero, T., F.R. Rutz, and K.L. Rens “Wind Pressure and Strain Measurements on Bridges: Part II Strain Transducer Development” *ASCE Journal of Performance of Constr Facilities*. Volume 22, Number 1, 12-23.
- 2007: Rutz FR, and KL. Rens “Structural Modeling for Lateral Stiffness in Historic Truss Bridges”, *Journal of Preservation Technology*. Association for Preservation Technology. Volume 38, Number 1, pp 33-41.
- 2007: Rens, K.L. “Inventory and Assessment of Denver Colorado Curbs and Gutters:” *ASCE Journal of Performance of Constructed Facilities*. Volume 21, Number 3, pp 249-254.
- 2007 Rutz FR, and KL Rens “Wind Loads for 19th Century Bridges: Design Evolution, Historic Failures, and Modern Preservation” *ASCE. Journal of Performance of Constructed Facilities*. Volume 21, Number 2, pp 157-165.
- 2006: Rens, K.L., and T. Kim “Quebec Bridge Inspection Using Common Nondestructive and Destructive Testing” *ASCE Journal of Performance of Constructed Facilities*. Volume 21, Number 3, pp 215-224.
- 2006: Reiner, M., K.L Rens, and A. Ramaswami “The Role of HVFA concrete in the Sustainability of the Urban Build Environment.” *Journal of Green Building*. Volume 1, Issue 4, pp 129-140.
- 2006: Reiner, M., and K.L. Rens “High-Volume Fly Ash Concrete: Analysis and Application” *Practice Periodical on Strcutural Design and Construction* . ASCE. Volume 11, Number 1, pp 58-64
- 2005: Rens, K.L., C. Nogueria, and D.J. Transue “Bridge Management and Nondestructive Evaluation:” *Journal of Performance of Constructed Facilities*. ASCE. Volume 19, Number 1, pp 3-16
- 2004: Allen, B.J., and K.L. Rens “Condition Assessment of the Eastbound 6th Avenue Viaduct using Strain Gauges: *Journal of Performance of Constructed Facilities*. ASCE. Volume 18, Number 4, pp 205-212
- 2002: Rens, K.L and D.J. Transue “Tomographic Imaging of Cracked Pier Cap of Evans over Santa Fe Bridge” , *Concrete Repair: International Concrete Repair Institute* Volume 15, Number 4, pp 22-29
- 2002: Delatte, N. and K.L. Rens “Forensics and Case Studies in Civil Engineering Education: State-of-the-Art” *Journal of Performance of Constructed Facilities*. ASCE, Volume 16, Number 3, pp 98-109
- 2001: Mohamed, O. and K.L. Rens “Ultrasonic Testing of Properties of 50 Year Old Concrete” *Materials Evaluation: An Official Journal of the American Society for Nondestructive Evaluation*, ASNT, Volume 59, Number 12

- 2001: Mohamed, O., K.L. Rens, and J.J. Stalnaker "Time Effect of Alkali-Aggregate Reaction on the Performance of Concrete" *Journal of Materials in Civil Engineering*, ASCE, Volume 13, Number 2, pp 143-151
- 2000: Rens, K.L., D. Howanick, and A.W. Knott "Radiographic Imaging for Assessment of Civil Engineering Concrete Infrastructure" *Materials Evaluation: An Official Journal of the American Society for Nondestructive Evaluation*, ASNT, Volume 58, Number 11
- 2000: Rens, K.L., M.J. Clark, and A.W. Knott "A Failure Analysis Case Study Information Disseminator" *Journal of Performance of Constructed Facilities*. ASCE, Volume 14, Number 3
- 2000: Rens, K.L., O. Rendon-Herro, and M.J. Clark "Failure Awareness Trends in the Civil Engineering Curricula" *Journal of Performance of Constructed Facilities*. ASCE, Volume 14, Number 1, pp 27-37
- 2000: Rens, K.L., D.J. Transue, and M.P. Schuller "Acoustic Tomographic Imaging of Concrete Infrastructure: History, Interest, and Applications" by Kevin L. Rens, David J. Transue, and Michael P. Schuller. *Journal of Infrastructure Systems*, ASCE, Volume 6, Number 1, pp 15-23.
- 2000: Mohamed, O., K.L. Rens, and J.J. Stalnaker "Factors Affecting Resistance of Concrete to Freeze-Thaw Damage" *Journal of Materials in Civil Engineering*, ASCE, Volume 12, Number 1, pp 26-32
- 1999: Rens, K.L., C.L. Nogueira, Y.M. Neiman, T. Gruber, and L.E. Johnson "for Bridge Maintenance and Management for the City and County of Denver, Colorado" *Practice Periodical on Structural Design and Construction*, ASCE. Volume 4 Number 4, pp 131-136
- 1999: McKay, D., K.L. Rens, L.F. Greimann, and J.H. Stecker "Condition Index Assessment for U.S. Army Corps of Engineers Civil Works" *Journal of Infrastructure Systems*, ASCE. Volume 5, Number 2 pp 52-60.
- 1999 Liephart, G.S., K L. Rens, and J. Knappmiller "Gauge Capability Analysis in Data Collection for Acoustic Tomography". *Journal of Infrastructure Systems*, ASCE Volume 5, Number 1, pp. 11-20.
- 1998 Rens, K.L. and D.J. Transue. "Recent Trends in Nondestructive Inspections in State Highway Agencies." *Journal of Performance of Constructed Facilities (ASCE)* Volume 12, Number 2, pp. 94-96.
- 1997 Rens, K.L. and L.F. Greimann. "An Ultrasonic Approach for Nondestructive Testing of Deteriorating Infrastructure." *Journal of Performance of Constructed Facilities.(ASCE)* Volume 11, Number 3, pp. 97-104.
- 1997 Rens, K.L., T.J. Wipf, and F.W. Klaiber. "A Review of Nondestructive Evaluation Techniques of Civil Infrastructure." *Journal of Performance of Constructed Facilities (ASCE)* Volume 11, Number 4, pp. 152-160. [nominated for best paper award]

