PONG-YU (PETER)

PROFESSIONAL PREPARATION

Cornell University	B.A.	Physics,	2000
Brown University	M.S.	Engineering	2003
Brown University	Ph.D.	Engineering	2007

PROFESSIONAL APPOINTMENTS

Assistant Professor	Binghamton University	Mechanical Engineering	2008 – present
Postdoctoral Associate	Tufts University	Biomedical Engineering	2006 – 2008

RESEARCH THRUSTS

Micro/Nanoscale fluid, colloidal and multiphase dynamics
Biomechanical dynamics of pathological cells
Multiphase microfluidic heat transfer
Miniaturization of biomedical devices
Micro- and nanoscale measurement techniques
Physiological transport phenomena

JOURNAL PUBLICATIONS

M. Coloma, J. D. Schaffer, P. Chiarot, and P. Huang

in near-wall shear flows and the implications for nano-velocimetry. , **637**, 241-265, 2009.

P. Huang, M. Hunter and I. Georgakoudi. A confocal light scattering spectroscopic imaging system for in situ tissue characterization. , **48**, 2595-2599, 2009.

B. J. Schmidt, P. Huang, K. S. Breuer and M.

BOOK CHAPTERS

P. Huang, J. S. Guasto, and K. S. Breuer. Evanescent wave microscopy.

ME 580B, Small-Scale Diagnostic Techniques in Mechanical Engineering 2011
Senior Design Projects
2009 – 2010
2010 – 2011
2011 – 2012
2011 – 2012
2012 – 2013
2012 – 2013
– sponsored by the Discovery Center
of the Southern Tier and BAE Systems 2013 – 2014
– for the Discovery Center
of the Southern Tier 2014 – 2015
2014 – 2015

PROFESSIONAL SERVICES

Co-organizer, Track 33 Measurement and Instrumentation at Microscale, ASME 10th International Conference on Nanochannels, Microchannels, and Minichannels 2012, Puerto Rico.
Co-organizer, Microfluidics Forum, ASME International Mechanical Engineering Conference & Exposition 2011, Denver, Colorado.
Organizer & Session Chair, Microfluidics Forum, ASME International Mechanical Engineering Conference & Exposition 2010, Vancouver, British Columbia, Canada.
Co-organizer & Session Chair, Microfluidics Forum, ASME International Mechanical Engineering Conference & Exposition 2009, Orlando, Florida.
Proposal Reviewer, American Chemical Society
Program Reviewer, Engineering Science Program, SUNY Broome

HONORS

NSF Summer Institute Fellowship 2009
Brown University Graduate Fellowship 2000 – 2001

PROFESSIONAL AFFILIATIONS

Faculty Member, SUNY Upstate Cancer Research Institute.
Faculty Member, Binghamton Biofilm Research Center.
Member, American Society of Mechanical Engineers (ASME).
Member, American Society of Engineering Education (ASEE).
Member, American Physical Society (APS), Division of Fluid Dynamics.

ARCHIVAL JOURNAL AND CONFERENCE PROCEEDINGS REFEREED

Journal of Fluid Mechanics (3x)
Journal of Fluid Engineering (4x)
Microfluidics and Nanofluidics (3x)
International Journal of Heat and Mass Transfer
Optics Express
Mathematical Problems in Engineering
Journal of the Association for Laboratory Automation (2x)