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EDUCATION	<p>Brown University Providence, RI Ph.D. in Applied Mathematics May 2011</p> <ul style="list-style-type: none"> • Dissertation: <i>Some aspects of suspension flows: Stokes to turbulent flows</i> • Adviser: Dr. Martin R. Maxey <p>Sc.M. in Applied Mathematics May 2007</p> <p>Yonsei University Seoul, Korea Sc.M. in Mechanical Engineering February 2005</p> <ul style="list-style-type: none"> • Thesis: <i>Near-wall characteristics of stably stratified turbulent channel flow</i> • Adviser: Dr. Changhoon Lee <p>Sc.B. in Civil Engineering February 1999</p>	
AWARDS	<ul style="list-style-type: none"> • Travel Grant for 2012 European-U.S. Summer School on HPC Challenges 2012 • Sigma Xi Award for excellence in research 2011 • Dissertation Fellowship, Brown University 2011 • Outstanding Master Thesis in Fluid Engineering, KSME 2005 	
RESEARCH INTERESTS	Microhydrodynamics, Complex fluids, Turbulent physics, Cloud physics, Soft matter physics, Computational fluid dynamics, High performance computing	
RESEARCH EXPERIENCE	<p><i>Postdoctoral Fellow</i></p> <ul style="list-style-type: none"> • Lawrence Berkeley National Lab., Climate Sciences Department 2011 - Present <p><i>Graduate Researcher</i></p> <ul style="list-style-type: none"> • Brown University, Division of Applied Mathematics 2005 - 2011 • Yonsei University, Department of Mechanical Engineering 2002 - 2005 • Yonsei University, Department of Civil Engineering 2001 - 2002 	
TECHNICAL SKILLS	Fortran, C++, Parallel Computing, MATLAB, R	
PEER-REVIEWED JOURNAL PAPERS	<p>K. Yeo & M.R. Maxey, “Numerical simulations of concentrated suspensions of monodisperse particles in a Poiseuille flow,” <i>J. Fluid Mech.</i>, 682, 491 (2011). Top 10 most downloaded articles (August 2011)</p> <p>K. Yeo & M.R. Maxey, “Anomalous diffusion in wall-bounded suspensions of non-Brownian particles under steady shear,” <i>Europhys. Lett.</i>, 92, 24008 (2010)</p> <p>K. Yeo & M.R. Maxey, “Rheology and ordering transitions of non-Brownian suspensions in a confined shear flow: effects of external torques,” <i>Phys. Rev. E</i>, 81, 062501 (2010)</p>	

- K. Yeo** & M.R. Maxey, “Ordering transitions of non-Brownian suspensions in confined steady shear flow,” *Phys. Rev. E*, **81**, 051502 (2010). Selected as PRE Kaleidoscope (May 2010).
- K. Yeo** & M.R. Maxey, “Dynamics of concentrated suspensions of non-colloidal particles in Couette flow,” *J. Fluid Mech.*, **649**, 205 (2010)
- K. Yeo** & M.R. Maxey, “Simulation of concentrated suspensions using the force-coupling method,” *J. Comput. Phys.*, **229**, 2401 (2010)
- K. Yeo**, B.-G. Kim & C. Lee, “On the near-wall characteristics of acceleration in turbulence,” *J. Fluid Mech.*, **659**, 405 (2010)
- K. Yeo**, S. Dong, E. Climent & M.R. Maxey “Modulation of homogeneous turbulence seeded with finite size bubbles or particles,” *Int. J. Multiphase flow*, **36**, 221 (2010)
- K. Yeo**, B.-G. Kim & C. Lee, “Eulerian and Lagrangian statistics in stably stratified turbulent channel flows,” *J. Turbulence*, **10**, 17 (2009)
- J. Jung, **K. Yeo** & C. Lee, “Behavior of heavy particles in isotropic turbulence,” *Phys. Rev. E*, **77**, 016307 (2008)
- E. Climent, **K. Yeo**, M.R. Maxey & G.E. Karniadakis “Dynamic self-assembly of spinning particles,” *J. Fluid Eng.*, **129**, 379 (2007). Top 10 most downloaded articles (April 2007)
- A.M. Reynolds, **K. Yeo** & C. Lee, “Anisotropy of acceleration in turbulent flows,” *Phys. Rev. E*, **70**, 017302 (2004)
- C. Lee, **K. Yeo** & J.-I. Choi, “Intermittent nature of acceleration in near wall turbulence,” *Phys. Rev. Lett.*, **92**, 144502 (2004)
- J.-I. Choi, **K. Yeo** & C. Lee, “Lagrangian statistics in turbulent channel flow,” *Phys. Fluids*, **16**, 779 (2004)
- S.-U. Choi, H. Kang & **K. Yeo**, “Flow and sediment transport in emerging vegetated zone,” *Ecology Civil Eng.*, **6**, 87 (2003)
- IN PREPARATION **K. Yeo** & M.R. Maxey, “Force-coupling simulations of dense finite-inertia suspensions in a linear shear flow”
- K. Yeo** & D.M. Romps, “Lagrangian measurement of convective entrainment”
- CONFERENCE PRESENTATIONS **K. Yeo** & D.M. Romps, “Lagrangian analysis of convective entrainment,” AMS 30th Conference on Hurricanes and Tropical Meteorology, FL, 2012
- K. Yeo** & M.R. Maxey, “Concentrated suspensions in a homogeneous shear flow with finite fluid inertia,” APS DFD 64th Annual Meeting, MD, 2011
- M.R. Maxey & **K. Yeo**, “Flow modulation by finite size particles: From Stokes suspensions to turbulence,” 41st AIAA Fluid Dynamics Conference and Exhibit, HI, 2011
- K. Yeo** & M.R. Maxey, “Anomalous diffusion of non-colloidal suspensions in a Couette flow,” APS DFD 63rd Annual Meeting, CA, 2010
- K. Yeo** & M.R. Maxey, “Numerical simulations of concentrated, non-colloidal suspensions in Poiseuille flows,” Society of Rheology 82nd Annual Meeting, NM, 2010
- K. Yeo** & M.R. Maxey, “Order transition in non-colloidal Couette suspension flows: effects of external torques,” APS DFD 62nd Annual Meeting, MN, 2009

