

CHRISTINE KEIKO LUSCOMBE – Curriculum Vitae**APPOINTMENTS**

- 2006-Present **Assistant Professor**, Materials Science and Engineering Department, University of Washington, Seattle. Appointment started on Sep. 16th 2006.
- 2004-2006 **Post-doctoral Researcher**, University of California, Berkeley, Lindemann and Trinity College Junior Research Fellow.
- 2000-2003 **Graduate Research Assistant**, University of Cambridge, UK
Syngenta and Johnson-Matthey Scholar.

PROFESSIONAL PREPARATION

<i>Institution</i>	<i>Field</i>	<i>Degree & Year</i>
University of Cambridge, UK	Chemistry	BA, MSci, 2000
University of Cambridge, UK	Chemistry	MA, 2003, PhD, 2005
University of California, Berkeley	Chemistry	Post-doc., 2004-2006

PROFESSIONAL EXPERIENCE

- 2004-2006 **Post-doctoral Researcher**, Prof. J. M. J. Fréchet, UC Berkeley, USA
- Design and synthesis of electroactive polymers for applications in organic electronics with an emphasis on photovoltaics involving organic-inorganic hybrid devices.
 - Coordination of a DARPA funded photovoltaic project, involving researchers at UC Berkeley, Stanford, and Nanosolar.
- 2000-2003 **Graduate Research Assistant**, Prof. A. B. Holmes, University of Cambridge, UK
- Seiko-Epson funded research on the synthesis and patterning of hydrophobic self-assembled monolayers (SAMs) in supercritical carbon dioxide for inkjet printing and flat-panel displays.
 - Development of a novel polymer deposition method for the fabrication of electronic devices.
- 2001-2003 **Scientific Interpreter**, Oakland Innovation and Information Services, Cambridge, UK
- Translated (Japanese↔English) scientific journals and papers.
 - Acted as an interpreter during business calls.
- 1999-2000 **Undergraduate Research Assistant**, Prof. S. V. Ley, University of Cambridge, UK
- Synthesis and characterization of cytotoxic marine natural products, didemniserinolipids.
- 1998 **Summer Undergraduate Intern**, Sharp Laboratories of Europe Ltd., Oxford, UK
- Laboratory research into the synthesis and characterization of novel liquid crystalline materials for use in flat-panel displays.
 - Studied liquid crystallinity using optical microscopy.
- 1997 **Summer Research Assistant**, Prof. E. N. G. Marsh, University of Michigan, USA
- Studied the mechanism and activity of co-enzyme B.
 - Learned and practiced cell culture techniques.
 - Characterized proteins using gel electrophoresis.
 - Awarded scholarship.

PUBLICATIONS**PEER-REVIEWED PUBLICATIONS**

- *20. Wen, T.; Liu, D.; Luscombe, C. K.; Krishnan, K. M. "Granular magnetoresistance in Cobalt/ poly(3-hexylthiophene-2,5-diyl) hybrid thin films prepared by a wet chemical method." *Appl. Phys. Lett.*, **2009**, *95*, 082509.
- *19. Doubina, N.; Stoddard, M.; Bronstein, H. A.; Jen, A. K. Y.; Luscombe, C. K. "The effects of binding ligand variation on the nickel catalyzed externally initiated polymerization of 2-bromo-3-hexyl-5-iodothiophene." *Macromol. Chem. Phys.*, **2009**, DOI: 10.1002/macp.200900375.