- 1991 Greimann, L.F., J.H. Stecker, A.M. Kao, and K.L. Rens. "Inspection and Rating of Miter Lock Gates." *Journal of Performance of Constructed Facilities (ASCE)* Volume 5, Number 4, pp. 226-238.

Magazine Articles (1990-2013)

- 1994 Rens, K.L., Greimann, L.F., Stecker, H., and Kao, A., "A Decision Support Tool for Managing the Nation's Aging Infrastructure," *Public Works*, May 1994, pp. 54-56,92-94.

Publications in Refereed Symposia Proceedings (1990-2013)

- 2012 R Liu and K. L. Rens "Inspection and Rating for the Platte River Bridge in Denver" Proceedings American Society of Civil Engineering forensic Congress San Francisco California
- 2012 Durham, SD, W. Marshall, and KL Rens "A Systematic Review of Assessment Tools for ABET accreditation" Annual Proceedings American Society of Engineering Education, San Antonio, Texas
- 2011 Graves, S. K.L. Rens, and F.R. Rutz "A 9-Step Process for Developing a Structural Health Monitoring System" 8th International Conference on Structural Health Monitoring, Stanford University, Palo Alto California
- 2010 Liu, R., S.A. Durham, K.L. Rens. "Durability of Sustainable Concrete Mixtures." ASCE Green Streets and Highways Conference Proceedings. November 2010. Denver, CO.
- 2010 Solis, A., S.A. Durham, K.L. Rens, A. Ramaswami. "Sustainable Concrete for the Urban Environment: Investigating Issues that Prevent Sustainable Street and Highway Development." ASCE Green Streets and Highways Conference Proceedings. November 2010. Denver, CO.
- 2006 EC Hamidian, Fred Rutz, and K.L. Rens "Blue River Bridge" 4th forensic Congress, Cleveland Ohio. Proceedings American Society of Civil Engineers, TCFE
- 2006 V Jacobson, Fred Rutz and K.L. Rens "Prowers Bridge" 4th forensic Congress, Cleveland Ohio. Proceedings American Society of Civil Engineers, TCFE
- 2006 HR. Elias, Fred Rutz and K.L. Rens "Inspection and rating of the historic San Miguel Bridge" 4th forensic Congress, Cleveland Ohio
- 2006 Bill Swigert, Fred Rutz and K.L. Rens "Inspection and rating of the historic Rifle Bridge" 4th forensic Congress, Cleveland Ohio
- 2006 T. Herero, Fred R. Rutz and K.L. Rens "Tools for inspection and rating of historic bridges" Structures Congress St Louis MO.
- 2006 Fred Rutz and K.L. Rens "Historic Bridge Evaluation" Proceedings of the 2006 ASCE Structures Congress St Louis MO.
- 2006 Jennifer Wood and K.L. Rens "Lawrence Bridge" Proceedings of the 2006 ASCE Structures Congress St Louis MO. May 18-20

