

Douglas B. Cleary, Ph.D., P.E.

OFFICE ADDRESS

College of Engineering
Henry M. Rowan Hall
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DEGREES

B.S.C.E.	Civil Engineering, Purdue University, 1987
M.S.C.E.	Civil Engineering, Purdue University, 1988
Ph.D.	Civil Engineering, Purdue University, 1992

ACADEMIC EXPERIENCE

2018 – present	Professor, College of Engineering, Rowan University
1998 – 2018	Associate Professor, College of Engineering, Rowan University
1992 – 1994	Visiting Assistant Professor, School of Civil Engineering, Purdue University
1987 – 1992	Graduate Research Assistant, Civil Engineering Structures Laboratory, Purdue University
1987 – 1989	Graduate Teaching Assistant, School of Civil Engineering, Purdue University
1987 - 1988	Research Assistant, Great Lakes Coastal Research Laboratory, Purdue University

ADMINISTRATIVE EXPERIENCE

2009 – 2014	Associate Department Chair, Civil and Environmental Engineering
2007 – 2018	Affiliate Director, Project Lead the Way, New Jersey

INDUSTRIAL EXPERIENCE

1994 – 1998	Black & Veatch Special Projects Corp
1984 – 1987	Woolpert Consultants

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE)
American Society for Engineering Education (ASEE)
American Institute for Steel Construction (AISC)
American Concrete Institute (ACI)
Member Committee S802 – Teaching Methods and Educational Materials
Member Committee 408 – Development and Splicing of Deformed Bars

AWARDS AND HONORS

Educator of the Year, New Jersey Section ASCE, 2010
ASCE Faculty Advisor Award Program, 2000 and 2001
David Ross Fellowship, 1989 to 1991
Concrete Reinforcing Steel Institute Cameron Fellowship, 1988

RESEARCH AND EDUCATIONAL INTERESTS

Reinforced concrete design, epoxy-coated reinforcement, reliability theory, rehabilitation of structures, marine and coastal engineering, composites, structural connections, pavements, steel connections.

PUBLICATIONS

Journal Publications

1. Water sorptivity prediction model for concrete with all coarse recycled concrete aggregates. Ariel Miguel Aragoncillo, Douglas Cleary, Umashanger Thayasivam, Gilson Lomboy. *Construction and Building Materials*. Volume 394, August 2023. <https://doi.org/10.1016/j.conbuildmat.2023.132128>.
2. Estimating the permeability of porous aggregate concretes using electrical resistivity based tests. Ariel M. Aragoncillo, Douglas B. Cleary, Gilson R. Lomboy. *Construction and Building Materials* Volume 364, January 2023. <https://doi.org/10.1016/j.conbuildmat.2022.129909>
3. Developing specifications for precast concrete highway pavements. Offenbacher, Daniel; Cleary, Douglas; Ali, Ayman; Mehta, Yusuf. *International Journal of Pavement Engineering*, 23(6), 1791-1799. 2022.
4. Enhancing a building information model for an existing building with data from a sustainable facility management database. R. Loeh, JW Everett, WT Riddell, DB Cleary. *Sustainability* 13(13), 7014. 2021.
5. Use of Coarse Recycled Concrete Aggregate in Ternary Blended Portland Cement Concrete. Seth Wagner, Gabrielle Wickizer, **Douglas Cleary**, Gilson R. Lomboy, Danielle Kennedy, Benjamin Watts, Peter Bly (2020). *Transportation Research Record, The Journal of Transportation Research Board*, July 30, 2020, <https://doi.org/10.1177/0361198120935876>.
6. Yusuf Mehta, **Douglas Cleary**, Ayman W. Ali (2017). Field cracking of performance of airfield rigid pavements, *Journal of Traffic and Transportation* (English Translation), Volume 4, Issue 4, August 2017, Pages 380-387, <https://doi.org/10.1016/j.jtte.2017.05.010>
7. Redles, T. A.; Ali, A. W.; Mehta, Y. A.; Cleary, D. (2016), Estimating fatigue endurance limits of flexible airfield pavements, *International Journal of Pavement Engineering*, 19(6), 534-542. <http://dx.doi.org/10.1080/10298436.2016.1176168>
8. **Douglas B. Cleary**, William T. Riddell, Nicolette Camishion, Patrick Downey, Sean Marko, Graham Neville, Matthew Oostdyk, and Thomas Panaro (2016). Steel Connections with Fiber-Reinforced Resin Thermal Barrier Filler Plates under Service Loading, *J. Struct. Eng.* 04016095, [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0001576](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001576)
9. Cunliffe, Charles; Mehta, Yusuf; **Cleary, Douglas**; Ali, Ahman; and Redles, Thomas (2016). "Impact of Dynamic Loading on Backcalculated Stiffness of Rigid Airfield Pavements," *International Journal of Pavement Engineering*, 17(6) pp 489-502; DOI:10.1080/10298436.2014.993395.
10. Matthew Oostdyk*, Matt Polhemus*, Andreas Gabrielsen*, **Douglas B. Cleary**, and William T. Riddell, (2015) Time Dependent Behavior of a FRR Thermal Break Pad under Compressive Loads, *Structures*, Volume 2, June 2015, pages 44 – 49. <http://dx.doi.org/10.1016/j.istruc.2015.01.002>.