- *18. Bronstein, H. A.; Luscombe, C. K. "Externally initiated regioregular P3HT with controlled molecular weight and narrow polydispersity." *J. Am. Chem. Soc.*, **2009**, *131*, 12894.
- *17. Doubina, N; Ho, A.; Jen, A. K. Y.; Luscombe, C. K. "Effect of initiators on the Kumada catalyst-transfer polycondensation reaction." *Macromolecules*, **2009**, ASAP, DOI: 10.1021/ma901410k.
- *16. Bull, T. A.; Pingree, L. S.; Jenekhe, S. A.; Ginger, D. S.; Luscombe, C. K. "The role of mesoscopic PCBM crystallites in solvent vapor annealed copolymer solar cells." *ACS Nano*, **2009**, *3*, 627.
- *15. Wu, P.T.; Bull, T.; Kim, F.; Luscombe, C. K.; Jenekhe, S. A. "Organometallic donor-acceptor conjugated polymers semiconductors: Tunable optical, electrochemical, charge transport, and photovoltaic properties." *Macromolecules*. **2009**, *42*, 671.
- *14. Ko, S. H.; Pan, H.; Grigoropoulos, C. P.; Luscombe, C. K.; Fréchet, J. M. J.; Poulidakos, D. "Lithography-free high-resolution organic transistors on polymer substrate by low temperature selective laser processing of inkjet printed nanoparticle film." *Appl. Phys. A*, **2008**, *92*, 579.
- *13. Liu, D.; Yang, P.; Luscombe, C. K. "Preparation of titanium oxide pillars on glass substrates and ultrathin titanium oxide layer using PMMA/PS blend films." *J. Phys. Chem. C*, **2008**, *112*, 7886.
- *12. Ko, S. H.; Pan, H.; Grigoropoulos, C. P.; Luscombe, C. K.; Fréchet, J. M. J.; Poulidakos, D. "All inkjet printed flexible electronics fabrication on a polymer substrate by low temperature high resolution selective laser sintering of metal nanoparticles." *Nanotechnology*, **2007**, *18*, 345202.
- *11. Ko, S. H.; Pan, H.; Grigoropoulos, C. P.; Park, I.; Pisano, A. P.; Luscombe, C. K.; Fréchet, J. M. J. "Metal nanoparticle laser processing for high-resolution, lithography-free organic transistors." *Nano Lett.* **2007**, *7*, 1869. Highlighted in *Nanowerk* and in *Nature Nanotechnology*
- *10. Luscombe, C. K.; Proemmel, S.; Huck, W. T. S.; Holmes, A. B.; Fukushima, H. "Synthesis of Supercritical Carbon Dioxide Soluble Perfluorinated Dendrons for Surface Modification." *J. Org. Chem.* **2007**, *72*, 5505.
- *9. Ko, S. H.; Pan, H.; Grigoropoulos, C. P.; Luscombe, C. K.; Fréchet, J. M. J.; Poulidakos, D. "Air stable high resolution organic transistors by selective laser sintering of inkjet printed metal nanoparticles." *Appl. Phys. Lett.* **2007**, *90*, 141103.
- *8. *Gowrishankar, V.; *Luscombe, C. K.; McGehee, M. D.; Fréchet, J. M. J. "6% Efficient, Cd-free Copper-Indium-Gallium-Diselenide / Polymer Hybrid Solar Cells." *Sol. Energy Mater. Sol. Cells.* **2007**, *91*, 807. *Joint first authors.

Prior to appointment at the University of Washington

- 7. Sivula, K.; Luscombe, C. K.; Thompson, B. C.; Fréchet, J. M. J. "Enhancing the Thermal Stability of Polythiophene:Fullerene Solar Cells by Decreasing Polymer Regioregularity." *J. Am. Chem. Soc.* **2006**, *128*, 13988.
- 6. Chang, J. B.; Liu, V.; Subramanian, V.; Sivula, K.; Luscombe, C.; Murphy, A.; Liu, J.; Fréchet, J. M. J. "Printable polythiophene gas sensor array for low-cost electronic noses." *J. Appl. Phys.* **2006**, *100*, 014506.
- 5. Liu, Y.; Scully, S. R.; McGehee, M. D.; Liu, J.; Luscombe, C. K.; Fréchet, J. M. J.; Shaheen, S. E.; Ginley, D. "Dependence of Band Offset and Open Circuit Voltage on the Interfacial Interaction Between TiO₂ and Carboxylated Polythiophenes." *J. Phys. Chem. B*. **2006**, *110*, 3257.
- 4. Murphy, A. R.; Liu, J.; Luscombe, C. K.; Kavulak, D.; Fréchet, J. M. J.; Kline, J.; McGehee, M. D. "Synthesis, Characterization, and Field-Effect Transistor Performance of Carboxylate Functionalized Polythiophenes with Increased Air Stability." *Chem. Mater.*, **2005**, *17*, 4892.

3. Muir, B. V. O.; Luscombe, C. K.; Huck, W. T. S. "Formation of Nanostructured Polymers." in *Encyclopedia of Nanoscience and Nanotechnology*. Editor-in-chief: Nalwa, H. S.; *American Scientific Publishers*, **2004**, 3, 497.
2. Luscombe, C. K.; Li, H.-W.; Huck, W. T. S.; Holmes, A. B. "Fluorinated Silane SAMs as Resists for Patterning ITO." *Langmuir*, **2003**, 19, 5273.
1. Kiyota, H.; Dixon, D. J.; Luscombe, C. K.; Hettstedt, S.; Ley, S. V. "Synthesis, Structure Revision, and Absolute Configuration of (+)-Didemniserinolipid B, a Serinol Marine Natural Product from a Tunicate *Didemnum* sp." *Org. Lett.*, **2002**, 4, 3223.

