

## PRASAD RANGARAJU, PhD, PE, FACI

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Professor	tel: (864) 656-1241
Department of Civil Engineering	fax: (864) 656-2670
School of Civil and Environmental Engineering and Earth Sciences	e-mail:prangar@clemson.edu
Clemson University, Clemson SC 29634	www.cecas.clemson.edu/ce/prangar

### **Education and Training**

1991:	B.Tech	J.N.T. University, India	Civil Engr.
1993:	MS	Iowa State Univ.	Civil Engr.
1997:	PhD	Purdue University	Civil Engr.

### **Research and Professional Experience**

2015 – Present: Professor, Clemson University, Clemson, SC, USA  
2020 – 2020: Senior Faculty Fellow, Naval Facilities Engineering, EXWC, Port Hueneme, California  
2016 - 2016: Visiting Professor, IIT Madras, Chennai, India  
2007 – 2015: Associate Professor, Clemson University, Clemson, SC, USA  
2001 – 2007: Assistant Professor, Clemson University, Clemson, SC, USA  
1997 – 2001: Senior Research Engineer, Off. of Materials and Road Res., MNDOT, Maplewood, MN, USA

### **Honors & Awards**

1. Outstanding Faculty Mentoring Award, CECAS, Clemson University (2022)
2. Senior Summer Faculty Research Award, Office of Naval Research – NAVFAC (2020)
3. Fellow of American Concrete Institute, (2017)
4. Brij Mohan Lal Memorial Prize for the Best Paper published in the *Journal of the Institute of Engineers (India): Series A*, Vol. 95, No. 4, pp. 203-209, 2014, titled “Investigation on Flexure Test of Composite Beam of Repair Materials and Substrate Concrete for Durable Repair” (2017)
5. Clemson University Board of Trustees Faculty Excellence Award, Clemson University, (2007, 2012).
6. Certificate of Excellence in Research (Focus on Research), Clemson University Research Foundation, Clemson University, (2006).
7. Outstanding Achievement Award, Minnesota DOT, (2000) **Refereed Publications in Recent Past:**

Peerzada AB, Rangaraju P, Roberts J, Biehl A. (2022) Influence of External Vibration on the Gravitational Flow Characteristics of Cementitious Materials: A Perspective from Application in Additive Manufacturing. Transportation Research Record – Journal of Transportation Research Board, March 2022, <https://doi.org/10.1177/03611981221078572>

Daware, A., Peerzada, A.B., Naser, M.Z., Rangaraju, P.R., Putman, B., Examining the Behavior of Concrete Masonry Units under Fire and Post-fire Conditions, Journal of Fire and Materials, June, 2022 pp. 1-11. DOI: 10.1002/fam.3085

Shreshta, R., Kessler, H., Redmond, L. and Rangaraju, P.R. Behavior of Anchor Bolts in Concrete Masonry with Lightweight Grout, ACI Structural Journal, 21-512, DOI: 10.14359/51737233

Amer, O., Rashidian Dezfouli, H., Rangaraju, P. R. (2021). Effectiveness of Binary and Ternary Blended Cements of Class C Fly Ash and Ground Glass Fibers in Improving the Durability of Concrete. Journal of Sustainable Cement-Based Materials, 271(121549). <https://doi.org/10.1080/21650373.2021.1899085>

Rashidian-Dezfouli, H., Rangaraju, P. R. (2021). Study on the effect of selected parameters on the alkali silica reaction of aggregate in ground glass fiber and fly ash-based geopolymer mortars. Construction and Building Materials, 271. <https://doi.org/10.1016/j.conbuildmat.2020.121549>

Shreshta, R., Kessler, H., Redmond, L., Rangaraju, P. R. (2021). Anchor Bolt Performance in CMU Assemblies with Lightweight Grout, 14th Proceedings of Canadian Masonry Society, Calgary, Alberta: Canadian Masonry Society, April, 2021.