11. *Reuther, D., *Baker, I., *Yetka, A., **Cleary, D.**, and Riddell, W. (2014). "Relaxation of ASTM A325 Bolted Assemblies." *J. Struct. Eng.*, 140(9), 04014060.
12. Cunliffe, Charles T.; Joshi, Akshay P.; Mehta, Yusuf; **Cleary, Douglas B.** (2014). "A Study to Determine the Impact of Cracking on Load Transfer Efficiency of Rigid Airfield Pavements," *Journal of Testing and Evaluation*, ASTM International, Vol. 42, No. 2, doi:10.1520/JTE20130042.
13. Joshi, A., Mehta, Y., **Cleary, D.**, Cunliffe, C., and *Henry, S (2012). "Load Transfer Efficiency of Rigid Airfield Pavement" *Transportation Research Record*, n 2300, p 68-74, January 12, 2012.
14. Joint ACI-ASCE Committee 408 (2012). *ACI 408.2R-12 Report on Bond of Steel Reinforcing Bars Under Cyclic Loads*. (One of four lead authors for this committee document), American Concrete Institute, 35 pages, 2012.
15. Joshi, A., Mehta, Y., and **Cleary, D.** (2012). "Effect of Pavement Damping and Aircraft Speed on Stress-Based Load Transfer Efficiency", *Transportation Research Record*, n 2300, p 75-82, January, 2012.
16. **Cleary, Douglas B.**; Riddell, William T.; and Lacke, Christopher J. (2012). "Effect of Washer Placement on Performance of Direct Tension Indicators with Curved Protrusions," *Engineering Journal*, AISC, 49(2):55-63.
17. Wadkar, A., Mehta, Y., **Cleary, D.**, Guo, E., *Musumeci, L., *Zapata, A., *Kettleson, W., (2011) "Load Transfer Efficiency of Rigid Airport Pavement Joints Based On Stresses and Deflections," *J. Materials in Civ. Eng.* 23(8), 1171-1180.
18. **Cleary, Douglas**; Riddell, William; and Hartman, Harriet (2010). "Analyzing Applicant Data for a Public, Predominantly Undergraduate Engineering Program to Gain Insight into Diversifying Recruitment," *Journal of Women and Minorities in Science and Engineering*, 16(3):193 – 214.
19. Everett, J., M. Cinaglia, **D. Cleary**, K. Jahan, J. Orlins, B. Sukumaran, Y. Mehta (2006) "Garden City: A Distributed Sharing Community", *World Transactions on Engineering and Technology Education*, 5(3):497-500.
20. Everett, J., K. Jahan, L. Head, J. Orlins, **D. Cleary**, and B. Sukumaran (2005), "Field Experiences in Engineering Courses," *World Transactions on Engineering and Technology Education*, 4(2):269-272.
21. Newell, J. A. and **Cleary, D. B.** (2004), "Using an Undergraduate Materials Research Project to Foster Multidisciplinary Teaming Skills," *Journal of SMET Education*, 5:18-23.
22. **Cleary, D. B.**, Newell, J. A., *Cassino, C. D., *Tortorice, R., and *Tyres, B. W. (2003). "Effect of Elevated Temperatures on a Fiber Composite used to Strengthen Concrete Columns," *Journal of Reinforced Plastics and Composites*, 22(10):881-896.
23. **Cleary, D.** and Sun, C. C., (2003). "A Course in Professional Practice Issues," *ASCE Journal of Professional Issues in Engineering Education and Practice*, 129(1):52-57.
24. Ciocco, M., Neyhart, J., Mandayam, S., Jahan, K., and **Cleary, D.** (2002). "Ultrasonic Imaging of Defects in Concrete Pipelines," *Review of Progress in Quantitative Nondestructive Evaluation*, Vol. 22.
25. Mandayam, S., Jahan, K. and **Cleary, D.** (2001). "Ultrasound Inspection of Wastewater Concrete Pipelines – Signal Processing and Defect Characterization," *Review of Progress in Quantitative Nondestructive Evaluation*, Vol 20, No. 2, 1210-1217.
26. McGormley, J. A., **Cleary, D. B.**, and Ramirez, J. A. (1996). "The Performance of Epoxy-Coated Shear Reinforcement," *ACI Structural Journal*, 93(5):531-537.
27. Hasan, H. O., **Cleary, D. B.**, and Ramirez, J. A. (1996). "Performance of Concrete Bridge Decks and Slabs Reinforced with Epoxy-Coated Steel," *ACI Structural Journal*, 93(4):397-403.
28. Hasan, H. O., **Cleary, D. B.**, and Ramirez, J. A. (1995), "Field Evaluation of Concrete Bridge Decks Reinforced with Epoxy-Coated Steel in Indiana," *Transportation Research Record*, No. 1476.
29. **Cleary, D. B.** and Ramirez, J. A. (1993). "Epoxy-Coated Reinforcement Under Repeated Loading," *ACI Structural Journal*, 90(4):451-458.