PUBLICATIONS IN CONFERENCE PROCEEDINGS

- *2. Luscombe, C. K.; Ho, A.; Doubina, N. "Effects of initiators in the chain-growth polymerization of semiconducting polymers." *PMSE Preprints*, **2008**.
1. Luscombe, C. K.; Huck, W. T. S.; Holmes, A. B.; Lu, T.; Leeke, G. A.; Santos, R. C. D.; Al-Duri, B.; Seville, J. P. K. "Patterned Deposition from Compressed Carbon Dioxide." *MRS Symp. Proc.*, **2002**, 734, 103.

PUBLICATIONS IN REVIEW OR IN PREPARATION

- *2. Kazarinoff, P. D.; Shamburger, P. J.; Ohuchi, F. S.; Luscombe, C. K. "Synthesis and characterization of air stable carboxylated thiophene polymers with varying crystallinity and properties." Submitted.
- *1. Boyd, S. D.; Jen, A. K. Y.; Luscombe, C. K. "Steric stabilization effects in the Ni-catalyzed regioregular poly(3-hexylthiophene) polymerization." Manuscript in preparation.

PATENTS

4. Huck, W. T. S.; Holmes, A. B. H.; Luscombe, C. K.; Fukushima, H.; Nebashi, S.; Ishida, M. "Fabrication of self-assembled dendron monolayers." **2004**, GB 0415243.5.
3. Holmes, A. B.; Huck, W. T. S.; Luscombe, C. K. "Patterned Substrates." **2004**, WO2004008250.
2. Holmes, A. B.; Lu, T.; Santos, R.; Al-Duri, B.; Leeke, G.; Huck, W. T. S.; Luscombe, C. K.; Seville, J.; Gaspar, F. "Patterned Deposition Using Compressed Carbon Dioxide." **2004**, US2004052944.
1. Holmes, A. B.; Huck, W. T. S.; Luscombe, C. K.; Fukushima, H.; Ishida, M.; Miyashita, S. "Fabrication of self-assembled monolayers." **2002**, US2002197879.

INVITED PRESENTATIONS

- *27. "Chip based sensors for disease diagnostics" August **2009**, SPIE, San Diego, CA.
- *26. "Towards highly ordered films for organic photovoltaic devices" June **2009**, Symposium "UW-NIMS MolAT", Seattle, WA.
- *25. "Towards highly ordered films for organic photovoltaic devices" May **2009**, Carother's Award Symposium, ACS Delaware.
- *24. "Towards highly ordered films for organic photovoltaic devices" March **2009**, Symposium "Multifunctional nanoscale materials for the 21st century", Argonne National Labs, IL.
- *23. "Towards highly ordered films for organic photovoltaic devices" December **2008**, Teijin Ltd., Japan
- *22. "Towards highly ordered films for organic photovoltaic devices" December **2008**, University of Kanagawa, Japan
- *21. "Towards highly ordered films for organic photovoltaic devices" December **2008**, Tokyo Institute of Technology, Japan

