

Paul L. Crovella, P.E., Ph.D.

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Education

- 2016 Ph.D., Environmental and Resource Engineering, State University of New York College of Environmental Science and Forestry
- 1990 M. Eng., Agricultural Engineering, Cornell University
- 1989 B. S., Agricultural Engineering, Cornell University
- 1985-88 Completed 128 credits in Civil Engineering and Architecture at the University of Buffalo

Academic Positions

- 2018 – Present Assistant Professor, Construction Management, State University of New York College of Environmental Science and Forestry
- 2018 Adjunct Associate Professor - School of Civil and Environmental Engineering, Cornell University
- 2008-2018 Instructor, Construction Management, State University of New York College of Environmental Science and Forestry
- 2001- 2008 Professor and Department Chair, Agricultural Engineering Technology, Morrisville State College
- 2000 Associate Professor, Agricultural Engineering Technology, Morrisville State College
- 1992-1998 Assistant Professor in the Department of Agricultural and Wood Engineering Technology at the State University of New York – Morrisville (later Morrisville State College)
- 1990-91 Assistant Professor, Department of Agricultural Engineering, University of Puerto Rico, Mayagüez Campus
- 1989-90 Graduate Teaching Assistant, Department of Physics, Cornell University

Non-Academic Positions

2018 (summer) BIM project support specialist – C&S Cos.

1999 Technical Consultant- Quality Control for Aracruz Produto de Madeira SA in Posto da Mata, Brazil

1996-99 Technical Consultant to US-AID, several NGOs and various universities for Environmental Pollution Prevention training based on ISO 14000

Volunteer

2007 -2012 Planning board member – Town of Madison (NY)

2006-2012 Habitat for Humanity board member – Madison County (NY)

2013, 2015 Construction Manager, Heromakers – week long mission trips

Technical Qualifications

Professional Engineer - State of New York - No 073940-1

LEED AP, BD+C

DBIA Associate

OSHA 30 Hr. Certification

ACI Concrete Flatwork Technician

Bilingual - English and Spanish

Working knowledge of Brazilian Portuguese

Professional Societies

Editorial Board – Mass Timber Construction Journal

Society of Building Science Educators

Honors and Awards

2019 – Faculty Technical lead for First Place team in the Multifamily category of the U.S. Department of Energy Solar Decathlon Design Challenge.

2018 – Named Syracuse Center of Excellence Faculty Fellow

2015 - SUNY ESF College Foundation Award for Exceptional Achievement in Teaching

2014 - Faculty lead for Grand Prize team in single family detached category at the DOE Race to Zero competition.

2005 Outstanding Advisor in School of Agriculture 2004-5 Student Government Award

1989 Merit-based Graduate Fellowship – Cornell University, College of Engineering

1988 National Science Foundation - Undergraduate Research Fellow - Summer 1988

Recent Grants

7/1/2019-6/30/2022 Crovella, P.L, A. Ackerman, S. Anagnost, T. Brown, R. Germain, R. Malmshemer, W. Smith, E. Vidon, and T. Volk. Mass Timber Construction – Discovery Challenge. State University of New York, 600,000.

8/1/18-6/30/19 Crovella, P. Advancing Sustainable Development of Cross Laminated Timber Construction Worldwide. Syracuse University, \$8,416.

7/1/2018-6/30/2020 Lichtenstein, M, Arnold, J, and Crovella, P Saving Energy on a SUNY Campus. New York State Energy Research and Development Authority \$65,356

1/1/2018 – 12/31/2020 Bremer, M., Crovella, P., and Kornhauser, R. Green Building LEED Certification by Student Experiential Learning. State University of New York Performance Improvement Fund, \$900,000. Co-PI share 300,000.

9/1/2017-3/31/2019 Volk,T., Crovella, P., and Lichtenstein, M. Energy Master Plan for SUNY-ESF. New York State Energy Research and Development Authority, \$109,136.