30. **Cleary, D. B.** and Ramirez, J. A. (1991). "Bond Strength of Epoxy-Coated Reinforcement," *ACI Materials Journal*, 88(2):146-149.

*indicates undergraduate author

Trade Journal Article

1. Hasan, Hendy O., Ramirez, Julio A., and **Cleary, Douglas B.** (1995). "Indiana Evaluates Epoxy-Coated Steel Reinforcement," *Better Roads*, 65(5).

Conference papers.

1. William T. Riddell, Douglas B. Cleary, Gilson R. Lomboy, Shahriar Abubakr, Benjamin E. Watts, Danielle E. Kennedy, Brian Berry, Amelia Chan, Nicholas Giagunto, Joseph Goodberlet, Maximilian Husar, Joseph Kayal, Christopher McCormick. Cold Temperature Effects on Reinforced Concrete Structural Behavior. CSCE 2022 Annual Conference, Whistler, British Columbia, May 25-28, 2022 (proceedings to follow in a year).
2. W.T. Riddell, D.B. Cleary, G.R. Lomboy, S. Abubakri, D. Kennedy, and B. Watts, Reinforcing Materials at Cold Temperatures, The 2021 World Congress on Advances in Structural Engineering and Mechanics (ASEM21) GECE, Seoul, Korea, August 23-26, 2021
3. Seth Wagner, Gabrielle Wickizer, Douglas Cleary, Gilson Lomboy, Danielle Kennedy, Benjamin Watts, Use of coarse recycled concrete aggregate in ternary blended portland cement concrete, Developments in Concrete Materials Research, January 13, 2020, Transportation Research Board Annual Meeting.
4. S. Wagner, D. Cleary, G. Lomboy, D. Kennedy, P. Bly, W. Lein, G. Wickizier, L. Butler, G. Aiello, Optimization of Ternary Blended Cementitious Binders by Calorimetry and Compressive Strength, 2019 TRB Annual Meeting, Washington DC, January 2019
5. Mehta, Yusuf; Cleary, Douglas; Ali, Ayman W. (2016). Field cracking performance of airfield rigid pavements, 8th International Conference on Maintenance and Rehabilitation of Pavements, MAIREPAV 2016, p 222-231, 2016.
6. Y. Mehta; F. Blotta; D. Cleary; and A. Ali (2015). Mechanical Responses of Dowel Joints Using 3D Finite Element Analysis for Different Airplane Configurations, *Proceedings: Airfield and Highway Pavements 2015: Innovative and Cost-Effective Pavements for a Sustainable Future*, June 7-10, 2015, <http://dx.doi.org/10.1061/9780784479216.066>.
7. *Redles, Thomas A.; Ali, Ayman W.; Mehta, Yusuf A., and **Cleary, Douglas** (2015). An Approach to Estimate Fatigue Endurance Limits of Flexible Airfield Pavements Using National Airport Pavement Test Facility Testing Results, 2015 Transportation Board Annual Meeting, January 11 – 15, 2015.
8. *Blotta, Felipe; Mehta, Yusuf; **Cleary, Douglas**; **Cunliffe, Charles; and Joshi, Akshay (2013) "Evaluating the Performance of Doweled and Isolation Joints at National Airport Pavement Testing Facility" 2013 Transportation Board Annual Meeting, January 13-17, 2013.
9. *Cunliffe, Charles; Mehta, Yusuf A.; **Cleary, Douglas**; and Joshi, Akshay (2013). "Impact of Cracking on Load Transfer Efficiency of Rigid Airfield Pavements" 2013 Transportation Board Annual Meeting, January 13-17, 2013.
10. **Wadkar, A., Mehta, Y., **Cleary, D.**, Guo, E., *Musumeci, L., *Zapata, A., and *Kettleson, W. (2011), "Effect of Aircraft Gear Positions and Gear Configurations on Load Transfer Efficiency of Airfield Rigid Pavement Joints" *Geotechnical Special Publication* (213 GSP) , pp. 40-48.