- *20. "Towards highly ordered films for organic photovoltaic devices" December **2008**, Seiko Epson Corporation, Japan
- *19. "Towards highly ordered films for organic photovoltaic devices" December **2008**, National Institute of Advanced Industrial Science and Technology, Japan
- *18. "Using semiconducting polymers as sensors" December **2008**, International Winter School for Graduate Studies, IIT Kanpur, India
- *17. "Organic/inorganic interfaces in photovoltaics" December **2008**, International Winter School for Graduate Studies, IIT Kanpur, India
- *16. "Self-assembly in semiconducting polymers" December **2008**, International Winter School for Graduate Studies, IIT Kanpur, India
- *15. "Quasi-living polymerizations for semiconducting polymers" October **2008**. NSF-DMR Solid state chemistry workshop, St Louis, MO.
- *14. "The use of living polymerization to create semiconducting polymer-peptide copolymers" September **2008**. International workshop for Molecular Biomimetics & Bionanotechnology-III, San Juan Island, WA.
- *13. "Nanostructures for organic photovoltaic devices." September **2008**. Micro Nano Breakthrough Conference, Vancouver, WA.
- *12. "Nanostructures for organic photovoltaic devices." July **2008**. National Institute of Materials Science, Tsukuba, Japan
- *11. "Creating novel semiconducting polymer-peptide block copolymers." September **2007**. International workshop for Molecular Biomimetics & Bionanotechnology-II, San Juan Island, WA.
- *10. "Organic electronics: Design and synthesis of polymers to device fabrication." October **2006**. Center of Nanotechnology, University of Washington, Seattle.
9. "Organic electronics: Design and synthesis of polymers to device fabrication." April **2006**. Nanosciences and Nanotechnology Institute, UC Berkeley.
8. "Organic electronics: Design and synthesis of polymers to device fabrication." March **2006**. Department of Materials Science and Engineering, University of Washington.
7. "Organic electronics: Design and synthesis of polymers to device fabrication." February **2006**. Department of Chemistry, Virginia Tech.
6. "Organic electronics: Design and synthesis of polymers to device fabrication." January **2006**. Department of Chemistry, University of Pittsburgh.
5. "Organic electronics: Design and synthesis of polymers to device fabrication." January **2006**. Department of Chemistry, University of Maryland.
4. "Organic electronics: Design and synthesis of polymers to device fabrication." January **2006**. Department of Chemistry, University of Washington.
3. "Organic electronics: Design and synthesis of polymers to device fabrication." November **2005**. Department of Chemistry, University of Wisconsin-Madison.
2. "Electroactive Polymers – from Design and Synthesis to Applications." Invited Speaker, *Gordon Research Conference on Organic Thin Films*, Rhode Island, USA. July 10-15, **2005**.
1. "Patterned Deposition from Compressed Carbon Dioxide." Invited Speaker, *MRS Fall Conference*, Boston, USA. December 2-6, **2002**.

AUTHORED OR CO-AUTHORED CONTRIBUTED PRESENTATIONS (PRESENTER INDICATED BY UNDERLINE)

- *6. Luscombe, C. K. "Effects of ligands on the chain-growth polymerization of semiconducting polymers." June **2008**. Macro 2008. Taiwan
- *5. Luscombe, C. K.; Ho, A.; Doubina, N. "Effects of initiators in the chain-growth polymerization of semiconducting polymers." April **2008**. ACS. New Orleans
- *4. Luscombe C. K.; Bull, T.; Pingree, L. S. C.; Ginger, D. S.; Jenekhe, S. A. "The Effects of Mesoscopic Phase Separation Induced by Solvent Vapor Annealing in Thieno[3,4-b]pyrazine-fluorene Copolymer/methanofullerene-based Solar Cells." April **2008**. MRS. San Francisco
- *3. Ko, S. H.; Pan, H.; Grigoropoulos, C. P.; Poulikakos, D.; Luscombe, C. K.; Murphy, A. R.; Frechet, J. M. J. "Laser based low-temperature lithography free high resolution inkjet printed OFET fabrication on polymer substrates." April **2007**. MRS. San Francisco
- 2. Fréchet, J. M. J.; Thompson, B. C.; Sivula, K.; Luscombe, C. K.; Ball, Z. T.; Armstrong, P. B.; Kavulak, D.; Okawa, D.; Clem, T.; Watanabe, N. "Development of functional polymers and macromolecular architectures for the enhancement of polymer based solar cells." Sep **2006**. ACS. San Francisco
- 1. Holmes, A. B.; Huck, W. T. S.; Kahle, K.; Lee, C. K. Y.; Luscombe, C. K. "Carbon dioxide as a solvent for synthesis and processing." March **2004**. ACS. Anaheim

HONORS AND AWARDS

- 2008 DARPA Young Faculty Award
- 2008 NSF Career Award
- 2007 Petroleum Research Fund Type G Award (from the ACS)
- 2003 Junior Research Fellow of Trinity College, University of Cambridge, UK.
- 2003 Lindemann Fellowship for post-doctoral research in the USA.
- 2002 GlaxoSmithKline Award for best presentation.
- 2002 Syngenta Scholarship for best organic chemistry PhD project.
- 2000 Johnson-Matthey Scholarship for outstanding achievement.
- 2000 Smith-Kline Beecham Award for best final year organic chemistry project.
- 1999 Johnson-Matthey Scholarship for outstanding achievement.
- 1999 Outstanding achievement award (Obtained highest mark in the University for Chemistry).
- 1999 Senior Scholar of Trinity College, University of Cambridge, UK.
- 1999 Tripos Award, Trinity College, University of Cambridge, UK.
- 1998 Senior Scholar of Trinity College, University of Cambridge, UK.
- 1998 Tripos Award, Trinity College, University of Cambridge, UK.
- 1997 Junior Scholar of Trinity College, University of Cambridge, UK.
- 1997 Tripos Award, Trinity College, University of Cambridge, UK.

