# Christopher C. E. Ramseyer

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#### **EDUCATION**

Ph.D. University of Oklahoma (December 2005)

Major: Structural Engineering Advisor: Kyran Mish Ph.D. Dissertation: *Axial Load Capacity of Cold-Formed Steel Sections* 

M.S. University of Oklahoma (December 1999)

Major: Civil Engineering Advisor: Bruce Russell Ph.D., P.E.

Thesis: Investigation of Very Early Strength Concrete with Low Shrinkage Properties

B.S. University of Oklahoma (May 1998)

Major: Civil Engineering, Engineering GPA = 4.0/4.0

# REGISTRATION

State of California Professional Engineer, License No. C 61767

State of Oklahoma Professional Structural Engineer, Registration No. PE 20860

State of Wyoming Professional Engineer, License No. PE 14509

State of Texas Professional Engineer, License No. 128564

State of North Carolina Professional Engineer, License No. 049034

# PROFESSIONAL AWARDS AND HONORS

- 2021 Outstanding Journal Paper Award for 2019 from ASCE Journal of Performance of Constructed Facilities
- 2018 Elected Fellow of American Concrete Institute
- 2016 The University of Oklahoma Vice President for Research Award for Improving Quality of Life and Communities.
- 2016 University of Oklahoma, Presidential International Travel Fellowship
- 2013 Creativity Oklahoma Renaissance Award from the Building Bridges, State of Creativity Forum
- 2013 Best Paper Award, for "Post-Damage Repair of Prestressed Concrete Girders" From the Korea Concrete Institute to Ramseyer, C., and Kang, T.
- 2013 The National Council of Structural Engineers Associations, Excellence in Structural Engineering Award, for the engineering design of SkyDance Bridge.
- 2013 BP DEVAS and BP Engineering Academy, Best Breakout Session Award
- 2012 Urban Design Citation Award as part of the Awards of Excellence Program from AIA Central Oklahoma with SXL for the Oklahoma City SkyDance Bridge.
- 2012 ENR (Engineering News Record) Award of Merit for the Oklahoma SkyDance Bridge in the Best Transportation Project classification for Texas, Oklahoma and Louisiana.
- 2012 IDEAS<sup>2</sup>, National Certificate of Recognition from the American Institute of Steel Construction (AISC) for SkyDance Bridge
- 2012 Oklahoma City SkyDance Bridge is named as one of the 50 best public art projects by the Americans for the Arts
- 2012 P3 (People, Prosperity and the Planet) Award from the U.S. Environmental Protection Agency (EPA), with C. Graham, D. Butko, W. McManus and L. Holliday

- 2012 American Society of Civil Engineers, Commendation for Exceptional Service as Faculty Advisor
- 2012 Innovator of the Year Award, with SXL for the Oklahoma City SkyDance Bridge., The Journal Record Publishing Company
- 2011 George W. Tauxe, Outstanding Professor Award, University of Oklahoma
- 2010 Must-read Paper Picked by Editor-in-Chief, International Journal of Theoretical and Applied Multiscale Mechanics (IJTAMM), Inderscience Publisher, Ltd.
- 2008 First Place Oklahoma City Bridge Competition with Butzer Design Partnership, for the Oklahoma City SkyDance Bridge.
- 2008 BP Professor Award, (awarded by the DEVAS and Eng. Academy students)
- 2007 Alumni Teaching Award, OU College of Engineering
- 2004 George W. Tauxe, Outstanding Professor Award, University of Oklahoma
- 2003 Most Dedicated Canoe Person of the Year (awarded by the OU-CEES students)
- 2002 Commitment Award (awarded by the OU-CEES students)
- 1998 Chi Epsilon, Civil Engineering Honor Society
- 1998 OSPE Engineering Achievement Award
- 1996-1998 OU President's Honor Roll
- 1996-1998 OU Dean's Honor Roll
- 1997 The National Dean's List
- 1997 G. B. Treat Memorial Scholarship
- 1996 R. L. O'Shields Scholarship

# ENGINEERING EMPLOYMENT EXPERIENCE

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Principle	Ramseyer and Associates PLLC	10/13 to present
Professor Emeritus	University of Oklahoma, Norman, Oklahoma School of Civil Engineering and Environmental Science	1/25/21 to present
Professor	University of Oklahoma, Norman, Oklahoma School of Civil Engineering and Environmental Science	5/19 to 1/25/21
Director	Donald G. Fears Structural Engineering Laboratory	5/08 to 1/25/21
Associate Professor	University of Oklahoma, Norman, Oklahoma School of Civil Engineering and Environmental Science	7/12 to 5/19
Assistant Professor	University of Oklahoma, Norman, Oklahoma School of Civil Engineering and Environmental Science	1/06 to 6/12
Adjunct Professor	University of Oklahoma, Norman, Oklahoma School of Civil Engineering and Environmental Science	8/00 to 12/05

Senior Design Engineer Star Building Systems, Oklahoma City, Oklahoma.

2/99 to 8/03

- Complete structural design of primary and secondary structure for 425+ buildings
- Complexity 1-10 buildings, including multi-crane systems, mezzanines, canopies, roof top units, explosion venting and loading, skewed walls, hips and valleys, etc.
- Building Codes: IBC, FEMA 302, UBC, BOCA and SBC

Graduate Research

University of Oklahoma, Norman, Oklahoma

1/97 to 1/99

Research Assistant

B. Russell Ph.D., P.E., School of Civil Engineering and Environmental Science *The development of statewide Portland cement patching products and procedures* 

Teaching Assistant

University of Oklahoma, Norman, Oklahoma

1/96 to 1/97

- H. Gruenwald Ph.D., and J. Laguros Ph.D., P.E., Civil Engineering and Environmental Science
- Technical support for AutoCad
- Land Surveying lab assistant

# RESEARCH RELATED EXPERIENCE

**Summary:** To date, I have secured \$4,360,250 in total research funding, with \$2,137,452 in individual research credit. This includes 49 projects, 37 where I served as Principal Investigator. Of the 44 projects funded, 14 are National/International grants, 13 are State grants, 16 are Industry-sponsored research, and 1 is a University grant.

Additionally, I have raised \$1,572,184 in direct donations to support research, \$321,000 in kind material donations directly related to research, \$82,900 in laboratory equipment donations, and \$640,000 in capital improvement donations. Total value of these donations is \$2,616,084

# **National / International Grants**

1. Assessment of Partial Joint Penetration Welds Test on Bolted End-Plate Connections

P.I.: Chris Ramseyer

Sponsor: Metal Building Manufacturing Association (MBMA)

Amount: \$20,000

Duration: 9/1/18 to 12/31/20

2. Developing 100 Year, Large Slab, Airport Runways"

P.I.: Chris Ramseyer co-P.I.: Steve Roswurm

Sponsor: National Academies of Sciences Amount: \$6,000 (personal credit \$6,000)

Duration: 9/1/17 to 9/1/18

3. "RAPID Response Research Grant to study residential lateral resistance systems"

P.I.: Chris Ramseyer co-P.I.: Lisa Holliday & Royce Floyd

Sponsor: National Science Foundation Amount: \$7,000 (personal credit \$6,000)

Duration: 5/21/13 to 6/14/13

4. "RET (Research Experience for Teachers) Site: Strengthening a K12 Learning Community through Engineering Research"

P.I.: Chen Ling co-P.I.: Mark Nanny, U. Matthias, Randa Shehab, Hazem Refai, Patricia

Hardre, Chris Ramseyer

Sponsor: National Science Foundation

Amount: \$300,000.00 (personal credit \$10,000)

Duration: 7/1/10 to 1/14/12

5. "Stability of concrete slabs on grade considering shrinkage and a moisture gradient"

P.I.: Chris Ramseyer, OU

Sponsor: Oklahoma Transportation Center Amount: \$199,000.00 (personal credit \$199,000)

Duration: 1/15/10 to 1/14/12

6. "Optimum cable barrier design and placement for the state of Oklahoma" P.I.: Chris Ramseyer, OU co-P.I.: Wilson Brewer, Langston University

Sponsor: Oklahoma Transportation Center Amount: \$275,000.00 (personal credit \$150,000)

Duration: 1/15/10 to 1/14/12

7. "Evaluation of the Effectiveness of ODOT's Cable Barrier Program"

P.I.: Chris Ramseyer, OU

Sponsor: Oklahoma Transportation Center Amount: \$84,422.00 (personal credit \$84,422)

Duration: 10/01/09 to 9/31/10

8. "Facilitated Experimental Learning Program – Camp Concrete"

P.I.: Wilson Brewer, Langston University Co-P.I.: Chris Ramseyer, OU

Sponsor: Oklahoma Transportation Center Amount: \$225,000.00 (personal credit \$150,000)

Duration: 06/01/09 to 05/31/12

9. "Interstate 35 Bridge Instrumentation Renaissance"

P.I.: David Baldwin, co-PI Chris Ramseyer, Sponsor: Oklahoma Transportation Center Amount: \$176,600.00 (personal credit \$35,320)

Duration: 9/15/10 to 9/14/12

10. "Cooperative Agreement with DoD ERDC on Magazine Safety"

P.I.: Kim Mish, Co-P.I.: Chris Ramseyer Sponsor: U.S. Army Corps of Engineers Amount: \$104,000.00 (personal credit \$15,600)

Duration: 09/01/08 to 08/30/10

11. "Work Program for FY05 OTC Appropriation Through Federal Highway

Administration: Turner-Fairbank Research Center" P.I.: Musharraf Zaman, Co-PI Chris Ramseyer

Sponsor: Federal Highway Administration (FhWA) Amount: \$1,155,001 (personal credit 9% = \$103,950)

Duration: October 2006 to September 2008

12. "Development of Repair and Strengthening Methods for End Damage on AASHTO Girders"

P.I.: Chris Ramseyer Co-P.I.: Kyran Mish

Sponsor: Oklahoma Transportation Center (OTC) Amount: \$50,000 (personal credit \$40,000) Duration: January 2006 to September 2006

13. "The Bridges of the Future can be Created Here Today"

P.I.: Kyran Mish, Co-P.I. Chris Ramseyer

Sponsor: Oklahoma Transportation Center (OTC) Amount: \$222,015 (personal credit 20% = \$44,403) Duration: January 2006 to December 2007

14. "Mechanical Activation of Fly Ash for Concrete"

P.I.: Chris Ramseyer, Co-P.I.: Beth Brueggen Sponsor: Oklahoma Transportation Center (OTC)

Amount: \$40,000 (\$24,000 personal credit)

Duration: May 2004 to December 2005

#### **State Grants**

1. "In-Stream Structures Integrity and Channel Stability Survey and Evaluation",

P.I.: Jason Vogal Co-P.I.: Chris Ramseyer,

Sponsor: University Transportation Center, Florida International University,

Amount: \$82,548 (personal credit \$9,080), Duration: June 2018 to December 2020

2. "Performance of Existing ABC Projects, Outreach, and Center Operation",

P.I.: Musharraf Zaman, Co-P.I.: Chris Ramseyer,

Sponsor: Accelerated Bridge Construction, University Transportation Center, Florida

International University,

Amount: \$22,000 (personal credit \$13,200), Duration: March 2019 to September 2020

3. "Innovative Bridge Research Project – Self Consolidating Concrete for Bridge Beams",

P.I.: Chris Ramseyer, Co-P.I.: Thomas Kang,

Sponsor: Oklahoma Department of Transportation (ODOT), ,

Amount: \$125,000 (personal credit \$87,500),

Duration: April 2007 to September 2008

4. "Innovative Bridge Research Project – Sandwich Plate System for SH7 Keel Creek Bridge"

P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$100,000 (personal credit \$100,000) Duration: April 2007 to September 2008

5. "Investigation of Cost Effective Truck Weight Enforcement"

P.I.: Chris Ramseyer, Co-P.I.: Kyran Mish

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$80,000 (personal credit \$64,000) Duration: October 2006 to September 2007

6. "Optimizing Concrete Mix Designs to Produce Cost Effective Paving Mixes."