11. **Wadkar, A., *Kettleson, W., Mehta, Y. and **Cleary, D.** (2011). "Analysis of Full Scale Test Data from National Airport Pavement Test Facility (NAPTF) to Determine Impact of Load Transfer Efficiency on Pavement". Accepted for Presentation and Publication at the Transportation Research Board, January 2011.
12. **Wadkar, A., Mehta, Y., Guo, E., **Cleary, D.**, *Norton, A, and *Tomlinson, C. (2010). "Load Transfer Efficiencies of Rigid Airfield Pavement Joints Based on Stresses and Deflections". *TRB 89th Annual Meeting Compendium of Papers DVD*, National Research Council, Washington DC. Jan 2010.
13. **Wadkar, A., *Schwandt, S., **Cleary, D.**, and Mehta, Y. "Analysis of cracking pattern in understanding of rigid pavement behaviour utilizing mechanistic modelling and full scale test data", *Proceedings of the Sixth International Conference on Maintenance of Pavements and Technology Control*, Torino, Italy., 2009.
14. **Cleary, Douglas B.**; Riddell, William; Hartman, H. (2008). "Analysis of Applicant Data to Improve Recruitment of Female and Underrepresented Engineering Students," *Proceedings of the 2008 American Society for Engineering Education Annual Conference and Exposition, (Best Paper Award – Women in Engineering Division)*.
15. **Cleary, Douglas B.** (2006). "Enhancing a Reinforced Concrete Design Course by Linking Theory and Physical Testing," *Proceedings of the 2006 American Society for Engineering Education Annual Conference and Exposition*, June 2006, Chicago, IL.
16. W.T. Riddell, P.M. Jansson, V. Anepete, **D. Cleary** (2005) "Undergraduate Forensic Investigation of Phase to Ground High Voltage Faults on Electrified Railways," ASEE 2005 St Lawrence Section Conference, April 8-9 2005, Binghamton, NY.
17. Everett, J.; Cinaglia, M.; **Cleary, D.**; Jahan, K.; Orlins, J.; Sukumaran, B.; Mehta, Y.; Gross, M. (2004), "Garden City – Design Throughout the Curriculum", *Proceedings of the 2004 American Society for Engineering Education Annual Conference & Exposition*, June 2004, Salt Lake City, Utah.
18. Cleary, D., Kadlowec, J., Newell, J. and von Lockette, P. (2003) "Incorporation of Hands-on Learning into the Materials Science Curriculum." *Proceedings of the American Society for Engineering Education Conference*, Nashville, TN.
19. Kadlowec, J.; Brown, F.; Chaubal, A.; Plitz, J.; Resciniti, M.; von Lockette, P.; Constans, E.; Sukumaran, B.; **Cleary, D.** (2003). "Combining Laboratory Innovation and a Design Experience into Tools for Mechanics", *Proceedings of the 2003 American Society for Engineering Education Annual Conference & Exposition*, June 2003, Nashville, TN.
20. **Cleary, D. B.**, "Bringing Constructability Issues to Design Courses," *Proceedings of the 2002 ASEE Annual Conference & Exposition*, June 2002, Montreal, Quebec, American Society for Engineering Education.
21. Kadlowec, J., Von Lockette, P., Constans, E., Sukumaran, B. and **Cleary, D.** (2002), "Visual Beams: Tools for Statics and Solid Mechanics," *Proceeding of the Frontiers in Education Conference*, Boston, MA.
22. Pearle, K. , Cleary, D., Constans, E., Dainton, G., Farrell, S., Harvey, R. Head, L., Hollar, K., Hutto, D., Jahan, K., Johnson, C., Kadlowec, J., Orlins, J., Pietrucha, B., and von Lockette, P. (2002). "Using Your Brain to Build Teams that Work: A Study of the Freshman and Sophomore Engineering Clinics at Rowan University." *Proceedings of the American Society for Engineering Education Conference, Educational Research and Methods Division*, Montreal, QC.
23. Kadlowec, J., Von Lockette, P., Constans, E., Sukumaran, B., and **Cleary, D.** (2002), "Hands-on Learning Tools for Engineering Mechanics," *Proceedings of the 2002 ASEE Annual Conference & Exposition*, June 2002, Montreal, Quebec, American Society for Engineering Education.
24. **Cleary, D. B.** and Jahan, K., "Revising A Civil And Environmental Engineering Capstone Design Course," *Proceedings of the 2001 ASEE Annual Conference & Exposition*, June 24 – 27, 2001, Albuquerque, NM, American Society for Engineering Education.
25. **Cleary, D. B.**, "Deriving Beam Bending Principles Through Experimentation In A Freshman Engineering Lab," 2001 ASEE Mid-Atlantic Regional Conference, Glassboro, NJ.