RESEARCH SUPPORT**Complete, Sole PI**

- 1. Date: 01/01/08-12/31/08
Title: Developing semiconducting polymers for thermoelectricity
Agency: Royalty Research Fund (UW)
Amount: \$35,508
- 2. Date: 09/01/07-08/31/09
Title: Surface-initiated n-type semiconducting polymer synthesis
Agency: ACS-PRF Type G Award
Amount: \$40,000

Completed, co-PI

- 3. Date: 2007 Equipment purchase

Title: Acquisition of an inert atmosphere system for fabrication and characterization of organic thin-film electronics and photonics
 Agency: Murdock Charitable Trust Foundation Program
 Amount: \$500,000
 Participation: G. Bartholomew was the PI.
 C.K. Luscombe and 6 others were co-investigators

4. Date: 2009 Equipment purchase
 Title: DURIP: Proposed thermoelectric property measurement system (TEPMS)
 Agency: AFOSR
 Amount: \$295,392
 Participation: M. Taya was the PI.
 C.K. Luscombe and 2 others were co-investigators

In progress, Sole PI

5. Date: 09/16/06-09/15/09
 Title: STC-Materials and Devices for Information Technology Research (seed fund)
 Agency: NSF
 Amount: \$170,000
6. Date: 01/01/07-12/31/09
 Title: MRSEC-Genetically Engineered Materials Science and Engineering Center (seed fund)
 Agency: NSF
 Amount: \$75,000
7. Date: 04/08-03/13
 Title: CAREER: Quasi-living polymerization of semiconducting polymers: tailored microstructures of optimal energy harvesting
 Agency: NSF
 Amount: \$495,000
8. Date: 04/08-03/09
 Title: Nanostructures for optimal energy harvesting
 Agency: DARPA
 Amount: \$150,000
9. Date: 09/08-12/09
 Title: Solution processible n-type polymers
 Agency: Teijin
 Amount: \$64,000

In progress, co-PI

10. Date: 01/08-12/10
 Title: Interfacial engineering for highly efficient π -conjugated polymer based bulk heterojunction photovoltaic devices
 Agency: DOE
 Amount: \$900,000
 Participation: A. Jen is the PI. C. Luscombe is a co-PI with 4 other investigators. However, C. Luscombe was the co-ordinator for the proposal.

Total as of August 2009: \$3.1 million

TEACHING EXPERIENCE

Graduate Level Course

- MSE 560/CHEM 564 Organic Electronic and Photonic Materials/Polymers (Spring 2007, 2008, 2009; Average teaching evaluation: 4.2/5.0)

Undergraduate Level Course

- MSE 170 Introduction to Materials Science and Engineering (Winter 2008, 2009; Average teaching evaluation: 4.0/5.0)
- MSE 471 Introduction to Polymer Science and Engineering (Fall 2007, 2008, 2009; Average teaching evaluation: 4.1/5.0)
- Instructor for early fall start Pre-Engineers
- Guest lecturer for six courses: twice for MSE 298 Introduction to modern materials and twice for MSE 491 Design in Materials Engineering, and MSE 498, GEN ST 197f Engineering as a humanitarian pursuit

Other

- Outreach activity for K-12 students through College of Engineering Open House
- Freshman course development – Molecular Engineering of Interfaces and Surfaces-The Design of Modern Materials and Processes (Developed by Brian Flinn, co-developed by Raj Bordia, Fumio Ohuchi, Guozhong Cao, Thomas Stoebbe, and myself)

