

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 Programs, 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 Engineering, IIT Kanpur, India
June 2017	National Institute of Higher Mathematics Fellow, Department of Structural Engineering and Architecture, Politecnico di Bari, Italy
Summer 2014	National Institute of Higher Mathematics Fellow, Department 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).

