

# PONG-YU (PETER)

## PROFESSIONAL PREPARATION

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

## PROFESSIONAL APPOINTMENTS

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

## RESEARCH THRUSTS

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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

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

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

, **637**,

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**

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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**

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Co-organizer, Track 33 Measurement and Instrumentation at Microscale, ASME 10<sup>th</sup> 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**

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

## **PROFESSIONAL AFFILIATIONS**

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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**

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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)