P.I.: Chris Ramseyer, Co-P.I. Kyran Mish

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$50,000 (personal credit \$45,000) Duration: October 2006 to September 2007

7. "Monitor Existing and New Bonded Overlay Projects in the State of Oklahoma"

P.I.: Chris Ramseyer, Co-P.I.: Kyran Mish

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$80,000 (\$72,000 personal credit) Duration: February 2006 to May 2007 8. "Stress Monitoring of the I-40 at Lake Eufaula Bridge"

P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$12,034 (\$9627.20 personal credit) Duration: June 2005 to December 2005

9. "Innovative Bridge Research Project – Use of HPC for a Crack Free Bridge Deck"

P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$10,000 (personal credit \$10,000) Duration: April 2005 to September 2005

10. "Creation of an Oklahoma Department of Transportation Specification for Patching or Overlay of Bridge Decks"

P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$285,000 total (personal credit \$285,000)

Duration: October 2004 to September 2008

11. "Investigation into the use of Portland Cement Concrete with Fiber Additives for Bridge Decks in

the State of Oklahoma" P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$49,300 (personal credit \$49,300) Duration: September 2003 to October 2004.

12. "Investigation of Patching Materials for Portland Cement Concrete Pavements in the State of Oklahoma"

P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$38,750 (personal credit \$38,750) Duration: September 2003 to October 2004.

13. "Investigation of Methods to Reduce or Eliminate End Region Corrosion of Pre-Stressed

Concrete Bridge Girders"

P.I.: Chris Ramseyer

Sponsor: Oklahoma Department of Transportation (ODOT)

Amount: \$31,225 (personal credit \$31,225) Duration: September 2003 to October 2004

# **Industry-Sponsored Research**

1. "APA Flexible Sheathing Shear Wall Tests"

P.I.: Chris Ramseyer co-P.I.: Shideh Shadravan Sponsor: American Plywood Association, (APA)

Amount: \$20,000 (personal credit \$2,000)

Duration: 8/15/18 to 12/31/19

2. "Improved Residential Foundations Using Chemically PreStressing Concrete."

P.I.: Shideh Shadravan co-P.I.: Chris Ramseyer Sponsor: CTS – Cement Manufacturing Corp

Amount: \$5,000 (personal credit \$500) Duration: June 2018 to December 2019 3. "Monotonic and dynamic Lateral Load Tests for sheathing systems"

P.I.: Shideh Shadravan co-P.I.: Chris Ramseyer Sponsor: American Plywood Association, (APA)

Amount: \$18,000 (personal credit \$1,800)

Duration: 9/1/17 to 12/31/17

4. "Lateral Load Tests for Tornado Resistance"

P.I.: Shideh Shadravan co-P.I.: Chris Ramseyer

Sponsor: IBHS

Amount: \$59,000 (personal credit \$8,850)

Duration: 7/28/16 to 7/28/17

5. "Continuously Reinforced Concrete Pavement Study Using RAPID SET and Portland Cement"

P.I.: Chris Ramseyer

Sponsor: CTS – Cement Manufacturing Corp

Amount: \$37,000

Duration: November 2015 to October 2016

6. "Curl and Shrinkage of Concrete Slabs on Grade."

P.I.: Chris Ramseyer

Sponsor: CTS – Cement Manufacturing Corp Amount: \$119,666 (personal credit \$119,666) Duration: August 2007 to September 2008

7. "Bridge Overlay Study Using Rapid Set Latex Modified - LOP Modified Cement"

P.I.: Chris Ramseyer

Sponsor: CTS – Cement Manufacturing Corp Amount: \$75,000 (personal credit \$75,000) Duration: August 2006 to September 2008

8. "Axial, Bending and Pressure Testing of Large Pipe Connections"

P.I.: Chris Ramseyer

Sponsor: Franks Casing Crew

Amount: \$70,520 (\$56,416 personal credit) Duration: August 2005 to August 2006

9. "Bending Capacity of Cold Formed Steel Purlins with an Innovative Bracing System Using the

Base Test Method" P.I.: Chris Ramseyer

Sponsor: Star Building Systems

Amount: \$10,008 (\$8006.40 personal credit) Duration: August 2005 to August 2006

10. "Bridge Overlay Study Using Rapid Set Latex Modified Cement"

P.I.: Chris Ramseyer

Sponsor: CTS – Cement Manufacturing Corp Amount: \$37,500 (personal credit \$37,500)

Duration: July 2005 to August 2006

11. "Cold formed Zee Purlin Capacity Study with Interaction of Web Stiffeners"

P.I.: Chris Ramseyer

Sponsor: Star Building Systems

Amount: \$7,850 (personal credit \$7,850) Duration: June 2005 to December 2005 12. "Improved Blended Cement with Large Fly Ash Replacement"

P.I.: Chris Ramseyer, Co-P.I.: Beth Brueggen

Sponsor: LaFarge North America Inc. Amount: \$21,000 (\$19,950 personal credit) Duration: April 2005 to September 2005

13. "Stress Monitoring of Bridge Girders While Bridge Jacking"

P.I.: Chris Ramseyer, Co-P.I.: Kyran Mish

Sponsor: Duit Construction and Muskogee Bridge Company

Amount: \$3,100 (\$2,325 personal credit) Duration: February 2005 to September 2005

14. "Analytical and Experimental Testing of Press Formed Purlin Anchorage Clips"

P.I.: Chris Ramseyer

Sponsor: Star Building Systems

Amount: \$4,250 (personal credit \$4,250) Duration: November 2003 to May 2004

15. "Cold Formed Steel Joist Buckling Capacity Testing"

P.I.: Chris Ramseyer

Sponsor: Star Building Systems

Amount: \$4,461 (personal credit \$4,461) Duration: October 2002 to August 2003

16. "Inelastic Capacity of the Bearing Seat, End Panel Diagonal, and End Panel Chord for Cold Form

Steel Joists"

P.I.: Chris Ramseyer

Sponsor: Star Building Systems

Amount: \$23,000 (personal credit \$23,000) Duration: June 2001 to December 2003

#### **University Grants**

"XACT Imaging of Concrete Structures"

P.I.: Liangzhong Xiang co-P.I.: Chris Ramseyer

Sponsor: OU Research Council

Amount: \$15,000 (personal credit \$7,500)

Duration: 4/28/16 to 4/28/17

# **Unfunded Research Projects**

1. Evaluation of Integral Abutment Bridges in the state of Missouri

P.I.: Chris Ramseyer

Duration: August 2010 to December 2010

2. "Pier and Grade Beam Foundation Systems"

P.I.: Chris Ramseyer Duration: 2007 to 2009

3. "Bending Capacity and Behavior of Large Concrete Filled Steel Tubes"

P.I.: Chris Ramseyer

Duration: December 2004 to December 2005 & 2010-2011

4. "Research on the Axial Load Capacity of Sheeted Cold-Formed, Large Z Sections"

P.I.: Chris Ramseyer

Duration: February 2002 to December 2003.

5. "Mechanical and Chemical Activation of Fly Ash Used in Portland Cement Concrete"

P. I.: Chris Ramseyer

Duration: August 2002 to August 2003

# **Direct Donations to Support Research**

Chris Ramseyer Structural Engineering Scholarship Fund

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Donors:	Value of Donation:
CTS Cement Manufacturing Corp	\$75,184 - September 2010
Manhattan Bridge Co.	\$1,000 - January 2011
Manhattan Bridge Co.	\$11,000 July 2011
CTS Cement Manufacturing Corp	\$45,000 - September 2011
Manhattan Bridge Co.	\$1,000 February 2012
CTS Cement Manufacturing Corp	\$100,000 - May 2012
CTS Cement Manufacturing Corp	\$150,000 – August 2012
CTS Cement Manufacturing Corp	\$200,000 – December 2012
Manhattan Road & Bridge Co.	\$10,000 February 2013
CTS Cement Manufacturing Corp	\$75,000 – December 2013
Anonymous	\$12,000 – July 2014
CTS Cement Manufacturing Corp	\$50,000 July 2015
Anonymous	\$12,000 – July 2015
CTS Cement Manufacturing Corp	\$50,000 – May 2016
CTS Cement Manufacturing Corp	\$150,000 – October 2017
CTS Cement Manufacturing Corp	\$250,000 – December 2017
CTS Cement Manufacturing Corp	\$75,000 – August 2018
CTS Cement Manufacturing Corp	\$65,000 – October 2018
CTS Cement Manufacturing Corp	\$20,000 – July 2019
CTS Cement Manufacturing Corp	\$10,000 – January 2020
CTS Cement Manufacturing Corp	\$20,000 – February 2020
CTS Cement Manufacturing Corp	\$190,000 – October 2020

Total Value of Donation: \$1,572,184

#### **In-Kind Donations Directly Related to Research**

Donors: Star Building Systems, LaFarge North America, Holcim, Dolese, Capital Steel, W & W Steel, WR Grace, HKS Iron, CSC Inc., PVS Chemical, Xypex, Nycon Fibers, FiberMesh, Sika, CTS Cement Manufacturing Corp, Franks Casing Crew and 3M

Items: Cold formed steel specimens, portland cement, clinker, fly ash, large aggregate, sand, steel plate, large steel tubes and pipe, admixtures, steel fabrication, raw chemicals, latex additive, fibers, CalciumSulphanoAluminate Cement, 30" diameter thick well casing, micro beads, (60) 3000 lb concrete blocks, (2) 10,,000 lb steel beam \$321,000

# **Laboratory Equipment Donations**

Donors: LaFarge North America, W and W Steel, and Chris Ramseyer Estimated Value: \$27,900

Items: Ball mill, data acquisition system and strong floor covers

Donor: Boeing Aircraft – March 2016. Estimated Value \$55,000

Items: (11) blade servers, blower fans, rack systems

# **Capital Improvement Donations**

Donor: Ed and Linda Rice – December 2017 – October 3031, Estimated Value: \$440,000

Items: 80' x 120' (9480 sq ft) North End Expansion to Fears Structural Engineering Laboratory

Donor: Ed and Linda Rice - August 2008, Estimated Value: \$50,000

Items: 30' x 60' (1800 sq ft) Curling Lab Expansion to Fears Structural Engineering Laboratory

Donor: - Wilkins Construction, Rinker Materials, Dolese, Urban Contractors and Hearon Steel -

August 2007 Estimated Value: \$14,000

Items: Culverts and concrete drives on the West side of Fears Structural Engineering Laboratory

Donor: Star Building Systems – August 2006, Estimated Value: \$110,000

Items: 30' x 144'-7" (4338 sq ft) West Bay Expansion to Fears Structural Engineering Laboratory

Donor: W & W Steel, Dolese and ODOT Estimated Value: \$26,000

December 2010 – (ongoing project) Items: 800 linear feet of solid metal panel fencing to enclose the field research site.