26. Jahan, K., **Cleary, D. B.**, and Mandayam, S., "Multidisciplinary Research Using Nondestructive Evaluation," Proceedings of the 2001 ASEE Annual Conference & Exposition, June 24 – 27, 2001, Albuquerque, NM, American Society for Engineering Education.
27. Sun, C., Dusseau, R., **Cleary, D.**, Sukumaran, B., and Gabauer, D., "Open-Ended Projects for Graduate School-Bound Undergraduate Students in Civil Engineering," Proceedings of the 2001 ASEE Annual Conference & Exposition, June 24 – 27, 2001, Albuquerque, NM, American Society for Engineering Education.
28. Marchese, A., Constans, E., Dahm, K., Hollar, K., Hutto, D., Johnson, F., Sun, C., von Lockette, P., Kadlowec, J., **Cleary, D.**, Sukumaran, B., "The Sophomore Engineering Clinic I: Integrating Statics, Solid Mechanics and Product Development in a Sophomore Level Design Course," Proceedings of the 2001 ASEE Annual Conference & Exposition, June 24 – 27, 2001, Albuquerque, NM, American Society for Engineering Education.
29. Everett, J. W., Dusseau, R., **Cleary, D.**, Jahan, K., Orlins, J., Sukumaran, B., Sun, C., "A Civil Engineering Program Developed in the Age of ABET 2000," Proceedings of the 2001 ASEE Annual Conference & Exposition, June 24 – 27, 2001, Albuquerque, NM, American Society for Engineering Education.
30. Mandayam, S., Jahan, K, and **Cleary, D. B.**, "Ultrasonic Inspection of Wastewater Concrete Pipelines – Signal Processing and Defect Characterization," 27th Annual Review of Progress in Quantitative Nondestructive Evaluation (QNDE), Ames, Iowa, July 16 – 21, 2000.
31. Mandayam, S., Jahan, K, and **Cleary, D. B.**, "Ultrasonic Based Defect Characterization In Wastewater Concrete Pipelines Using Invariance Transformation Techniques," WEFTEC 2000, 73rd Annual WEF Conference and Exposition, Anaheim, CA, October 14 - 18, 2000.
32. **Cleary, D. B.**, Dusseau, R. A., Jahan, K., Everett, J., and Sukumaran, B., "Addressing the Professional Practice Criteria of ABET 2000," ASEE Mid-Atlantic Regional Fall Meeting, Harrisburg, PA, November 6, 1999.
33. **Cleary, D. B.**, Hookham, C. H., and Waller, J. W., "Development of a Miter Gate Reliability Model," 7th ASCE Conference on Probabilistic and Deterministic Mechanics, Worcester, MA, 1996.
34. **Cleary, D. B.**, Hasan, H., and Ramirez, J. A., "Bond of Epoxy-Coated Reinforcement Under Repeated and Static Loading," International Conference on Bond in Concrete -From Research to Practice, Riga, Latvia, October 15-17, 1992.
35. **Cleary, D. B.** and Ramirez, J. A., "Bond of Epoxy-Coated Reinforcement Under Repeated Loading," Structures Congress '91 Compact Papers, Ninth Structures Congress, Indianapolis, Indiana, American Society of Civil Engineers, 1991, pp. 697-700.