RESEARCH SUPERVISION

- Dr. Dan Liu, Postdoctoral Fellow, 2006 – 2008
- Shane Boyd, Graduate Student, 2006 – Present
- Tricia Bull, Graduate Student, 2007 – Present
- Natalia Doubina, Graduate Student, 2007 – Present
- Matt Durban, Graduate Student, 2008 – Present
- Peter Kazarinoff, Graduate Student, 2008 – Present
- Pinyi Yang, Graduate Student, 2009 - Present
- Andrew Rice, Graduate Student, 2009 – Present
- Dr. Hugo Bronstein, Postdoctoral Fellow, 2009 - Present
- PhD supervisory committees for Tianlong Wen (MSE), Marcella Gonzales (MSE, PhD 2008), Zhengwei Shi (MSE), Jin Wang (ME), Jessica Hancock (chemistry, PhD 2008), Keiko Munechika (chemistry, GSR), Eilaf Ahmed (chemistry), Joseph Wei (Chem E, GSR, PhD 2009), Quangen Du (ME, GSR), Steven Hau (MSE), Alejandro Briseno (chemistry, PhD 2008), Richard Champion (ME), Julie Bardecker (MSE), Lisa Park (chemistry, GSR), Jeffrey S. Walling (GSR, EE, PhD 2009), Pei-Tzu Wu (ChemE), Taeshik Earmme (ChemE), Kevin Noone (chemistry), Kate Schultz (chemistry, GSR), Christopher Moss (chemistry, GSR), Carolyn Rosewall (chemistry, GSR), ChinYi Chen (MSE, PhD 2009)

RESEARCH SUPERVISION - ALUMNI

- Chilip Chan, B.S. 2007, University of Washington (2006 – 2007).
- David Yamada (currently at Sienna Technologies, WA), B.S. 2007, University of Washington (2006 – 2007).
- Noel Lewis (currently undergraduate student at University of Dallas), REU student at University of Washington (2007).
- Natalie Wilhelm (currently undergraduate student at McGill, Canada), REU student at University of Washington (2007).
- Eugene Wang, exchange student from Szechuan Univeristy, (2007-2008)
- Elizabeth Fuller, B.S. 2008, University of Washington (2007-2008)
- Ryan Webster, B.S. 2008, University of Washington (2007-2008)
- Grant Hansen, B.S. 2008, University of Washington (2007-2008)
- Daniel Soto (currently at Intel, Arizona), B.S. 2008, University of Washington (2007-2008)
- Fateh Kahn, B.S. 2009, University of Washington (2008-2009)
- Chris Matsuoka (currently at Crane Aerospace and Electronics), B.S. 2009, University of Washington (2008-2009)
- Yue Zhao, exchange student from Szechuan University, (2008-2009)

PROFESSIONAL ACTIVITIES

Membership

- Materials Research Society (MRS)
- American Chemical Society (ACS)

Editorial Review

- Adv. Mater
- J. Am. Chem. Soc.
- Chem. Mater.

- Ind. Eng. Chem. Res.
- Polymer
- Sol. Energy Mater. Sol. Cells
- Organic Electronics
- Org. Lett.
- Macromolecules
- Journal of Colloid and Interface Science
- Journal of Organic Chemistry
- Applied materials and interfaces

Proposal Review

- NSF, Division of Chemistry
- NSF, Division of Materials Research
- DOE
- ACS-PRF
- Royalty Research Fund (University of Washington)

Panel

- NSF, Division of Materials Research, 2006
- NSF, Engineering Directorate, 2007
- ACS-PRF, 2009
- NSF, Division of Materials Research, 2009

Symposium and Conference Organization

- Session chair for University of Washington Center of Nanotechnology workshop, June 2009
- Session chair for Symposium for “Multifunctional Nanoscale Materials for the 21st Century”, Argonne National Labs, March 2009
- Session chair for Symposium at the Department of Chemistry, University of Cambridge, UK, 2008
- Steering committee of International Conference on Molecular Photonics, WA, USA, 2007.
- Session chair for International Conference on Molecular Photonics, WA, USA, 2007.

University Service

- College of Engineering Diversity Summit 2007 – Present
- Council of Education Policy 2007 – Present
- Speaker at workshop for writing NSF Career proposals, 2008

Department Service

- Seminar Committee, Chair, 2007 - 2009
- Graduate Committee, Member, 2007 – Present
- Graduate Recruitment Committee, Chair, 2008
- Faculty Hiring Committee, Member, 2007 – 2008

Outreach and Community Service

- Outreach activity for K-12 students through College of Engineering Open House, (April 2007)
- Supervisor for 2 REU students (Summer 2007)
- Keynote speaker for College of Engineering Freshman orientation (July 2007)
- Host for 15 high school students from Bothell High School (March 2008)

MEDIA

- Work highlighted in *Nature Nanotechnology*:
<http://www.nature.com/nnano/reshigh/2007/0607/full/nnano.2007.210.html>
- Work highlighted in *Nanowerk*: <http://www.nanowerk.com/spotlight/spotid=2140.php>
- Work highlighted in *The Daily (UW newspaper)*:
<http://www.thedaily.washington.edu/article/2007/5/16/whatsNewInScience>