# **PUBLICATIONS AND PRESENTATIONS**

Summary: I have 2 books, 2 National Research Group Studies, 41 refereed journal articles published or in review (41 published, 0 accepted and 0 in review). I have 29 refereed conference proceedings published or in review (28 published, 0 accepted and 0 in review). I have issued 25 technical reports and 4 chapters or sections of refereed documents. I have made 8 International presentations, 59 National presentations and 102 invited presentations. I am also the co-inventor on 2 patents.

#### **Books**

- 1. William L. Coulbourne, P.E.; David O. Prevatt, Ph.D., P.E.; T. Eric Stafford, P.E.; Christopher C. Ramseyer, Ph.D., P.E.; and John M. Joyce, P.E., "Moore, Oklahoma, Tornado of 2013, Performance of Schools and Critical Facilities", ASCE 2015 64 pages
- 2. ACI PRC-223-21; "Shrinkage-Compensating Concrete Guide" Reported by ACI Committee 223, ACI 2021 31 pages editor and major author.

# **National Research Group Study**

1. APA- The Engineered Wood Association: "Product Advisory: Performance of Flexible Structural Sheathing (Independent Evaluations of Published Design Values)", SP-1186A, Oct 2019, revised

- Collaborated with Clemson University and APA- The Engineered Wood Association <a href="http://www.texasinspector.com/files/SP-1186">http://www.texasinspector.com/files/SP-1186</a> Flexible Sheathing-unlocked.pdf
- APA- The Engineered Wood Association: "Product Advisory: Performance of Flexible Structural Sheathing (Independent Evaluations of Published Design Values)", SP-1186, July 2018, Collaborated with Clemson University and APA- The Engineered Wood Association <a href="http://www.texasinspector.com/files/SP-1186">http://www.texasinspector.com/files/SP-1186</a> Flexible Sheathing-unlocked.pdf

# **Refereed Journal Articles**

- 1. Sherry, S. and Ramseyer, C. "Assessment of Partial Joint Penetration Welds on Bolted End-plate Connections for Use in Intermediate Moment Frames", *Engineering Structures*, Elsevier, On line June 2019
- 2. Shadravan, S. and Ramseyer, C. "Comparison of Structural Foam Sheathing and Oriented Strand Board Panels of Shear Walls Under Lateral Load", *Advances in Computational Design*, Techno-Press, Vol. 4, No. 3 pp 251-272, ISSN: 2383-8477, March 2019
- 3. Murray, C., Floyd, R., and Ramseyer, C. "Using Calcium Sulfoaluminate Cement for Precast, Prestressed Concrete Beams", *PCI Journal*, Precast/Prestressed Concrete Institute, February 2019
- 4. Shadravan, S. and Ramseyer, C. "Investigation of Design Values Computation of Wood Shear Walls Constructed with Structural Foam Sheathing", *Advances in Computational Design*, Techno-Press, Vol. 4, No. 3 pp. 223-238, ISSN: 2383-8477, February 2019
- 5. Roswurm, S. J. and Ramseyer, C. "Developing Large Slab Airport Runways for the Next Century", Transportation Research Record: Journal of the Transportation Review Board, TRB, Vol. 2673 issue 6, pp. 524-535, May 2019
- 6. Shadravan, S., Ramseyer, C. and Floyd, R., "Lateral Resistance of Strapped Wood Shear Walls", Journal of Structural Integrity and Maintenance, Taylor and Francis, Vol. 4, No. 2 pp 65-75 May 2019
- 7. Shadravan, S., Emde, M. and Ramseyer, C. "Investigation of Torsional Bracing of Cold-Formed Steel Roofing Systems", *Journal of Structural Integrity and Maintenance*, Taylor and Francis, Vol. 4. No. 1 pp 6-14 May 2019
- 8. Ramseyer, C., Holliday, L. and Sherry, S. "Lessons Learned from Two Elementary School Collapses During the May 20<sup>th</sup>, 2013 Moore Tornado", *ASCE Journal of Performance of Constructed Facilities*, November 2018 on line, Vol. 33, Issue 1 February 2019 Outstanding Journal Paper Award for 2019
- 9. Shadravan, S. and Ramseyer, C. "Investigation of Wood Shear Walls Subjected to Lateral Loads", *Structures*, Elsevier, Volume 16, Pages 82-96 Nov. 2018
- 10. Kang, H.-K., De Bruyn, K., Bescher, E., Hong, S. and Ramseyer, C., "Porosimetric Features of Calcium Sulfoaluminate and Portland Cement Pastes: Review of Testing Protocols and Analysis of Results", *Journal of Structural Integrity and Maintenance*, Taylor and Francis, March 2018
- 11. Nghiem, A., Kang, H.-K., Minsun, L., Ramseyer, C. and Lee, C-H., "Flexural Testing of Circular Concrete-Filled Tubes without Axial Forces", *ACI Structural Journal*, March 2018, Vol. 115 No. 2 pp 511-524 with discussion January 2019, Vol. 116 No. 1 pp 277 278
- 12. Tang, S., Ramseyer, C., Samant, P. and Xiang, L., "X-ray-Induced Acoustic Tomography of Concrete Infrastructure". *Applied Physics Letters* February 2018

- 13. Ramseyer, C., Holliday, L. and Floyd, R., "Performance of Enhanced Residential Building Code Requirements During the March 25, 2015 Moore Tornado", ASCE Journal of Performance of Constructed Facilities, Submitted May 2016 Vol. 31, No. 5 October 2017
- 14. Tang, S., Nguyen, D. H., Sarafshani, A., Ramseyer, C., Zheng, B., Liu, H. and Xiang, L., "X-ray-Induced Acoustic Tomography with an Ultrasound Ring-Array". *Applied Physics Letters* 110(10), 06-MAR-17(2017).
- 15. Roswurm, J. and Ramseyer, C. "Investigation into the influence of Sand Angularity on the Standard Test for Strand Bond", *PCI Journal*, Precast/Prestressed Concrete Institute, Vol. 62, No. 2, pp. 101-112 ISSN: 0887-9672, March-April 2017
- 16. Ramseyer, C., and Shadravan, S., "Bending Capacity of Cold Formed Z-Purlins Supporting a Standing Seam Roof System with Torsional Bracing", *Journal of Structural Integrity and Maintenance*, Taylor and Francis, Vol. 11, pp. 59-68, ISSN: 1976-0485, March 2017
- 17. De Bruyn, K., Bescher, E., Ramseyer, C., Hong, S. and Kang, H.-K., "Pore Structure of Calcium Sulfoaluminate Paste and Durability of Concrete in Freeze-Thaw Environment", *International Journal of Concrete Structures and Materials*, ISSN 1976-0485 December 2016
- 18. Hardre, P., Shehab, R., Ling, C., Herron, J., Nanny, M., Nollert, M., Refai, H., Ramseyer, C., Wollega, E., "Situating Teachers' Developmental Engineering Experiences in an Inquiry-based, Laboratory Learning Environment", *Journal of Teacher Development*, Taylor & Francis Vol. 21, No. 2, April 2017, on line Sept 2016
- 19. Bescher, E., Rice, E.K., Ramseyer, C. and Roswurm, S., "Sulfate Resistance of Calcium Sulphoaluminate Cement", *Journal of Structural Integrity and Maintenance*, Taylor and Francis, 1:3, pp. 131-139 ISSN: 2470-5314 September 2016
- 20. Lisa Holliday, Chris Ramseyer, Matthew Reyes, and Daniel Butko, "Building with Compressed Earth Block within the Building Code", *ASCE Journal of Architectural Engineering*, ISSN: 1076-0431 Vol. 22, Issue 3, September 2016
- 21. Ramseyer, C., Roswurm, S., "Behavior of Type K Shrinkage Compensating Concrete Under Various Forms of Mechanical Restraint", *ACI Special Publication 307; Shrinkage Compensating Concrete Past, Present and Future*, ACI, March 2016 pp. 41-52 ISBN-13: 978-1-942727-70-5
- 22. Shadravan, S., Ramseyer, C., and Kang, T., "Dimensional Stability of Concrete Slabs-on Ground", ACI *Special Publication 307; Shrinkage Compensating Concrete Past, Present and Future*, ACI, March 2016 pp. 53-65 ISBN-13: 978-1-942727-70-5
- 23. McLean, E., Ramseyer, C., Roswurm, S., "600 Crack-Free Bridges Using Shrinkage Compensating Concrete", *ACI Special Publication 307; Shrinkage Compensating Concrete Past, Present and Future*, ACI, March 2016 pp. 85-100 ISBN-13: 978-1-942727-70-5
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- 2. Shadravan, S. and Ramseyer, C., "Evaluating Structural Sheathing Capacity Subjected to Lateral Loads" AEI, Accepted August 2018.
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- 4. Shadravan, S. and Ramseyer, C., "Torsional Bracing of Cold-Formed Roof Systems", 2017 AEI Convention, Oklahoma City, Oklahoma, April 2017.
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- 2. **Ramseyer, C.,** "Improving Continuous Reinforced Concrete Pavement Building for the next century", *Grupo Cementos de Chihuahua, S.A.B. de C.V. Summit*, Chihuahua, Mexico, January 2017