- 2006 Rens KL and T Kim "Quebec Bridge" Proceedings of the 2006 ASCE Structures Congress St Louis MO. May 18-20
- 2005 Angela Hagar and K.L. Rens "West Bound 6th Avenue" Proceedings of the 2006 ASCE Structures Congress New, York NY
- 2005 Fred Rutz and K.L. Rens "Steam boat bridge evaluation" American Preservation Technology, Halifax Nova Scotia
- 2004 Fred Rutz and K.L. Rens "Fruita Bridge evaluation" Proceedings of the 2005 ASCE Structures congress Nashville Tenn
- 2003 Rens, K.L, C. Nogueira, and D.J. Transue "Bridge Evaluation Using Nondestructive Evaluation – The Denver Management System" 3rd forensic Congress, San Diego, California, ASCE press, pp 207 -220
- 2003 Gogel, M.E., And K.L. Rens "Inspection Rating and Management System for Tubular Steel Pedestrian Bridges" 3rd forensic Congress, San Diego, California, ASCE press, pp 221-234
- 2003 Allen, B.J., and K.L. Rens "Structural Evaluation and Repair of the 6th Avenue Viaduct" 3rd forensic Congress, San Diego, California, ASCE press, pp 235-246
- 2001 Rens, K.L., M. Lacome, and T. Hoang "Concrete Maturity – New Approaches in Developing Maturity-Strength Relations for use in Fast-Track Pavement Applications" 2001 American Concrete Institute Annual Convention, October 2001, Dallas Texas
- 2000 Rens, K.L., M. Clark, A.W. Knott "Development of an Internet Failure Analysis Disseminator for Professors" 2nd Forensic Congress, San Juan, Puerto Rico, ASCE press, pp. 441-453
- 2000 Rens, K.L., H.J. Royston, and M.L. LaCome "Temporary Bracing During Construction: Fact or Fiction" 2nd Forensic Congress, San Juan, Puerto Rico, ASCE press, pp. 652-661
- 2000 Lacome, M.L., A. Blankes, and K.L. Rens "Maturity: A Valid NDE and Forensic Tool" 2nd Forensic Congress, San Juan, Puerto Rico, ASCE press, pp. 172-182
- 1999 Rens, K.L., Y. Neimann, and C. Noguera "Application of GIS for Bridge Management and Deterioration Modeling" American Public Works Association, Annual Convention, Denver, Colorado.
- 1999 Transue, D.J., M.P. Schuller, and K.L. Rens "Use of the Pendulum Hammer Hardness Test for Mortar Evaluation. Proceedings, 8th North American Masonry Conference, Austin Texas. Session 6B.2
- 1997 Rens, K.L., and A. Knott. "Education Begins Responding to the Needs of our Deteriorating and Failing Infrastructure." Proceedings, Infrastructure Condition Assessment: Art, Science, and Practice, Boston, Massachusetts. pp. 544-551.

- 1997 Transue, D.J., K.L. Rens, and M.P. Schuller. "A Study of the Feasibility and Potential of Using Acoustic Tomographic Imaging for Nondestructive Evaluation of Concrete Structures." Proceedings, Infrastructure Condition Assessment: Art, Science, and Practice, Boston, Massachusetts. pp. 415-424.
- 1997 Greimann, L.F., J.H. Stecker, K.L. Rens, and D. McKay. "Condition Assessment of Navigation Lock and Dam Structures." Proceedings, Infrastructure Condition Assessment: Art, Science, and Practice, Boston, Massachusetts. pp. 385-394.
- 1997 K.L. Rens and A. Knott. "Teaching Experiences: A Graduate Course in Condition Assessment and Forensic Engineering." Proceedings, First Forensic Congress, (ASCE), Minneapolis, Minnesota. pp. 178-185.

Book Reviews

- 1998 Building Failure: Causes and Prevention by C. Herbert Wheeler. American Society of Civil Engineers (ASCE) press.
- 1997 Steel Design by ASD and LRFD: A Dual Code Approach by J. Jong Lou. Chapman and Hall.

