

VITAE: James T. Jenkins

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I. Education:

Ph. D., Mechanics, Johns Hopkins University, Baltimore, MD, November 1969
B. S., Mechanical Engineering, Northwestern University, Chicago, IL, June 1964

II. Academic Experience:

1972-Present	Cornell University
2008-Present	School of Civil and Environmental Engineering
1972-2008	Department of Theoretical and Applied Mechanics
2017-Present	Walter S. Carpenter, Jr. Professor of Engineering Emeritus
2001-2017	Walter S. Carpenter, Jr. Professor of Engineering
1984-2001	Professor
1977-1984	Associate Professor
1972-1977	Assistant Professor

III. Administration:

1991-2000	Chairman, Department of Theoretical and Applied Mechanics
2010-2013	Associate Director and Director of Undergraduate Pro- grams, School of Civil and Environmental Engineering
2013-2017	Director of Graduate Studies, Field of Civil and Environmental Engineering

IV. Visiting Positions (2011-Present):

December 2018	Visiting Professor, Department of Mechanical Engi- neering, IIT Kanpur, India
June 2017	National Institute of Higher Mathematics Fellow, De- partment of Structural Engineering and Architecture, Politecnico di Bari, Italy
Summer 2014	National Institute of Higher Mathematics Fellow, De- partment of Structural Engineering and Architecture, Politecnico di Bari, Italy
March 2014	MTS Fellow, Department of Civil and Environmental Engineering, University of Minnesota
Fall 2013	Organizer, Program on Fluid-Mediated Particle Transport in Geophysical Flows, Kavli Institute for Theoretical Physics, Santa Barbara, CA
Summer 2012	Visiting Professor, Department of Civil and Environ-

mental Engineering, University of Trento, Italy

V. Honors and Awards (2011-Present):

- Plenary Speaker, Powders and Grains 2017, Montpellier, France, July 2017
- Keynote Speaker, Plasticity 2016, Kona, Hawaii, January 2016
- Plenary Speaker, Max Planck Institute for Complex Systems Program on Two-Phase Geophysical Flows Dresden, March 2016
- Plenary Speaker, Engineering Mechanics Institute, Stanford University, June 2015
- MTS Fellow, Department of Civil and Environmental Engineering, University of Minnesota, March 2014
- Plenary Speaker, German Physical Society, Dresden, Germany, March 2011
- Plenary Speaker, THESIS-2011: Two-Phase Modeling for Sediment Dynamics, Paris, France, April 2011

VI. Professional Activities (2011-Present):

- Foreign Member, National Scientific Qualification Committee, Italy, 2012-Present
- Member, Engineering and Physical Sciences Peer Review College, United Kingdom, 2005-2015
- Member, Engineering Advisory Council, Wallace H. Coulter School of Engineering, Clarkson University, September 2009-2016
- Organizer, Fluid Mediated Particle Transport in Geophysical Flows, Kavli Institute of Theoretical Physics, Santa Barbara, CA, September 23 to December 20, 2013
- Secretary, Association pour l'Etude de la Micro-Mécanique des Milieux Granulaires, 2004-2013
- Member, International Scientific Committee, Powders and Grains 2012, Sydney, Australia July 2013
- Guest Editor, Advances in Water Resources, THESIS edition, May 2011-April 2012
- Member, International Scientific Committee THESIS-2011: Two-Phase Modeling for Sediment Dynamics, Paris, France, April 26-28, 2011
- Invited Participant, Non-equilibrium Dynamics in Astrophysics and Material Science, Yukawa Institute for Theoretical Physics, Kyoto, Japan, October, 2011
- Member, Editorial Board, Proceedings of the Royal Society, London, Series A 2005-2011

VII. Ten Relevant Publications:

1. "The incremental response of random aggregates of identical round particles" (with M.A. Koenders) *European Physical Journal E* 13, 113-123 (2004).

2. “Fluctuations and the effective moduli of an isotropic, random aggregate of identical, frictionless spheres” (with D. Johnson, L. LaRagione and H. Makse) *Journal of the Mechanics and Physics of Solids* 53, 197-225 (2005).
3. “A continuum theory for a random array of identical, elastic, frictional disks” (with I. Agnolin and L. LaRagione) *Mechanics of Materials* 38, 687-701 (2006).
4. “The initial response of an idealized granular material” (with L. LaRagione). *Proceedings of the Royal Society of London A* 463, 2079 (2006).
5. “Average particle rotation in a granular material” (with L. LaRagione) *Journal of the Mechanics and Physics of Solids* 57, 1449–1458 (2009).
6. “An analytical determination of microstructure and stresses in a dense, sheared, non-Brownian suspension” (with L. LaRagione) *Journal of Fluid Mechanics* 763, 218-236 (2015).
7. “Micromechanical prediction of localization in a granular material” (with L. LaRagione and V.C. Prantil) *Journal of the Mechanics and Physics of Solids* 83, 146-159 (2015).
8. “Bedforms produced on a particle bed by vertical oscillations of a plate” (with L. LaRagione, K. Laurant and G. Bewley) *Physical Review Letters* 123, 058501 (2019)
9. “Wave propagation in an unconsolidated granular material: a micro-mechanical approach.” (with L. LaRagione and G. Recchia) *Wave Motion* 99, 102653 (2020).
10. “A continuum description of dense suspensions based on micro-mechanics” (with L. LaRagione and R. Seto) *Journal of Fluid Mechanics* 912, A27 (2020).