- 3. **Ramseyer, C.**, "Field Testing using Vibrating Wire Strain Gauges A new look at an old problem", *Grupo Cementos de Chihuahua*, *S.A.B. de C.V. Summit*, Chihuahua, Mexico, January 2017
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- 8. Piyawat, K., Kim, W., Ramseyer, C. and **Kang, T.H.**, "ANSYS & OpenSees Modeling of Pre-Tensioned Prestressed Concrete Beams," The *2011 International Conference on Computational Technologies in Concrete Structures*, Korea Advanced Institute of Science and Technology, Seoul, Korea, Sept. 2011

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- 2. Floyd, R., **Ramseyer, C.,** Bescher., and Bissonnette, B. "ACI On-Demand Course; Session on Shrinkage-Compensating Concrete", July 2022
- 3. **Ramseyer, C.** "Crack-Free Bridge Decks and Water Tanks" ACI Fall 2021 Convention, Session on Shrinkage-Compensating Concrete Design and Research in Memory of Edward K. Rice, October 17-20, 2021.
- 4. Ramseyer, C., **Stephen Roswurm** "Mechanical Restraint of Type K Shrinkage-Compensating Cement" ACI Fall 2021 Convention, Session on Shrinkage-Compensating Concrete Design and Research in Memory of Edward K. Rice, October 17-20, 2021.
- 5. **Ramseyer, C.** "A Life Well Lived," ACI Fall 2021 Convention, Session on Shrinkage-Compensating Concrete Design and Research in Memory of Edward K. Rice, October 17-20, 2021.
- 6. **Murray, C. D.**, Floyd, R., and Ramseyer, C. "Performance of Precast Prestressed Beams Cast with Calcium Sulfoaluminate-Belite Cement Concrete," ACI Fall 2018 Convention, Las Vegas, NV, October 14-18, 2018.
- 7. Ramseyer, C., "High Wind / Wall Bracing", APA Summit, Grapevine, Texas, May 2018
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- 9. **Ramseyer**, C., "Assessment of the EF-5 Moore Oklahoma Tornado of May 20th, 2013 on Non Residential Structures" Resilience of the Integrated Building: A Community Focus, Architectural Engineering Institute (AEI) National Conference, Oklahoma City, Oklahoma, April 2017
- 10. **Ramseyer**, C., "Residential Foundations on Shrinkable Clays" Resilience of the Integrated Building: A Community Focus, Architectural Engineering Institute (AEI) National Conference, Oklahoma City, Oklahoma, April 2017
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- 37. **Ramseyer, C.C.**, "Investigation of the Dimensional Stability of Concrete Slabs on Grade at the Advanced Concrete Research Laboratory", *American Concrete Institute, Annual Fall Convention*, New Orleans, Louisiana, November 2009
- 38. **Ramseyer, C.C.**, "CTS Dimensional Stability of Concrete Slabs on Grade", *American Concrete Institute, Annual Fall Convention*, New Orleans, Louisiana, November 2009
- 39. **Ramseyer, C.C.**, Piyawat, K., "Numerical Buckling Analysis of Built-Up, Cold Formed Members", *American Iron and Steel Institute, Committee on Specification*, Charlotte, North Carolina, August 2009
- 40. **Ramseyer, C.C.** and Perez, V., "Highway Panel Replacement CSA Concrete in California", *Concrete Pavement Technology Program, Federal Highway Administration*, National Conference on Preservation, Repair and Rehabilitation of Concrete Pavements, St Louis, Missouri April 2009
- 41. **Ramseyer, C.C.**, "Research of shrinkage compensating cements at the University of Oklahoma", *American Concrete Institute, Annual Fall Convention*, St. Louis, Missouri, November 2008
- 42. **Ramseyer, C.C.**, "Camp Concrete Growth of a Graduate Program" *American Society for Engineering Education*, Annual Conference and Exposition, Pittsburgh, Pennsylvania June 2008
- 43. **Ramseyer, C.C.**, "Research at the University of Oklahoma on CSA Concrete", *American Concrete Institute, Annual Spring Convention*, Los Angeles, California, March 2008
- **44. Ramseyer, C.C.**, "The Tulsa Experience with Concrete Overlays", *World of Concrete Technology for Construction*, CTS Mobile Mixer and Accelerated Concrete session, Los Vegas, Nevada, January 2008
- 45. Ramseyer, C.C. and Chancellor, B., "Economical Rehabilitation of Concrete Pavements", Concrete Pavement Technology Program, Federal Highway Administration, International Conference on Optimizing Paving Concrete Mixtures and Accelerated Concrete Pavement Construction and Rehabilitation, Atlanta, Georgia November 2007
- 46. **Ramseyer, C.C.**, "An Experiment in Undergraduate Research" *American Society for Engineering Education*, Annual Conference and Exposition, Honolulu, Hawaii June 2007
- 47. Carmen Diaz & Ramseyer, C.C., "Dynamic Testing of Rammed Earth Scale Models", *The Adobe Association of the South West*, Adobe USA Bi-Annual Conference, El Rito New Mexico, May 2007
- 48. Shadravan, S., **Ramseyer, C.C.**, "Bending Capacity of Cold Formed Steel Purlins with Torsional Bracing Using The Base Test Method", *Annual Stability Conference, Structural Stability Research Council*, New Orleans, Louisiana, April 2007
- 49. **Ramseyer, C.C.**, Kiamanish, R., "Mechanically Activated Fly Ash in Fresh and Hardened Concrete" *American Concrete Institute, Annual Fall Convention*, Denver, Colorado, November 2006
- 50. **Ramseyer**, C.C., Freyne, S., Peters, W. Geibler, J., "First HPC Bridge Deck in Oklahoma" *American Concrete Institute, Annual Fall Convention*, Kansas City, Kansas, November 2005
- 51. **Ramseyer, C.C.**, and Brueggen, B. L., "Camp Concrete An Experiment in Undergraduate Research" *American Society for Engineering Education*, Annual Meeting of the Midwest Section, Fayetteville, Arkansas, September 2005

- 52. **Ramseyer**, C.C., "A Study of Shrinkage in Concrete from the Time of Casting" *American Concrete Institute, Annual Spring Convention*, New York, New York, April 2005
- 53. **Brueggen, B.L.** and Ramseyer, C.C., "Mechanical Activation of Fly Ash: Why it Works" *American Concrete Institute, Annual Spring Convention*, New York, New York, April 2005
- 54. Chancellor, B. and Ramseyer, C.C., "Investigation of Very Early Strength Concrete with Low Shrinkage Properties Suitable for Rigid Pavement Repair" *American Concrete Institute, Annual Spring Convention*, New York, New York, April 2005
- 55. **Brueggen, B.L.** and Ramseyer, C.C., "Finite Element Modeling of Cold-Formed Steel Joist Systems", *Structural Stability Research Council Stability Conference* at the *North American Steel Construction Conference*, Montreal, Quebec, Canada, April 2005
- 56. **Thottunkal, V.J.** and Ramseyer, C.C., "Axial Capacity of Deep Z Sections", *Structural Stability Research Council Stability Conference* at the *North American Steel Construction Conference*, Montreal, Quebec, Canada, April 2005
- 57. Brueggen, B.L. and **Ramseyer, C.C.**, "Capacity of Built-Up, Cold-Formed Steel Axial Compression Members", *Structural Stability Research Council Stability Conference* at the *North American Steel Construction Conference*, Montreal, Quebec, Canada, April 2005
- 58. **Ramseyer, C.C., Freyne, S.**, Russell, B.W., and Bush, T., "Enhancing Compressive Strength in HPC with a Corrosion Inhibiting Admixture Containing Calcium Nitrite", *American Concrete Institute, Annual Fall Convention*, Dallas Texas, October 2001
- Russell, B.W., and Ramseyer, C.C., "High Performance Concrete Products and Procedures for Repairing Bridge Decks and Rigid Pavements", 78th Annual Transportation Research Board Meeting, Washington D.C., January 1999
- 60. **Ramseyer, C.C.,** and Russell, B.W., "High Performance Concrete Products and Procedures for Repairing Bridge Decks and Rigid Pavements", *Pre-Stressed Post-tensioned Concrete Institute, Annual Convention*, Atlanta Georgia, November 1998

# **Invited Presentations (Presenting Author is Bold)**

- 1. **Ramseyer, C.C.**, "Residential Braced Walls", *Central Oklahoma Home Builders Association*, Oklahoma City, Oklahoma, August 2023
- 2. **Ramseyer, C.C.**, "Wood Frame "Roof" Construction for Oklahoma", *Ideal Homes Builder Training*, Oklahoma, July 2023
- 3. **Ramseyer, C.C.**, "Design Principles for Oklahoma Foundations", *Ideal Homes Builder Training*, Oklahoma, July 2023
- 4. **Ramseyer, C.C.**, "William LeMessurier and the CitiCorp Center; A case study in engineering and ethics", *Wallace Design Collective*, Oklahoma, August 2022
- 5. **Ramseyer, C.C.**, "Shrinkage Compensating Concrete Why are you accepting cracked concrete", *Scholer Peterson Concrete Conference*, Kansas State University, Topeka, Kansas, February 2019
- 6. **Ramseyer, C.C.**, "High Wind Issues", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Oklahoma City, Oklahoma, September 2017