1/2014 – 6/2015 Crovella, PL (PI), and Germain, R.(Co-PI) Building the Foundation for the Cross Laminated Timber Construction Industry in New York State , New York State Energy Research and Development Authority. \$ 100,000

7/2013 – 6/2014 Crovella, PL (PI), and Kyanka,GH (Co-PI) Saving Historic Timber Structures through Non-destructive Evaluation of Critical Joinery, National Park Service, \$25,000

10/2011 Kelleher, M (PI), President’s Office; Crovella, PL (Co-PI), SCME; Daley, DJ (Co-PI), ERE; Volk, TA (Co-PI), FNRM and Fletcher, J (Co-PI) SUNY ESF Gateway Combined Heat and Power System , NYS Energy Research and Development Authority \$ 963,955

Recent Publications

Paul Crovella, William Smith, Jacek Bartczak, Experimental verification of shear analogy approach to predict bending stiffness for softwood and hardwood cross-laminated timber panels, *Construction and Building Materials*, Volume 229, 2019, 116895, ISSN 0950-0618, <https://doi.org/10.1016/j.conbuildmat.2019.116895> .

Tinner, M., P. Crovella, & P. Rosenbaum (2018) Perceived Importance of Wellness Features at a Cancer Center: Patient and Staff Perspectives. *Health Environments Research & Design Journal*, Vol 11, Issue 3, pp. 80 – 93. <https://doi.org/10.1177/1937586718758446>

Crovella, P. & Kyanka, G. (2017) A non-destructive method to determine the rotational

stiffness of timber frame connections., J Civil Struct Health Monit. <https://doi.org/10.1007/s13349-017-0247-2> November 2017, Volume 7, Issue 5, pp 627–635

Crovella, P.L. and G. H. Kyanka. 2016, Improving analysis of historic wooden structures through non-destructive testing of connections. Proceedings of the ASCE 2016 Construction Research Congress ,San Juan, Puerto Rico. 8 pp.

Crovella, P.L. and G.H. Kyanka 2013. Preserving timber structures with nondestructive evaluation of critical joinery. Proceedings of 18th International Nondestructive Testing and Evaluation Symposium. Madison, Wisconsin. 7pp.

Crovella, P. L. and G. H. Kyanka. 2011. Use of vibration techniques to determine the rotational stiffness of timber joints. Proceedings of the Structural Health Assessment for Timber Structures Conference. Lisbon, Portugal. 12pp.

Crovella, P.L. 2010. A Comparison of Techniques to Measure Commercial Building Infiltration Rates. IAQVEC 2010. Syracuse, NY. 8 pp.

Recent Presentations

Determination of lead dust fall rates during deconstruction of wood frame buildings in an urban region in the Northeastern United States. September 25, 2018. International Building Physics Conference 2018, Syracuse, NY.

An Analysis of Non-destructive Testing for Evaluating Timber Frame Connections. Forest Products Society 68th International Convention, August 10-14, 2015, Quebec City, Quebec.

Right-sizing Community Deconstruction Development – Co-presented at DECON 11 May, 2011, New Haven CT

Nature vs. Nurture – Defining the Characteristics of Deconstruction Lumber - Presented at Upstate Green Building Conference March, 2011 Syracuse, NY

More Refereed Publications

Crovella, Paul L., and K. G. Gebremedhin Analyses of Light Frame Wood Truss Tension Joint Stiffness Forest Products Journal, April 1990, 41-47.

Gebremedhin, Kifle G. and P. L. Crovella Load Distribution in Metal Plate Connectors of Tension Joints in Wood Trusses Transactions of the ASAE, Vol 34(1), 281-87.

Gebremedhin, K. G. and P. L. Crovella. 1990. Analysis of Light Frame Wood Truss Joints Using an Elastic Foundation Model. Proceedings: International Timber Engineering Conference. Tokyo, Japan. 709-15.

Non-refereed Publications

Crovella, P. L. and K. G. Gebremedhin. 1988. Improving Wood Truss Design by Optimizing Metal Plate Connectors. ASAE Paper no.88-45117. St. Joseph, MI. 19pp.

Popular Press

Featured in “Climate Changers” Professional Engineer Magazine, March/April 2020 National Society of Professional Engineers <https://www.nspe.org/resources/pe-magazine/march-2020/climate-changers>