

Curriculum Vitae of Collaborator: Prof Leslie Yeo

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Academic Qualification

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| Ph.D. Chemical Engineering, Imperial College London | 2002 |
| M.S. Chemical Engineering, Imperial College London | 1998 |

Present and Past Appointments

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| Professor of Chemical Engineering & ARC Future Fellow RMIT University Australia | 2011 – present |
| Associate Professor & Australian Research Fellow Monash University Australia | 2010 – 2011 |
| Senior Lecturer Monash University Australia | 2007 – 2009 |
| Lecturer Monash University Australia | 2005–2006 |
| Postdoctoral Research Associate University of Notre Dame USA | 2003–2005 |
| Mathematical Modeller Det Norske Veritas UK | 2002–2003 |

Selected Honors and Awards

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| Australian Research Council Future Fellowship | 2013 - 2017 |
| Eureka Prize for Early Career Research Finalist | 2010 |
| Australian Research Fellowship | 2009 - 2013 |
| Monash University Vice-Chancellor's Award for Excellence in Research by an Early Career Researcher | 2009 |

Research Interests

Acoustically-driven microfluidics
Electrokinetically-driven microfluidics
Microfluidics, microfabrication and materials
Interfacial flows & liquid-liquid dispersions
Piezoelectric micromotors & Photonics

Selected/Related Publications

1. AR Rezk, O Manor, LY Yeo, JR Friend. Double Flow Reversal in Thin Liquid Films Driven by MegaHertz-Order Surface Vibration. *Proc R Soc A* 470, 20130765 (2014).
2. AE Rajapaksa, JJ Ho, A Qi, R Bischof, T-H Nguyen, M Tate, D Piedrafita, MP McIntosh, LY Yeo, E Meeusen, RL Coppel, JR Friend. Effective Pulmonary Delivery of an Aerosolized Plasmid DNA Vaccine via Surface Acoustic Wave Nebulization. *Respir Res* 15, 60 (2014).
3. AR Rezk, JR Friend, LY Yeo. Simple, Low Cost MHz-Order Acoustomicrofluidics using Aluminium Foil Electrodes. *Lab Chip* 14, 1802–1805 (2014).
4. A Rajapaksa, A Qi, LY Yeo, R Coppel, JR Friend. Enabling Practical Surface Acoustic Wave Nebulizer Drug Delivery via Amplitude Modulation. *Lab Chip* 14, 1858–1865 (2014).
5. MB Dentry, J Friend, LY Yeo. Continuous Flow Actuation Between External Reservoirs in Small-Scale Devices Driven by Surface Acoustic Waves. *Lab Chip* 14, 750–758 (2014).
6. MB Dentry, LY Yeo, JR Friend. Frequency Effects on the Scale and Behavior of Acoustic Streaming. *Phys Rev E* 89, 013203 (2014).
7. D Yudistra, A Boes, AR Rezk, LY Yeo, JR Friend, A Mitchell. UV Direct Write Metal Enhanced Redox (MER) Domain Engineering for Realization of Surface Acoustic Devices on Lithium Niobate. *Adv Mater Interfaces* 1, 1400006 (2014).
8. LY Yeo, JR Friend. Surface Acoustic Wave Microfluidics. *Annu Rev Fluid Mech* 46, 379–406 (2014).

9. K Kulkarni, J Friend, L Yeo, P Perlmutter. An Emerging Reactor Technology for Chemical Synthesis: Surface Acoustic Wave-Assisted Closed-Vessel Suzuki Coupling Reactions. *Ultrason Sonochem* 21, 1305–1309 (2014).
10. J Guo, JLW Li, Y Chen, LY Yeo, JR Friend, Y Kang. RF-Activated Standing Surface Acoustic Wave for On-Chip Particle Manipulation. *IEEE Trans Microw Theory Techn* 62, 1898–1904 (2014).
11. J Blamey, LY Yeo, JR Friend. Microscale Capillary Wave Turbulence Excited by High Frequency Vibration. *Langmuir* 29, 3835–3845 (2013).
12. L Bllaci, S Kjellström, L Eliasson, JR Friend, LY Yeo, S Nilsson. Fast Surface Acoustic Wave-Matrix-Assisted Laser Desorption Ionization Mass Spectrometry of Cell Response from Islets of Langerhans. *Anal Chem* 85, 2623–2629 (2013).
13. T Vuong, A Qi, M Muradoglu, BH-P Cheong, OW Liew, CX Ang, J Fu, L Yeo, J Friend, TW Ng. Precise Drop Dispensation on Superhydrophobic Surfaces Using Acoustic Nebulization. *Soft Matter* 9, 3631–3639 (2013).
14. AR Rezk, O Manor, JR Friend, LY Yeo. Unique Fingering Instabilities and Soliton-Like Wave Propagation in Thin Acoustowetting Films. *Nature Commun* 3, 1167 (2012).
15. O Manor, LY Yeo, JR Friend. The Appearance of Boundary Layers and Drift Flows Due to High-Frequency Surface Waves. *J Fluid Mech* 707, 482–495 (2012).
16. NR Glass, RJ Shilton, PPY Chan, JR Friend, LY Yeo. Miniaturized Lab-on-a-Disc (miniLOAD). *Small* 8, 1881–1888 (2012).
17. AR Rezk, A Qi, JR Friend, WH Li, LY Yeo. Uniform Mixing in Paper-Based Microfluidic Systems Using Surface Acoustic Waves. *Lab Chip* 12, 773–779 (2012).
18. SM Langelier, LY Yeo, J Friend. UV Epoxy Bonding for Enhanced SAW Transmission and Microscale Acoustofluidic Integration. *Lab Chip* 12, 2970–2976 (2012).
19. DJ Collins, O Manor, A Winkler, H Schmidt, JR Friend, LY Yeo. Atomization Off Thin Water Films Generated by High Frequency Substrate Wave Vibrations. *Phys Rev E* 86, 056312 (2012).
20. RJ Shilton, SM Langelier, JR Friend, LY Yeo. Surface Acoustic Wave Solid-State Rotational Micromotor. *Appl Phys Lett* 100, 033503 (2012).