- K. Yeo** & M.R. Maxey, “Numerical simulation of concentrated suspensions of non-colloidal particles in Couette flow,” Society of Rheology 81st Annual Meeting, WI, 2009
- K. Yeo** & M.R. Maxey, “Dynamic self-assembly of non-colloidal particles in Couette flow,” Society of Rheology 81st Annual Meeting, WI, 2009
- L.-P. Wang, H. Gao, L.-S. Luo, Y. Peng, **K. Yeo** & M.R. Maxey, “Comparing particle-resolved simulation methods for moving particles in a viscous fluid,” APS DFD 61st Annual Meeting, TX, 2008
- J. Lim, **K. Yeo** & C. Lee, “On the modification of near-wall structures in stably stratified turbulence,” APS DFD 58th Annual Meeting, IL, 2005
- J. Jeong, **K. Yeo** & C. Lee, “Dispersion of heavy particles in isotropic turbulence,” APS DFD 58th Annual Meeting, IL, 2005
- C. Lee, J. Jeong & **K. Yeo**, “Acceleration, enstrophy and dissipation in isotropic turbulence,” APS DFD 58th Annual Meeting, IL, 2005
- K. Yeo** & C. Lee, “On the modification of near-wall structures in stably stratified turbulence,” APS DFD 57th Annual Meeting, WA, 2004.
- K. Yeo** & C. Lee, “Modification of near-wall turbulent characteristics under stable stratification,” The 6th KSME-JSME Thermal and Fluid Engineering Conference, Jeju, Korea, 2004.
- K. Yeo** & C. Lee, “On the acceleration in inhomogeneous turbulence,” APS DFD 56th Annual Meeting, NJ, 2003.
- A.M. Reynolds, **K. Yeo** & C. Lee, “On the anisotropy of Lagrangian accelerations in turbulence,” APS DFD 56th Annual Meeting, NJ, 2003.
- K. Yeo** & C. Lee, “Acceleration statistics in turbulent channel flow,” 5th Asian Computational Fluid Dynamics, Busan, Korea, 2003.

TEACHING
EXPERIENCE

Division of Applied Mathematics, Brown University

Teaching Assistant

September 2007 to December 2010

- Computer TA (Fall 2007, Spring 2010)
- Course: *Introduction to Computing Sciences* (Spring 2008)
- Course: *Methods of Applied Mathematics* (Fall 2008 to Fall 2010)
- Grader for graduate level course:
Numerical Solution of Partial Differential Equations I (Fall 2008)
- Graduate level course: *Fluid Mechanics I* (Fall 2006)

Department of Mechanical Engineering, Yonsei University

Teaching Assistant

March 2003 to May 2004

- Course: *Fluid Mechanics*

REFEREE FOR
JOURNALS

- *Journal of Fluid Mechanics*
- *Journal of Computational Physics*
- *Fluid Dynamics Research*

PROFESSIONAL
ASSOCIATIONS

- American Physical Society
- American Geophysical Union
- American Meteorological Society
- Society of Rheology
- Sigma Xi

REFERENCES

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