- 7. **Ramseyer, C.C.**, "Oklahoma's Earthquakes A Structural Engineer's Perspective", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Oklahoma City, Oklahoma, September 2016
- 8. **Ramseyer, C.C.**, "High Winds, Lateral Bracing", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Oklahoma City, Oklahoma, September 2016
- 9. Ramseyer, C., "Oklahoma's Earthquakes A Structural Engineer's Perspective", What's Shaking Oklahoma? Oklahoma Commercial Real Estate Forum™: Earthquakes, Central Oklahoma Commercial Association of REALTORS® (COCAR™), Oklahoma City, Oklahoma, Sept 2016
- 10. **Ramseyer, C.**, "Setting the Standard New Building Codes for Tornado Resistance", *North Texas Chapter of the International Code Council (ICC)* Grapevine, Texas, April 2016
- 11. **Ramseyer**, C., "B-CSA Pavement Research", *University of Texas Austin, CRCP FAST Act* Austin, Texas, March 2016
- 12. **Ramseyer, C.C.**, "The Development of the City of Moore New Building Code for Tornado Resistance", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Oklahoma City, Oklahoma, September 2015
- 13. **Ramseyer, C.**, "An Assessment of School and Commercial Facility Performance Due to the May 20th, 2013, Moore, Oklahoma Tornado", *Board of Architects*, Metro Tech/Spring Lake, Oklahoma City, Oklahoma, April 2015
- 14. **Ramseyer, C.C.**, "The Development of the City of Moore New Building Code for Tornado Resistance", *Board of Architects*, Metro Tech/Spring Lake, Oklahoma City, Oklahoma, April 2015
- 15. **Ramseyer, C.C.**,"The Use of Shrinkage Compensating Concrete in an Underground Water Tank", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, November 2014
- 16. **Ramseyer, C.C.**, Fagan, J., Dyer, J., "Dialog with Galileo: A Learning Community for Engineering at OU Arezzo", *Teaching Scholars Initiative*, Norman, Oklahoma, October 2014
- 17. **Ramseyer, C.,** "Tornadoes Is Community Resiliency Possible?", *Oklahoma Building Inspectors Association Annual Conference,* Ada, Oklahoma, October 2014
- 18. **Ramseyer, C.**, "Considering the 2009 International Residential Code?", *Oklahoma Building Inspectors Association Annual Conference*, Ada, Oklahoma, October 2014
- 19. **Ramseyer, C.**, Holliday, L., Floyd, R., "Tornadoes Taking Shelter" subtitled 'Is Community Resiliency Possible?", *Oklahoma Chapter of the American Planning Association Annual Conference*, Norman, Oklahoma, October 2014
- 20. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Southwest *Construction Codes Council*, Del City, Oklahoma, September 2014
- 21. **Ramseyer, C.**, "Residential Foundation Design for Central Oklahoma", Southwest *Construction Codes Council*, Del City, Oklahoma, September 2014

- 22. Ramseyer, C.C., "High Wind Construction Lateral Load Resistant Design for High Wind Events", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Mid-West City, Oklahoma, September 2014
- 23. **Ramseyer, C.C.**, "Residential Foundation Design for Central Oklahoma", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Mid-West City, Oklahoma, September 2014
- 24. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Oklahoma City Engineering Club Meeting, Purcell, Oklahoma, May 2014
- 25. **Ramseyer, C.**, **Bescher, E.**, "100 Year Pavement", Federal Aviation Administration Headquarters, Washington D.C., May 2014
- 26. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Association of Central Oklahoma Governments Meeting for City Managers, Oklahoma City, Oklahoma, May 2014
- 27. **Ramseyer, C.**, "Tornado Research", 2014 Mid-Continent Student Conference, Banquet Dinner Keynote Presentation, Stillwater, Oklahoma, April 2014
- 28. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Association of Central Oklahoma Governments Meeting for City Planners, Oklahoma City, Oklahoma, April 2014
- 29. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Purcell Rotary Club Meeting, Purcell, Oklahoma, April 2014
- 30. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Enid Homebuilders Meeting, Oklahoma City, Oklahoma, April 2014
- 31. **Ramseyer, C.**, "City of Moore New Building Code for Tornado Resistance Adoption", City of Moore Council Meeting, Moore, Oklahoma, March 17, 2014
- 32. **Ramseyer, C.**, "New Building Code for Tornado Resistance", Central Oklahoma Habitat for Humanity Meeting, Oklahoma City, Oklahoma, March 2014
- 33. **Ramseyer, C.**, "City of Moore New Building Code for Tornado Resistance", City of Moore Council Meeting, Moore, Oklahoma, February 2014
- 34. **Ramseyer**, C., "Lessons Learned from the May 20<sup>th</sup> Tornado", ASCE-*Oklahoma City Chapter Meeting*, Oklahoma City, Oklahoma, February 2014
- 35. **Ramseyer, C.**, "City of Moore New Building Code for Tornado Resistance", Moore Home Builders Meeting at City Hall, Moore, Oklahoma, January 2014
- 36. **Floyd, R.**, Ramseyer, C., "Performance of Structures in the May 20th Moore Tornado: NSF Evaluation -- A Quick Review", University of Arkansas Civil Engineering Graduate Seminar, Fayetteville, Arkansas, January 2014
- 37. **Ramseyer, C.**, "City of Moore New Building Code for Tornado Resistance", City of Moore Meeting at City Hall, Moore, Oklahoma, December 2013
- 38. **Ramseyer, C.**, "Lessons Learned from the May 20<sup>th</sup> Tornado", Moore Home Builders Association, Moore, Oklahoma, November 2013

- 39. Ramseyer, C.C., Butzer, H., and Fitzsimmons, K., "Bridge to Design Thinking", 2013 *Building Bridges, State of Creativity Forum*, Oklahoma City, Oklahoma, November 2013
- 40. **Ramseyer, C.**, "Lessons Learned from the May 20<sup>th</sup> Tornado", Builders Association of South Central Oklahoma, Norman, Oklahoma, November 2013
- 41. **Ramseyer, C.**, "Opening Session: Moore Tornado May 20<sup>th</sup>, "Before the storm and after", 10<sup>th</sup> Annual Oklahoma Homebuyer Education Association Conference, Edmond, Oklahoma, November 2013
- 42. Ramseyer, C.C., Butzer, H., and Fitzsimmons, K., "SkyDance Bridge", Transformations 2013 AIA Central States Region and AIA Oklahoma Convention, Trade Show and Design Awards, Oklahoma City, Oklahoma, October 2013
- 43. **Ramseyer, C.**, "Lessons Learned from the May 20<sup>th</sup> Tornado", State of Oklahoma, House of Representatives Interim Study **13-016**, Economic Development, Chairman Rep. Randy McDaniel, HOST: Rep. Richard Morrissette, District 92, Oklahoma City, Oklahoma, September 26th, 2013
- 44. Ramseyer, C.C., "Structural Framing, Walls", Oklahoma Better Building Summit, Oklahoma State Home Builders Association, Mid-West City, Oklahoma, September 2013
- 45. Ramseyer, C.C., "Structural Framing, Roofs", Oklahoma Better Building Summit, Oklahoma State Home Builders Association, Mid-West City, Oklahoma, September 2013
- 46. **Ramseyer, C.C.**, "Foundations, Soils and Concrete", *Oklahoma Better Building Summit, Oklahoma State Home Builders Association*, Mid-West City, Oklahoma, September 2013
- 47. **Ramseyer, C.C.**,"Rapid Setting Concrete 2 hours from casting to stripping", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, September 2013
- 48. **Ramseyer, C.**, "Moore Tornado May 20<sup>th</sup>, NSF & ASCE/SEI Evaluations", *Montenaro Lunch and Learn*, Moore, Oklahoma, August 2013
- 49. **Ramseyer, C.**, "Moore Tornado May 20<sup>th</sup>, NSF & ASCE/SEI Evaluations", *ASCE-Oklahoma City Chapter Meeting*, Oklahoma City, Oklahoma, August 2013
- 50. **Ramseyer, C.C.**, "Flange Connection to Gussett Plate The Intel Problem", *W&W Steel corp*, Oklahoma City, Oklahoma, May 2013
- 51. **Ramseyer, C.C.**, "Rapid Setting Concrete, Cement Types and Performance Characteristics used by CalTrans", *Caltrans District* 7, Los Angeles, California, April 2013
- 52. **Ramseyer, C.C.**, "Investigation of Very Early Strength Concrete with Low Shrinkage Properties", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, April 2013
- 53. **Ramseyer**, C.C., "Field Testing of Low Shrinkage Concrete in a Six Million Gallon Water Tank", *Oklahoma Structural Engineer's Association –central chapter meeting*, Oklahoma City, Oklahoma, February 2013
- 54. **Ramseyer, C.C.**, "Shrinkage Compensating Concrete for Crack Free Bridge Decks", *ODOT-Headquarters*, Oklahoma City, Oklahoma, February 2013

- 55. **Ramseyer, C.C.**, "Preservation, Repair and Rehabilitation of Concrete Pavements Dimensional Stability of Concrete Slabs on Ground", *Caltrans District* 7, Los Angeles, California, January 2013
- 56. **Ramseyer**, C.C., "Preservation, Repair and Rehabilitation of Concrete Pavements Bridges Without Cracks", *Caltrans HQ*. Sacramento, California, January 2013
- 57. **Ramseyer, C.C.**, "Preservation, Repair and Rehabilitation of Concrete Pavements Dimensional Stability of Concrete Slabs on Ground", *Caltrans HQ*. Sacramento, California, January 2013
- 58. **Ramseyer, C.C.**, "600 Bridges Without Cracks", *Wiss Janney Elstner Associates Inc.*, Austin, Texas, January 2013
- 59. **Ramseyer**, C.C., "Unrestrained and Restrained VWSG Shrinkage-Expansion Testing", CTS Cement Manufacturing Inc., Los Angeles, California, December 2012
- 60. **Ramseyer, C.C.**, "Structural Engineering at OU", *Structural Engineer Council of Oklahoma*, Oklahoma City, Oklahoma, November 2012
- 61. **Ramseyer, C.C., Butzer, H.**, "The Oklahoma City SkyDance Bridge: The Collaborative Process", A pecha kucha format Creativity Slam, State of Creativity Forum, Oklahoma City, Oklahoma, November 2012
- 62. **Ramseyer, C.C.**, McLean, E., Rubin, E., "600 Bridges Without Cracks", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, November 2012
- 63. **Ramseyer, C.C.**, "Wall Bracing What does the IRC 2009 Require?", *Oklahoma State Home Builders Association*, Oklahoma City, Oklahoma, October 2012
- 64. **Muraleetharan, K. K.**, Bright, Z., Miller, G., Breazile, C., Ramseyer, C., Kirupakaran, K., "Understanding Distress to Bridges Caused from Interaction with Adjacent Roadways through Instrumentation", *2012 ODOT-OkTC Transportation Research Day*, Mid-West City, Oklahoma, October 2012
- 65. Ramseyer, C.C., Phillips, J., Ramming, C., "State of Our Schools", *Oklahoma Structural Engineer's Association –central chapter meeting*, Oklahoma City, Oklahoma, June 2012
- 66. Ramseyer, C.C., Carroll, S., Butzer, H., Massenat, L., Fitzsimmons, K., Wanzer, D., Gardner, J., Johnson, B., "SkyDance Bridge A Designers Point of View", *Oklahoma Structural Engineer's Association –central chapter meeting*, Oklahoma City, Oklahoma, May 2012
- 67. **Ramseyer, C.C.**, Carroll, S., Butzer, H., Massenat, L., Fitzsimmons, K., Wanzer, D., Gardner, J., Johnson, B., "SkyDance Pedestrian Bridge over I-40 in Oklahoma City", *Oklahoma Structural Engineer's Association Spring Conference 2012*, Stillwater, Oklahoma, April 2012
- 68. **Ramseyer, C.C.**, "Considering the 2009 International Residential Code", *Adoption of the 2009 edition of the International Residential Code Meeting- Building Inspection 8<sup>th</sup> floor, 420 W. Main*, Oklahoma City, Oklahoma, March 2012
- 69. **Carroll, S.**, Butzer, H., Ramseyer, C.C., Massenat, L., Fitzsimmons, K., Wanzer, D., Gardner, J., Johnson, B., "The Oklahoma City SkyDance Bridge: The evolution of an idea through a design collaboration.", *OSU School of Architecture*, Stillwater, Oklahoma, March 2012