*indicates undergraduate author

Conference Presentations without a Proceedings

1. **Cleary, D. B.**, and Ramirez, J. A., "Bond of Epoxy-Coated Reinforcement Under Repeated Loading," Open Paper Session, American Concrete Institute Spring Convention, Boston, Mass., March 1991.
2. **Cleary, D. B.**, and Ramirez, J. A., "Bond of Epoxy-Coated Reinforcement Under Repeated Loading," Research-in-Progress, American Concrete Institute Fall Convention, San Diego, California, October 1989.

Invited Presentations

1. *Opportunities and Barriers to Using Recycled Concrete Aggregates in PCC – a New Jersey Perspective.* **Douglas B. Cleary**, Presented at Northeast States Materials Engineers Association conference, Philadelphia, PA, October 24, 2012.

2. *Study of Long Term Relaxation of Bolt Assemblies with Direct Tension Indicators*, William Riddell, **Douglas Cleary**, Presented to ASTM Committee F16 on Fasteners at Fall 2011 Committee Week, Tampa, FL, November 2011.

Selected Technical Reports

1. Long-term performance of sustainable pavements using ternary blended concrete with recycled aggregates, GR Lomboy, DB Cleary, SM Wagner, YA Mehta, DE Kennedy, BE Watts, ..., Cold Regions Research and Engineering Laboratory (US)
2. **Douglas B. Cleary** and William T. Riddell, *Comparison Of Structural Bolting Assemblies Installed By The Turn-Of-Nut And Direct Tension Indicator Methods And Their Respective Reserve Ductility*, report to TurnaSure, August, 2018.
3. **Douglas B. Cleary** and William T. Riddell, *Tests Of 10.9 System Hv Assemblies With And Without The Presence Of A Bolt Face Washer (Hb)*, report to TurnaSure, August 2017.
4. **Douglas B. Cleary** and William T. Riddell, *Behavior of Armatherm FRR Thermal Break Material in Moment Connections*, report to Armadillo Noise and Vibration Control, August 2015.
5. **Douglas B. Cleary** and William T. Riddell, *Armatherm Thermal Barrier Plates in Shear Connection*, report to Armadillo Noise and Vibration Control, June 2015.
6. **Douglas B. Cleary** and William T. Riddell, *Compression Testing of Armatherm Barrier*, report to Armadillo Noise and Vibration Control, March 2014.
7. **Douglas B. Cleary**, *Recycled Concrete Aggregate in Portland Cement Concrete: Final Report*, for New Jersey Department of Transportation, January 2013.
8. **Douglas B. Cleary** and William T. Riddell, *Study of Long-Term Relaxation of Structural Bolt Assemblies with Direct Tension Indicators*, report to Turnasure LLC, October, 2011.
9. **Douglas B. Cleary** and William T. Riddell, *Load-Rotation Tests of M24x90 H8.8 Galvanized Structural Bolt Assemblies with DTIs*, report to Turnasure LLC, October, 2010.
10. **Douglas B. Cleary** and William T. Riddell, *Load-Rotation Tests of M24x90 H10.9 Galvanized Structural Bolt Assemblies with DTIs*, report to Turnasure LLC, October, 2010.
11. **Douglas B. Cleary** and William T. Riddell, *Tests of Tension Control Bolts With Varied Thread Condition*, report to Turnasure LLC, February, 2010.
12. **Douglas B. Cleary** and William T. Riddell, *Effect of Washer Placement on Performance of Direct Tension Indicators*, A Study Prepared for TurnaSure, LLC, July 23, 2009
13. Dusseau, Ralph Alan; **Cleary, Douglas B.**; Sukumaran, Beena; Ramanchandran, Ravi; Polikar, Robi, "A Bridge to the 21st Century: A Strategic Engineering Partnership Between DRPA and Rowan University," Quarterly Report submitted to DRPA, four per year September 2000 through October 2002.
14. **Cleary, Douglas B.**; Laicovsky, Jim; Magill, Matt; Odud, Claire; Rolf, Eric and Weaver, Joe, "Communicating Constructibility," submitted to Construction Industry Advancement Program, December 2001.
15. **Cleary, Douglas B.**; Laicovsky, Jim; Magill, Matt; Ferraris, Jill; Michiels, Joe; and Weaver, Joe, "Communicating Constructibility," submitted to Construction Industry Advancement Program, May 2002.
16. **Cleary, Douglas B.**; Tortorice, Rosie; Gawrysiak, Joseph; Puterbaugh, Jeffrey; Gamba, Stephen; Hare, Andrea;

Whalen, Kenneth, "Application of Monte Carlo Analysis Techniques to Design and Construction Cost Proposals," submitted to Construction Industry Advancement Program, December 2000.