Non-Refereed Publications (acceptance based on peer review of abstract only) 1990-2013

- 2003 Kim, T and K.L. Rens "The Maturity Method using Variable Temperature Curing" Proceedings Advances in Cement and Concrete, Copper Mountain Colorado.
- 2002 Rens K.L. "Failure Analysis and the Civil Engineering Curriculum" ASCE 2002 Conference and Exposition, Washington DC
- 1999 Rens, K.L., Y. Neimann, and C. Nogueria "Application of a Geographic Information System for Bridge Management, Deterioration Modeling, and Condition Assessment" Structural Faults and Repair – 99. London England.
- 1998 Rens, K.L., D.J. Transue, and A. Knott. "Recent Trends in Non-Destructive Inspections in State Highway Agencies – Can Engineering Education Respond?" **Invited Paper.** Proceedings, Structural Materials Technology Conference, San Antonio, Texas. pp. 2-11.
- 1998 D.J. Transue, K.L. Rens, and M.P. Schuller. "Learning from old Mortars." 30th Annual American Preservation Technology Conference, New Orleans, Louisiana.
- 1997 K.L. Rens and A. Knott. "Education and Industry Respond to the Needs of our Failing and Deteriorating Infrastructure." Proceedings, Structural Faults and Repairs, Edinburgh, Scotland. pp. 583-589.

- 1996 Greimann, L. F., J. Stecker, and K.L. Rens. "Condition Assessment of Navigation Lock and Dam Structures." Semisesquicentennial Transportation Conference, Ames, Iowa.
- 1994 Rens, K.L., T.J. Wipf, and F.W. Klaiber. "A State by State Perspective of NDE and the Aging Infrastructure." Proceedings, American Society for Nondestructive Testing, Spring Conference, New Orleans, LA.
- 1994 Rens, K.L., Greimann, L.G., Stecker, J., Bondoc, A.D. "Sector Gate Case Study: Condition Assessment of Chicago Harbor Lock." Proceedings, 48th Mechanical Failures Prevention Meeting, Wakefield, Massachusetts. pp. 347-358.
- 1993 Rens, K. L., L. F. Greimann, and J. Stecker. "Condition assessment procedures for sector gates." Fifth International Conference on Structural Faults and Repair, Scotland, UK (July 1993). pp. 3-9.

Technical Reports

- 2023 Rens, K.L. "Monthly Reports – City and County of Denver Research." Submitted Monthly to City Engineer, Terry Gruber. (1998 – present)
- 2001 Rens, K.L.. "Concrete Maturity A Quantitative Understanding of How Early Age Temperatures Affect The Maturity Concept." Annual Report National Science Foundation (1998 – present)
- 2001 Rens, K.L., and M. Gogel "Nondestructive Evaluation of Steel Power Poles" Final Report, Knott Laboratory
- 2001 Rens, K.L., J. Stecker, and S. Foltz "Early Warning Systems: A Review of District and Division Equipment and Practices" Final Report, U.S. Army Corps of Engineers, Construction Engineering Research Laboratories, Champaign, IL
- 1998 Transue, D.J., K.L. Rens, and M.P. Schuller. "Nondestructive Method for Hardness Evaluation of Historic and Pointing Mortars: Final Report." National Park Service (Department of the Interior).
- 1998 Transue, D.J., K.L. Rens, and M.P. Schuller. "Standard Test Method for Rebound Number of Hardened Mortar." Proposed ASTM Standard.
- 1998 Mohammad, O.M., K.L. Rens, and J.J. Stalnaker. "Cement Durability Study of Green Mountain Dam." Final Report. National Science Foundation.
- 1998 Rens, K.L. and D.J. Transue. "Improving Plant Output by Mitigating Static Electricity." Final Project Report Submitted to Portland Cement Association. September, 1998.
- 1998 Rens, K.L. "Monthly Reports – City and County of Denver Research." Submitted Monthly to City Engineer, Terry Gruber. (1998 – present)

- 1997 Nelson, R.F., A.H. Stewart, R.E. Randle, M. Abbey, J.A. Henkener, B.H. Catalina, and K.L. Rens. "Assessment and Inspection Methods (AIM) – Methodology." Electric Power Research Institute (EPRI). Technical Report TR-108212.
- 1997 Stecker, J., L.F. Greimann, S. Mellema, and K.L. Rens. "REMR Management Systems – Navigation and Flood Control Structures, Condition Rating Procedures for Lock and Dam Operating Equipment." REMR-OM-19.
- 1994 Greimann, L.F., J. Stecker, K.L. Rens and Mike Nop. "REMR Management Systems Navigation Structures, User's Manual for Inspection and Rating Software, Version 2.0." REMR-OM-15.
- 1994 Rens, K.L. T.J. Wipf, and F. W. Klaiber "Nondestructive Evaluation of Steel Structures." Report R-538. American Association of RailRoads, 1994
- 1993 Greimann, L.F., J.H. Stecker, and K.L. Rens. "REMR Management Systems, Condition Rating Procedures for Sector Gates." REMR-OM-13.
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- 1998 Condition Assessment and Failure Analysis of Infrastructure: Teaching, Research, and Service. Research Seminar, University of Colorado at Denver.
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