- Kaminsky, A., Krstic, M., Rangaraju, P., Tagnit-Hamou, A., Thomas, M. (2020). Ground-Glass Pozzolan for Use in Concrete. *ACI Concrete International*, 42(11), 24-32. <https://www.concrete.org/publications/internationalconcreteabstractsportal.aspx?m=details&ID=51729296>
- Rangaraju, P. R. (2020). ASTM C1866 / C1866M-20, Standard Specification for Ground-Glass Pozzolan for Use in Concrete. ASTM Standard Specifications ASTM C1866 (2020th ed., vol. 04.02). West Conshohocken, PA: ASTM. <https://compass.astm.org/download/C1866C1866M.14340.pdf>
- Konduru, H., Rangaraju, P. R., Amer, O. (2020). Reliability of Miniature Concrete Prism Test in Assessing AlkaliSilica Reactivity of Moderately Reactive Aggregates, *Transportation Research Record: Journal of the Transportation Research Board*. Transportation Research Record: Journal of the Transportation Research Board, 2674(4).
- Ding, L., Rangaraju, P. R., Poursae, A. (2019). Application of generalized regression neural network method for corrosion modeling of steel embedded in soil. *Soils and Foundations*, 59(2), 474--483.
- Amer, O., Rangaraju, P. R. (2019). Evaluation of Coal Ash as a Supplementary Cementitious Material for Application in Cement-Treated Base and Full-Depth Reclamation of Asphalt Pavements. St. Louis, MO: Proceedings of World of Coal Ash.
- Rashidian-Dezfouli, H., Rangaraju, P. R., Kothala, V. S. (2018). Influence of selected parameters on compressive strength of geopolymer produced from ground glass fiber. *Construction and Building Materials*, 162, 393405. <http://dx.doi.org/10.1016/j.conbuildmat.2017.09.166>
- Afshinnia, K., Rangaraju, P. R. (2016). Impact of combined use of ground glass powder and crushed glass aggregate on selected properties of Portland cement concrete. *Construction and Building Materials*, 117, 263-272. <http://dx.doi.org/10.1016/j.conbuildmat.2016.04.072>
- Li, Z. and Rangaraju, P.R. (2016), "Effect of Surface Roughness on the Bond Performance Between Ultra-High-Performance Concrete and Precast Concrete in Bridge Deck Connections", *Journal of Transportation Research Board*, No. 2577, pp. 88-96, Aug 2016.
- Li, Z. and Rangaraju, P.R. (2016), "Effect of Alkali Content of Cement on Properties of Ultra-High-Performance Concrete", *Journal of Construction and Building Materials*, Vol. 102, Part 1, January 2016, pp. 631-639.
- Li, Z. and Rangaraju, P.R. (2015)., "Influence of Silica Flour-Silica Fume Combination on the Properties of HighPerformance Cementitious Mixtures at Ambient Temperature Curing, *Journal of Construction and Building Materials*, Vol. 100,
- Li, Z., Harish, K.V. and Rangaraju, P.R. (2015) "Effect of Sand Content on the Properties of Self-Consolidating High-Performance Cementitious Mortar", *Transportation Research Record: The Journal of Transportation Research Board, Concrete Materials*, Vol. 2508, p. 10, 2015
- Jimma, B.E. and Rangaraju, P.R. (2015) "Chemical Admixtures Dose Optimization in Pervious Concrete Paste Selection - A Statistical Approach", *Journal of Construction and Building Materials*, Vol. 101, Part 1, December 2015, pp. 1047-1058. <http://dx.doi.org/10.1016/j.conbuildmat.2015.10.003> **Synergistic Activities:**
1. *Professional Community Service:*
  2. In terms of service to scientific and engineering community, I have been an active member in several technical committees of ACI, ASTM and TRB:
    - a. Member, ACI Committees 123 – Research; 221 – Aggregates; 232 – Fly Ash; 240 – Natural Pozzolans; 233 –Slag; 236 – Material Science of Concrete
    - b. Secretary, TRB Committee AFN30 – Durability of Concrete; Member TRB Committee AFN40 – Concrete Materials and Placement Techniques.
    - c. Member ASTM C1 and C9 Committees.
    - d. Served as technical panel member for research proposal evaluation for following agencies: NCHRP, FAA, NSF MRI and CMMI Review Panels, NEUP, AAAS
    - e. Reviewer for Journals including: ACI Materials, ACI Structures, Cement and Concrete Composites, ASCE Journal of Materials, ASTM Advances in Civil Engineering Materials, TRB Journal, and Several International Conferences.

- f. Organized and moderated technical sessions sponsored by ACI and TRB technical committees.