GRANTS/CONTRACTS/PROJECTS

1. NJDOT, Innovative Techniques and Materials for Preventing Concrete Shrinkage Cracking, PI: Lomboy, Co-PI Cleary, Zhu, Kawashima, Wei, 30 months, \$299,597. Start date July 2019.
2. CRREL, "Cold Weather Reinforced Concrete for Structural Applications", PI is Lomboy; Cleary and Riddell are Co-PI, Sept 2018 to August 2020, \$299,561.
3. "Classification and Production of Recycled Concrete Aggregates Based on Concrete Performance", Gilson Lomboy, PI and Douglas Cleary Co-PI, Department of Defense (CRREL), June 2019 to May 2021, \$380,000.
4. "Evaluation of Precast Concrete Pavement Systems and Cast In-Place, , for NJDOT, \$60,000, **Co-PI**.
5. "Development of Ternary Blend Mixes for Recycled Concrete Aggregate", September 1, 2017 to August 31, 2019. This project is a component of "Development of Innovative Materials and Methods to Solve United States Department of Defense (DoD) Horizontal Infrastructure Challenges in Cold Regions" for which Yusuf Mehta is the PI. The overall project is \$1.26 million with this specific piece \$159,955. Gilson Lomboy and Douglas Cleary are **Co-Pi** for the Recycled Concrete Aggregate portion.
6. "Bridge Support Program,," May 15, 2017 to May 14, 2018 (with additional award expected yearly for three years), subaward to Rutgers, The State University of New Jersey, for NJDOT, \$45,000 to \$50,000 per year, **Rowan PI**.
7. "Performance of DTIs with and without bolt face washers," August 1 to September 30, 2017, Turnasure, \$4864 +\$600 of in-kind support from client, **Co-PI**.
8. "Overtightened Connections with and without DTIs," September 2016 to July 2017, Turnasure, \$3,300 +\$5000 of in-kind support from client, **PI**.
9. "Shear and Moment-Rotation Tests of Armatherm Thermal Barrier," April 1, 2014 – January 31, 2015, Armadillo Noise and Vibration Control, \$19,960, **PI**.
10. "Evaluation of Creep in Armatherm Thermal Barrier," December 2013 – April 2014, Armadillo Noise and Vibration Control, \$3765, **PI**.
11. "Development of a Graduate STEM Education Curriculum," June 2013 – December 2016, Woodrow Wilson Foundation, \$600,000, **senior personnel**.
12. "Slip Resistance of Wet Floors to Barefoot Traffic," Moore Engineering, June 2013 – December 2013, \$13,785. **PI**.
13. "Relaxation of Bolted Assemblies with Direct Tension Indicators," TurnaSure, LLC., August 2011 – June 2012, \$12,000. **PI**
14. "Recycled Concrete Aggregate in Portland Cement Concrete", NJDOT, July 2009 through September 2012, \$220,000. **PI**
15. "Evaluate the Impact of Concrete Material Properties, Joint Type, and Support Condition on Airport Pavement Design", Federal Aviation Administration, September 2010 – August 2013, \$147,000. **Co-PI**.
16. "Analysis of the model for evaluating joint load transfer efficiency using NAPTF data", Federal Aviation Administration, September 2009 – August 2010, \$68,000. **Co-PI**.
17. "Structural Analysis for Solar Array", New Jersey Department of Military and Veterans Affairs, January through July 2009, \$50,000. **Co-PI**
18. "Laboratory Testing of Direct Tension Indicators", May 1 through June 15, 2009, Turnasure, \$10,000. **PI**
19. "Historic American Building Survey for Hollybush" 2009 and 2010, internal. **PI**
20. "Evaluation of Properties of Self-Consolidating Concrete", internal. **PI**