- 70. **Ramseyer, C.C.**, "Considering the 2009 International Residential Code", *Adoption of the 2009 edition of the International Residential Code Meeting- City Hall*, Norman, Oklahoma, January 2012
- 71. **Mekker, M.**, Ramseyer, C.C., Brewer, W., "Overview of Transportation Issues at Fears Lab", *Oklahoma Transportation Center Summer Symposium*, Midwest City, Oklahoma, July 2011
- 72. **Shadravan, S.**, Ramseyer, C.C., "Dimensional Stability of Slabs on Grade", *Oklahoma Transportation Center Summer Symposium*, Midwest City, Oklahoma, July 2011
- 73. **Ramseyer, C.C.**, "SkyDance Evolution of a Bridge Design", *ODOT-Headquarters*, Meeting Including ODOT, City of OKC, FHWA and independent Engineering Firms, Oklahoma City, Oklahoma, May 2011
- 74. Ramseyer, C., McLean, E., Davis, C., Gummersheimer B., Trautman, B., Martens, P., Amos, D., Schmidt, I., Diaz, L. and Sharp, R., "Experience with Rapid Setting, Low Permeability Bridge Overlays in the St. Louis Area", ASCE-Oklahoma City Chapter Meeting, Oklahoma City, Oklahoma, March 2011
- 75. **Ramseyer, C.C.**, "Recommendations of the International Residential Code Building Subcommittee", *Oklahoma Uniform Building Code Commission Meeting*, Oklahoma City, Oklahoma, November 2010
- 76. **Ramseyer, C.C.**, "Experience with 4 Bridges in the St. Louis Area", *ASCE-Oklahoma City Chapter Meeting*, Oklahoma City, Oklahoma, October 2010
- 77. **Ramseyer**, C.C., "Evaluation of the Effectiveness of ODOT's Cable Barrier Program", *OTC Transportation Research Day, Annual Fall Meeting*, Oklahoma City, Oklahoma, October 2010
- 78. **Ramseyer, C.C.**, "Transportation at Fears Lab", *OTC Transportation Research Day, Annual Fall Meeting*, Oklahoma City, Oklahoma, October 2010
- 79. **Ramseyer, C.C.**, "Low-P Overlay Bridge Decks, 12<sup>th</sup> Street, Russell & Gravoix, Lafayette and Pestalosi", *Evaluation Meeting with MoDOT*, St. Louis, Missouri, September 2010
- 80. **Ramseyer, C.C.**, "Overview of Transportation Issues at Fears Lab", *Oklahoma Transportation Center Summer Symposium*, Midwest City, Oklahoma, July 2010
- 81. Ramseyer, C.C., **Shadravan**, **S**., "Dimensional Stability of Concrete Slabs on Grade", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, May 2010
- 82. Ramseyer, C.C., "Transportation at Fears Lab", OTC-Oklahoma Transportation Center, Meeting with RITA, Norman, Oklahoma, March 2010
- 83. **Ramseyer, C.C.**, "Extreme Concrete Cold Weather Concrete on a Rapid Build Construction Site", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, February 2010
- 84. **Ramseyer, C.**, "SkyDance Evolution of a Bridge Design", American Society of Civil Engineers, ASCE, Oklahoma Section Annual Conference, Advanced Technology Research Center, Oklahoma State University, Stillwater, August 28<sup>th</sup>, 2009
- 85. Butzer, H. and **Ramseyer, C.**, "SkyDance The Creation and Evolution of the Bridge", Meachum Hall, Construction Science Speakers Program, University of Oklahoma, Norman April 14<sup>th</sup>, 2009

- 86. **Ramseyer, C.C.**, "The Relevance of OU's Fears Lab to the Local Structural Engineering Community" Oklahoma Structural Engineering Association (*OSEA*) *Oklahoma Central Chapter Meeting*, Oklahoma City, Oklahoma, February 2009
- 87. **Ramseyer, C.C.**, "Pozzolan Concrete Research at The University of Oklahoma Fears Lab", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, December 2008
- 88. **Ramseyer, C.C.**, "High Performance Concrete in Oklahoma", *ODOT/OTC Research Day*, Oklahoma City, Oklahoma, October 2008
- 89. **Ramseyer, C.C.**, "Fears Lab and its Impact on Engineering Education", *ASCE-Oklahoma City Chapter Meeting*, Oklahoma City, Oklahoma, October 2008
- 90. **Ramseyer, C.C.**, "Concrete Chemistry and Materials Research at Fears Lab", *Dolese Seminar*, Oklahoma City, Oklahoma, October 2008
- 91. **Campbell, M.**, Ramseyer, C.C., "Introduction to Fears Lab and Student Activities", *ACI-Tulsa Chapter Meeting*, Tulsa, Oklahoma, September 2008
- 92. **Ramseyer, C.C.**, "Fast Track Materials", *ACPA-Oklahoma/Arkansas Chapter 2008 Oklahoma Portland Cement Concrete Pavement Conference*, Oklahoma City, Oklahoma, March 2008
- 93. **Ramseyer, C.C.**, "The Tulsa Experience with Concrete Overlays", *ACI-Oklahoma Chapter Meeting*, Oklahoma City, Oklahoma, February 2008
- 94. **Ramseyer**, C.C., "Experiences with Bridge Construction Oklahoma", *Pooled-Fund Seminar: Construction of Crack-Free Bridge Decks*, Oklahoma City, Oklahoma, October 2007
- 95. **Ramseyer, C.C.**, "Pier and Grade Beam Foundations" *Oklahoma Board of Registration*, Open forum meeting, Oklahoma City, Oklahoma July 2007
- 96. **Ramseyer, C.C.**, "Stability Bracing Requirements for Metal Building Frame Systems", *Metal Building Manufacturers Association, MBMA Annual Researcher Symposium*, Tampa, Florida, February 2007
- 97. **Ramseyer, C.C.**, "Bridge Deck Repairs and The Tulsa Experience with Pavement Overlays", GCC Seminar on Added Value Products Rapid Set, CTS Type K Shrinkage Compensating Cement, Microsilex, Versabind, Mid-Continent Ready Mix Offices, Tulsa, Oklahoma, January 2007
- 98. **Ramseyer, C.C.**, and Kiamanish, R., "Improved Blended Cement with Large Fly Ash Replacement", *Quality Action Seminar*, LaFarge Cement Co. Tulsa, Oklahoma, September 2006
- 99. Ramseyer, C.C., Freyne, S. and **Giebler, J.**, "High Performance Concrete for use in Oklahoma Bridge Decks", *30<sup>th</sup> Annual Transportation Research Day*, Oklahoma Department of Transportation, Oklahoma City, Oklahoma, September 2006
- 100. **Ramseyer, C.C.**, "Experiences with Bridge Construction Oklahoma", 4<sup>th</sup> Annual Meeting for the Pooled-Fund Study: Construction of Crack-Free Bridge Decks, Kansas City, Missouri, July 2006
- 101. **Ramseyer, C.C.**, "Steel Design in the Metal Building Industry" Star Building Systems, Oklahoma City, Oklahoma, February 2006

102. Russell, B.W., and Ramseyer, C.C., "This is Not Your Father's Concrete or Understanding Concrete Science Leads to Performance", Session - High Performance Concrete and Research into Very Early Strength Production, Shaping the Future of Concrete - GRACE Quality Control Seminar, GRACE Construction Products, Cambridge, Massachusetts, November 12, 1998

# INTELLECTUAL PROPERTY DEVELOPMENT

<u>Liangzhong Xiang</u>, Shanshan Tang, Christopher Ramseyer, "Method and system of X-ray-induced Acoustic Computed Tomography of Concrete Infrastructure," US Patent Application, ID Number: 16NOR045, Disclosed: May 2016

Gerardo Quinonez, Stuart Ronald, Christopher Ramseyer, "Bridge Structure and Method for bracing a bridge deck" US Patent Application, ID Number: 8,925,132 Disclosed: October 2013

# **SUPERVISION OF STUDENTS**

**Summary:** I have advised a total of 42 graduate students and graduated 2 Ph.D. students (1 woman (1 minority)/1 man (1 minority)), 34 M.S. students with thesis (5 women (2 minority)/30 men (7 minority)) and 6 M.S. students without thesis (0 women (0 minority)/6 men (4 minority)). I have also directed the work of 88 undergraduate students in my "Camp Concrete" program (19 women (12 minority)/65 men (7 minority)) and 14 undergraduate students in the NSF-REU program (2 women (0 minority)/12 men (2 minority)) on undergraduate research projects. My students have won \$304,500 in awards while members of my research program.

# Ph.D. Degree

- 2011 Shideh Shadravan, "Dimensional Stability of Concrete Slabs on Grade"
- 2011 Krisda Piyawat, "A Suggested Design Approach for Built-up Cold-Formed Columns based on Research Using Non Linear Finite Element Method"

#### Master of Science Degree – with Thesis

2018	Dakota Gennings, "Investigation of Chemically Prestressed Concrete"
2018	Steve Roswurm, "Characterizing the Behavior of Concrete Cast with Type K Shrinkage Compensating Cement When Placed Under Mechanical Restraint"
2018	Jake Roswurm, "Influence of Retarders on Shrinkage and Compressive Strength in Rapid Set Concrete"
2016	Sam Sherry, "Assessment of Partial Joint Penetration Welds on Bolted End-plate Connections for Use in Intermediate Moment Frames"
2014	Jacquie Baker, "How Varying Amounts of Fly Ash Effect Shrinkage in Calcium SulfoAluminate Cement Concrete"
2013	Jesse Roswurm, "Investigation Into the Influence of Sand Angularity on the Standard Test for Strand Bond"
2013	Seth Carlton, "Material Behavior of Latex-Modified Concrete in Thin Hyperbolic Paraboloid Shells"