21. "Analysis of Applicant Data for College of Engineering," Engineering Information Foundation, July 2007, \$7100. **PI**
22. "Design of Bridges and Site Planning for Police Athletic League of Egg Harbor Township", Police Athletic League of Egg Harbor Township, September 2005, \$10,000. **PI**
23. "Compatibility of Highway Railroad Crossing Gates with Overhead Catenary System High Voltage Power For Trains", January 2005, \$265,000. **Co-PI**
24. "Hands-on Learning in an Interdisciplinary Material Science Curriculum," National Science Foundation, June 2002, \$68,920. **PI**
25. "Evaluation of Effects of Fiber Reinforcement on Rebar Anchorage," 2002, (pilot study). **PI**
26. "Communicating Constructibility: A Tool for Dissemination of Construction Information to Engineering Students," CIAP/BCA, September 2001, \$10,000. **PI**
27. "Bridge Vibration Analysis," DRPA, 2000, \$999,931. **Co-PI**
28. "Visual Beams for Enhanced Learning in Statics and Solid Mechanics," National Science Foundation, 2000, \$92,697. **Co-PI**
29. "Ultrasonic-Based Defect Characterization in Wastewater Concrete Pipelines Using Invariance Transformation Techniques," WERF, 1999, \$70,210. **Co-PI**
30. "Use of Probability Theory in Construction and Design-Build Cost Proposals," CIAP, 1999, \$5,000. **PI**
31. "Effect of Elevated Temperatures on Fiber Wrap Reinforcing," Fyfe Company, 1999, \$1000, (pilot study). **Co-PI**
32. "Garden City: Implementing Sooner City at Rowan University," NSF, 1998, \$61,202. **Co-PI**

GRADUATE STUDENT ADVISING

Harshdutta Pandya (Ph.D. expected ?) – committee member
 Seth Wagner (M.S. expected May 2019) – committee member
 Samuel Moeller (M.S. awarded January 2017) – thesis advisor
 Sean Marko (M.S. expected December 2018) – thesis advisor
 Craig Kumpel (M.S. awarded, 2014) – committee member
 Akshay Joshi (M.S. awarded, May 2013) – committee member
 Charles Cunliffe (M.S. awarded August 2011) – committee member
 Jeff Owad (M.S., May 2011) – project adviser
 Ashish Wadkar (M.S. awarded, August 2010) – committee member

External Committee member for – Michael Mota (Ph.D., Drexel University); Xiaobin Lu, NJIT)

CONSULTING

2014 – present	various designs of connections with thermal barrier for Armadillo LLC
1992 – 1993	shoreline erosion problems for SEACO, Inc.
1990	instrumentation of liquid nitrogen tanker trucks for Air Products to evaluate cracking problems.

PROFESSIONAL REGISTRATION

Registered Professional Engineer, Indiana (inactive)
 Registered Professional Engineer, New Jersey

INSTITUTIONAL AND PROFESSIONAL SERVICE

Joint ACI-ASCE Committee 408, Development and Splicing of Deformed Bars
ACI Committee S802, Teaching Methods and Educational Materials
Reviewer
ACI Structures Journal
ACI Materials Journal
ASCE Journal of Structural Engineering
ASCE Journal of Professional Issues in Engineering Education and Practice
ASCE Journal of Transportation Engineering
ASCE Journal of Performance of Constructed Facilities
Canadian Journal of Civil Engineering
ASCE Student Chapter Faculty Advisor (1998 – 2003, 2005 - present)
University Senate Recruitment, Admission, and Retention (2017 – 2020); chair 2019-2020
University Senate Academic Policies and Procedures (2012 – 2017; 2019 to present)
University Senate Tenure and Recontracting Committee (2011 – 2012)
University STEM Coalition (2011 – present)
University Senator (2007 – 2008 (department rep), 2010-2011 (Senator-at-Large), 2012-2013 (Senator-at-Large), 2016-2018 (department rep))
University Senate Curriculum Committee (2003 to 2011)
University Master Planning Committee (2006 to 2009)
University Senate Learning Outcomes Committee (2001 to 2002)
University Senate Budget Committee (1998 to 2000)
Provost's Committee to Explore Viability of an Architecture Program (2008)
Provost's Ad-Hoc Committee for Assessment of the General Education Curriculum (2002 to 2003)
College of Engineering Task Force for General Engineering Degree (2013 – present)
College of Engineering New Building Planning Committee (2013 – present)
College of Engineering Curriculum Committee (2001 to 2003, 2006 (chair), 2008 - 2011 (Chair))
College of Engineering Assessment Committee and Civil Engineering ABET Coordinator (2004 to 2007, 2011 - 2014)
College of Engineering Planning Committee (2000 to 2003)
College of Engineering Laboratory Committee (1998 to 2000)
College of Engineering Safety Subcommittee (1998 to 2000)
University A/E Selection Committee (2001)
Order of the Engineer Officiant (2005 – 2013)
Civil Engineering Faculty Search Committee (multiple times)