2013	Seth Roswurm, "Investigation of the Mechanical Behavior of Type K Shrinkage Compensating Concrete Under Various Forms of Mechanical Restraint"
2012	Carlos Rincon, "The Shrinkage Behavior of Calcium SulphoAluminate Concrete and Portland Concrete at Early Age"
2012	Kyle Renevier, "Investigation of Shrinkage Compensating Concrete in an Underground Water Tank"
2011	Andy Nghiem, "Flexural Behavior of Circular Concrete Filled Steel Tubes without Axial Loads" M.S.
2011	Pat Crowder, "The Tension Strength of Latex Modified Bonded Concrete Overlays"
2011	David Frank, "The Effects of Temperature on Compressive Strength of Rapid Setting Concrete"
2010	Mark Emde, "Investigation of Torsional Bracing of Cold-Formed Steel Roofing Systems"
2010	Chris Davis, "Investigation of Early-Age Bonded Concrete Overlay Failure"
2009	Marty Farris, "Self Consolidating Concrete for Use in Reinforced Bridge Beams"
2009	Derick Thompson, "Shrinkage Effects in the Transfer Zone of Prestressed Concrete Beams"
2009	Andrew Scherman, "Investigation of Non Destructive Testing Techniques on Aged Concrete Structures"
2008	Aaron Probst, "Improved Composite Action Using Shear Connectors for Concrete Filled Steel Tubes in Flexure"
2008	Kenny Biggs, "Axial Load Capacity of Cold-Formed, Built-Up Members"
2008	Jared Schwennesen, "An Evaluation of a 23" Garage Door Return System with the Application of a Lateral Load"
2008	Keara Phillips, "Prevention of Corrosion in Reinforced Concrete Structures"
2007	Roozbeh Kiamanesh, "Mechanically Activated Flyash for Blended Cement"
2007	Brent Chancellor, "Very Early Strength Concrete for Patching"
2007	Shideh Shadravan, "Bending Capacity of Cold Formed Z-Purlins Supporting a Standing Seam Roof System with Torsional Bracing"
2007	Clay Buehrle, "Cold-Formed Zee Purlin Capacity Study with Interaction of Web Stiffeners"
2007	Jessica Whittle, "Buckling Capacities of Axially Loaded, Cold-Formed, Built-Up Members"
2007	Matt Gastgeb, "Very Early Strength Concrete for Patching"
2007	Cory Yeager, "Corrosion of Prestressing Strands Used to Construct Bridge Girders"
2006	Jason Giebler, "The Use of High Performance Concrete in Oklahoma Bridge Decks"
2006	Daniel Myers, "Fiber Reinforced Concrete and Bridge Deck Cracking"
2005	Jen-Teck Kao, "Investigation into the Use of Portland Cement Concrete with Fiber Additives for Bridge Decks in the State of Oklahoma"
2004	Beth Brueggen, "Strength and Serviceability Issues of Cold-Formed Steel Joists"
2004	Vinay Joseph Thottunkal, "Axial Load Capacity of Cold-Formed Z Sections"

# **Master of Science Degree – Non Thesis**

2014 Gary Quinonez, - Non Thesis topic – "Beam Bracing for Deck Slab Placement"

2012	Travis Poole, - Non Thesis topic – "The Investigation of Porosity Measurement Methods and the Relationship to Cement Microstructure"
2012	Hai Wei Lim, – Non Thesis topic – "Flexural Strength of Concrete-Filled Steel Tubes Subjected to Pure Bending"
2012	Foroud Moradi Sarmeidani, – Non Thesis topic – "Evaluation of Designing a Building with Different Materials"
2010	Kyle Haskett, - Non Thesis topic - "The use of Steel to Reinforce Soil"
2009	Victor Njiru, - Non Thesis topic - "SkyDance Foundation"

Undergraduate Research Supervision – "Camp Concrete" – Research Experience for Under Graduates			
2018	Medani Dissanayake Alex Busby	Christian Schran Cole Mohedano	Cody Willingham
2017	Adam Aab		
2016	Jacob Roswurm Dare Obasade	Steve Roswurm	Dakota Gennings
2015	Ofelia Olvera Uriah Nichols	Jacob Roswurm Raina Coleman	Steve Roswurm
2014	Ofelia Olvera Erik Reyes	Jacob Roswurm Ayanna Harris	Steve Roswurm Raina Coleman
2011	Charlie Mish Jenny Bergen Matt McSherry	Jesse Roswurm Alyse Burgess	Seth Roswurm Tim Duncan
2010	Pat Crowder David Frank	Jesse Roswurm Cassie Gonzales	Seth Roswurm
2009	Chris Davis David Frank	Mark Emde	Pat Crowder
2008	Kyle Haskett Michael Rice	Chris Hill Marissa Samaripa	Chris Davis
2007	David Swyden Marty Farris Andrew Scherman Andrew Nghiem	Mark Williams Kenny Biggs Michaela Campbell	Kyle Haskett Jared Schwennesen Patrick Crowder
2006	Roozbeh Kiamanesh Marty Farris Chris Ely Zach West Cortney Westphal	Daniel Myers Kenny Biggs Chris Harlin Brandon Birch Jared Schwennesen	David Swyden Shideh Shadravan Hai Wei Lim Geeta Ashabi Russell Buhler
2005	Derek Thompson Jason Giebler	Roozbeh Kiamanesh Jessica Whittle Ramseyer CV - 32	Daniel Myers Keara Phillips

	Kate Nelson Ali Farzaneh Matt Gastgeb Chris Ely Ivy Lau	David Swyden Josh Malwick Randy Martin Chris Harlin Nam Nguyen	Matt Schachle Clay Buehrle Kenny Biggs Dustin Warden
2004	Brent Chancellor Derick Thompson Regina Cantu Jason Giebler	Roozbeh Kiamanesh Cory Yeager Derek McIntosh	Daniel Myers Katie McDowell B.J. Hawkins
2002	Beth Brueggen		
2003	Beth Brueggen		

# **Undergraduate Research Supervision – Continued**

**NSF** – Research Experience for Under Graduates

- 2012 Tim Duncan(OU), Anthony Hanley (OU) and Brittany Cranor (OU)
- 2011 Michelle Mekker (University @ Buffalo NY) and Bryan Rinde (CSU Sacramento)
- 2010 Edward Eskew (Clarkson) and Cameron DuBois (Linfield)
- 2009 Pat Crowder (OU)
- 2008 Chris Hill (OU) and Michael Rice (OU)
- 2007 Alex Jones (Olin) and Gregory Streibling (Missouri-Rolla)
- 2006 Marty Farris (OU) and Jarrod Persun (Clarkson)

# **Undergraduate Research Supervision – – Continued Awards to students**

2017	Airport Cooperative Research Program ( ACRP ) Graduate Research Award to Steve Roswurm $$ Value = $\$10,\!000$
2012	Robberson Research and Creative Endeavors Grant awarded to Seth Carlton for travel and research at Cambridge, England. Value = \$500
2007	Graduate Research Fellowship awarded to Jessica Whittle from the National Science Foundation (N.S.F.) Estimated Value = \$151,500
2004	Graduate Research Fellowship awarded to Beth Brueggen from the National Science Foundation (N.S.F.) Estimated Value = \$121,500
2004	Outstanding Graduate Assistant Award awarded to Beth Brueggen from the OU Graduate Student Senate. Value = $$500$
2003	O.H. Ammann Research Fellowship in Structural Engineering awarded to Beth Brueggen for the proposal "Continuation of Inelastic Finite Element Modeling of the Weld Connections and End Region of Cold Form Steel Joists." From the Structural Engineering Institute of ASCE. Value = \$5,000

- O.H. Ammann Research Fellowship in Structural Engineering awarded to Beth Brueggen for the proposal "Inelastic Finite Element Modeling of the Weld Connections and End Region of Cold Form Steel Joists." From the Structural Engineering Institute of ASCE. Value = \$5,000
- First Place, Technical Paper Competition, ASCE Mid-Continent Conference awarded to Beth Brueggen for the paper and presentation "Strength and serviceability issues of cold formed steel joists." Value = \$500

# TEACHING EXPERIENCE

# **Classroom Education**

Courses	CEES 1213 Computing Applications in CEES	Sp 04
Taught	CEES 2113 Statics	F 14, 15, 16, 17, 18
(28)	CEES 3401 Engineering Economics	F 18, S 19, F 19, S 20, F 20
Sections	CEES 3403 Civil Engineering Materials	Sp 01, 02, 03, 04,10, 11
Taught	CEES 3414 Structural Analysis	F 01, 09, 10, 11
(120)	CEES 3453 Introduction to Construction Management	Sp 16, 17, 19, 20
, ,	CEES 3663 Structural Design – Steel I	F 00, 01, 02, 03, 04, 05, 07, 08
	·	Sp 14, 15, 16, 17, 19, 20
	CEES 3763 Structural Design – Concrete I	Sp 05, 06, 07
	CEES 4050 Design Problems in Civil Engineering	F and Sp 00, 01, 02, 03
	CEES 4803 Professional Practice – Pre Capstone	F 05, 06, 07, 08
	CEES 4753 Structural Design – Wood	F 13
	CEES 4774 Structural Design – Steel and Concrete	Sp 10, 11, 12, 13
	CEES 4903 Civil Engineering Design – Capstone	Sp 06, 07, 08, 09, 13
	CEES 4993 Architectural Engineering Design, Capstone	Sp 08, 09, 13
	CEES 5010 Research Problems – Timber Design	Su 04
	CEES 5010 Research Problems – Concrete Design	Sp 06
	CEES 5020 Corrosion Issues with Bridges	F 04
	CEES 5020 Bridge Deck Overlays	Sp 05
	CEES 5020 Bridge Engineering	F 11
	CEES 5020 Structural Design - Masonry	F 12
	CEES 5673 Structural Design – Concrete II	F 05
	CEES 5773 Structural Design – Steel II	Sp 01, 02, 03, 04, 05, 06, 08, 09
		F 13 Sp 15 F 15, 16, 18, 19, 20,
		F 21
	ENGR 1420 Freshman Orientation	Sp 07, 08, 09
	ENGR 2002 Professional Development	F 14, 15, 16, 17, 18
	ENGR 3401 Engineering Economics	F 07, 08, 09, 15, 16, 18 S 19, F
		19, S 20, F 20, S 22
	ENGR 4510 Disruptive and Innovative Technology	F 15
	Ideation The Figure 111 Figure 11	g 06 0 <b>g</b> g 00 00 516
	ENGR 4510 Money and the Engineer	Su 06, 07 – Sp 08, 09 F 16
	HON 3980 Honors Research	Sp 02, F 05, Sp 10, Sp 13, Su 13

# **Additional Educational Activities**

Seminars	Participated in OU summer student programs for K-12 STEM development:		
and	<b>DEVAS</b> (Discovering Engineering Via Adventures in Science)		
Programs	(2008, 2009, 2010, 2011, 2012, 2013)		
Taught	BP Engineering Academy.	(2008, 2009, 2010, 2011, 2012, 2013)	
(29)	Passport to Engineering middle school camp	(2011)	
	GLAMS (Girls Learning About Math and Science	(2011)	

These are outreach programs for severely under represented youth in engineering. The teaching exercise consists of building structures that are then tested to failure on the shake table at the Donald G. Fears Structural Engineering Lab. This is followed by rebuilding the structures and re-testing. The rebuilt second structure ALWAYS exceeds the behavior of their first structure. A brief discussion follows on how engineers learn from failure.

Organized and developed with Wilson Brewer from Langston University the following:

Langston 4-H Transportation Program(2009 to 2015)Upward Bound(2011)Project Promise(2012)National Summer Transportation Institute(2012)

These are outreach program for severely under represented youth in engineering. This program introduces the students to the Donald G. Fears Structural Engineering Lab and transportation issues and challenges faced by Oklahoma. In 2011 these programs participated in the shake table program described above.

Participated OU summer teacher programs for K-12 STEM development:

# **Creating Critical Connections in Math and Science C3[M+S]**

# Immersing Middle School Teachers in Research Experiences in Math and Science

- 1. Program investigated the classical column buckling experiments by Euler and how to relate these engineering experiments to secondary school students. This program included a visit to the History of science collection which allowed the teachers to handle books published by Galileo and Euler, June 1st through 12th, 2009
- 2. Program investigated the use of simple analytical bridge modeling and statistics to a better understanding of engineering and science for secondary school students. June 6<sup>th</sup> through 17<sup>th</sup>, 2011, 2012, 2013 and 2014

**Research Experience for Teachers (RET)** Site: Strengthening a K12 Learning Community through Engineering Research. Sponsor: National Science Foundation. My group investigated the use of both simple analytical and physical bridge modeling, coupled with statistics to form a better understanding of engineering and science for High school teachers. June 13<sup>th</sup> through July 22<sup>nd</sup>, 2011, 2012 & 2013

Williams Student Leadership Retreat OU student development programs:

Presented: "Leadership vs. Management" (2009)

"Effective Meetings" (2011)

"Leadership of a Small Group" (Spring 2012)

"Leadership Examples and Mentors" (Fall 2012)

"Strategic vs. Tactical Planning" (Fall 2013)

Participated in the following industry development programs:

"Steel Design in the Metal Building Industry"

(Su 04, Sp 05, Sp 06)

Star Building Systems, Oklahoma City, Oklahoma

Each of these events is a 60 hour lecture series

# **Additional Creative Activities**

2013	ASCE/SEI Moore, Oklahoma Tornado Assessment Team. Assessment of the schools, hospital and commercial buildings damaged by the May 20 <sup>th</sup> EF-5 Tornado Team members included: Bill Coulbourne, David Prevatt, Eric Stafford, John Joyce, and Dean Shafer
2008 – 2012	Lead Structural Engineer for the <b>SkyDance Bridge</b> \$6.4 million dollar Iconic pedestrian bridge to cross I-40 and connect the Oklahoma City "Core to Shore" project Collaborative Team.Members: Butzer Design Partnership, SXL and MKEC
2010	Extreme Home Makeover National Team.Members: ABC, CTS Commercial Team Members: Ideal Homes, Dolese OU Team.Members: ASCE, AEI and ESSA student Chapters
2009 – 2010	Morgan Park Fishing Pier Renovation Project Rebuilt 270 ft. wood structure Local Sponsor:: City of Norman OU Team.Members: ASCE, and AEI student Chapters
2007 and Ed. 2- 2008	Eric Bescher (UCLA) and Chris Ramseyer (OU), "Calcium Sulfoaluminate Cement and Concretes" Teaching Tutorial PowerPoint sent to 250 plus universities
1998	Renovation and Improvement of the Odd Fellows water wheel, Turner Falls OK

# **SERVICE**

Ed.

#### PROFESSIONAL SERVICE Oklahoma State Board of Licensure for Professional Engineer and Land Surveyors **Board Member** (2017 - 2023)Chairman (2022 - 2023)Vice Chair (2021 - 2022)(2020 - 2021)Secretary Scholarship Committee - Chair (18-20) Member (20-present) (2018 - 2023)National Council of Examiners for Engineering and Surveying (NCEES) Voting Member (2017 - 2023)Southern Zone Secretary – Treasurer (2020 - 2022)Fundamentals of Engineering (FE) Exam Committee Member (2018 - present) American Concrete Institute, (ACI) Committee 223, Shrinkage-Compensating Concrete (2008 - present) Chair (2018 - present) Secretary (2013 - 2018)Committee S802, Teaching Methods and Educational Materials (2013 - present) Committee 242, Alternative Cements (2018 - present)Editor Special Publication – 307 "Shrinkage-Compensating Concrete – Past, Present, and Future" sponsored by Committee 223 (2013 - 2016)223 Conference Session Organizer and Moderator:

Ramseyer, C. (2021) "Shrinkage-Compensating Concrete Design and Research in Memory of Edward K. Rice", ACI Fall 2021 Convention, October 17-21, 2021

# 223 Conference Session Organizer and Moderator:

Ramseyer, C. (2012) "Shrinkage-Compensating Concrete – Past, Present, and Future" Technical Session 1&2, ACI Fall 2012 Convention, October 21-25, 2012

# Oklahoma Uniform Building Code Commission

IRC - Building Technical Review Committee	(2021 - 2022)
IRC – Ice and water roof Technical Review Committee	(2021 - 2022)
Storm Shelter Committee – Vice Chair	(2016 - 2017)
IRC - Building Technical Review Committee - Chair	(2015 - 2016)
IBC - Building Technical Review Committee	(2014 - 2015)
IRC - Building Technical Review Committee - Chair	(2010 - 2011)

# American Iron and Steel Institute, (AISI)

Committee on Specifications	(2006 - 2016)
Task Force Group 4 – Base Test and Anchorage	(2006 - 2016)
Subcommittee 22 – Compression Members	(2005 - 2016)
Subcommittee 24 – Flexural members	(2006 - 2016)

# Oklahoma Department of Transportation – 2009 Specification

Section 500 Committee (completed the rewriting of this section) (2008-2010)

# Structural Stability Research Council, (SSRC)

Task Group 1 – Axial Columns	(2007 - 2010)
Task Group 4 – Frames	(2005 - 2010)
Task Group 6 – Research Methods	(2005 - 2010)

# American Society of Engineering Educators, (ASEE)

Reviewer for the Proceeding of the 2005 Midwest Section Conference

Reviewer for the ERM Division (2007, 2008)

American Institute of Steel Construction, (AISC)

Oklahoma Society of Structural Engineers, (OSEA)

American Society of Civil Engineers, (ASCE)

National Society of Professional Engineers, (NSPE)

# **UNIVERSITY SERVICE – (Note: Sabbatical Fall 2017 and Spring 2018)**

Director Fears Structural Engineering Lab		(summer 2008 – 2019)	
Faculty Welfare Committee	Chair (2015-2017)	(fall 2013 – spring 2017)	
Retirement Plans Management Committee		(fall 2014 – spring 2017)	
Faculty Senate Executive Comm	nittee	(spring 2014, fall 2015 – spring 2017)	
E-Club Advisor		(fall 2009 - spring 2017)	
Loyal Knights of Old Trusty Ad	visor	(spring 2008 – spring 2016)	
CoA/CoE Council		(fall 2009 - 2013)	

Engineering Practice Facility – COE Task Force (2007)

# **DEPARTMENT SERVICE- (Note: Sabbatical Fall 2017 and Spring 2018)**

**CEES Committee A**  $(2018 - Jan\ 2021)$  $(2010 - Jan\ 2021)$ CEES Undergraduate Curriculum Committee CEES Scholarship Committee Chair (2015- Jan 2021)  $(2010 - Jan\ 2021)$ CEES Technology and Software Review Committee (2013 - spring 2017)Fears Structural Engineering Laboratory Oversight Committee Chair (2008 – spring 2017) ASCE Student Chapter, Faculty Advisor (2006 - spring 2017)OU- ASCE Concrete Canoe/Steel Bridge, Faculty Advisor (2000 - spring 2017) ASCE Mid-Continent Regional Conference, Faculty Chair (2018-2019)ASCE Mid-Continent Regional Conference, Overall Coordinator (2009-2010)ASCE Mid-Continent Regional Conference, Competition Coordinator (2001-2002)

		Regional		Nationals		Role
Year	Canoe	Ranking	Location	Ranking	Location	Kole
2000	SS Minnow	4th	UMR			co-Advisor
2001	Bringing the Heat	2nd	UA	14th	San Diego, CA	co-Advisor
2002	Jaws	2nd	OU	8th	Madison, WI	co-Advisor
2003	Sooner or Later	1st	KSU	5th	Philadelphia, PA	co-Advisor
2004	Proplous	1st	UNL	17th	Washington D.C.	co-Advisor
2005	Smoke on the Water	2nd	SIUE			Advisor
2006	Sword in the Stone	1st	UMC	16th	Stillwater, OK	Advisor
2007	Centennial	1st	KU	7th	Seattle, WA	Advisor
2008	The Eliminator	1st	UA		Montreal, Canada	Advisor
2009	Sixty Six	2nd	SIUC			Advisor
2010	100 Year Storm	2nd	OU			Advisor
2011	Wild Mary Sudik	1st	KSU	12th	Evansville, IN	Advisor
2012	Legend of the Thunderbird	4th	UNL			Advisor
2013	Unearthed	1st	SIUE	14th	Urbana, Ill	Advisor
2014	Pops	2nd	OSU			Advisor
2015	USS Oklahoma	3rd	KU			Advisor
2016	Boldly Go	2nd	MST			Advisor
2017	Eco Canoe	2nd	UA			Advisor

SAME Student Chapter, Faculty Advisor (2011 – 2015) AEI Student Chapter, Faculty Advisor (2011 – 2013)

Fears Structural Engineering Lab Expansion Organizer

■ Phase I, 4,320 sq ft High Bay Expansion (2006, 2007)

■ Phase II, 1,800 sq ft Concrete Shrinkage and Curling Lab (2008)

■ Phase III, 2+ Acre exterior storage and testing (2011 & 2012)

■ Phase IV, 9,480 sq ft High Bay Expansion (2018 to 2021)

Fears Lab Expansion - Dedication Celebration Organizer (2007)

CEES Structural Faculty Search Committee, Member (6 times from 2001 to 2006,

2012 & 2013)

CEES Director Search Committee, Member (2000, 2012)

Fears Lab 25<sup>th</sup> Anniversary Celebration Organizer (2005)

OU – CEES Visiting Council, Member ASCE Student Chapter, Practitioner Advisor (5 years from 1999 to 2003) (2001-2003)