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Education

- Ph.D. in Chemistry, Michigan State University, East Lansing, MI (December 2002)
- M.S. in Chemistry and Chemical Technology, Silesian Technical University (STU), Gliwice, Poland (August 1997)

Research Experience

- Research Associate at Louisiana State University, Department of Chemistry and Center for BioModular Multi-Scale Systems (CBM²), (July 2004 - date)
- Postdoctoral Associate at Louisiana State University, Department of Chemistry (November 2002- July 2004)
- Graduate Research Assistant (September 1997 – December 2002)
- Graduate Research Assistant at Silesian Technical University, Department of Chemistry, Gliwice, Poland (September 1996 – August 1997)
- Internship in Polish Academy of Science - Institute of Paints and Polymeric Coatings, Zabrze, Poland (Summer 1996)

Teaching Experience

- Teaching Assistant at Utah State University, Department of Chemistry and Biochemistry, Logan, UT (Fall 1997–Spring 1999).

Synergistic Activities

- Session Chair at 2006 Annual Meeting of the American Electrophoreses Society, San Francisco, CA; session title: **“Advances in CE and Microdevice Technology for Genomic Analysis”**
- Research Mentor for High School Students and Teachers, LSU Summer 2006 and 2005
- Session Chair at 2005 Annual Meeting of the American Electrophoreses Society, Cincinnati, OH session title: **“BioMEMS and Microfluidic Technology for Cell and Biomolecule Analysis”**
- Co-organized Poster Session for 18th International Symposium on MicroScale Bioseparations (MSB)(formerly HPCE), New Orleans 2005

Professional Affiliations

- American Chemical Society (ACS) (1998 – present)
- The Electrochemical Society (2000 – 2004)
- The Society for Electroanalytical Chemistry SEAC (2001 – present)

- Michigan State University Women in Chemistry (WiC) supported by the Local Section of the ACS, East Lansing, MI (2000-2002)

Awards and Honors

- Dissertation Completion Fellowship, Michigan State University, Summer 2002
- Best Poster Award, Sixteen Annual CFMR Symposium, April 2002, Michigan State University
- Michigan State University Travel Grant Recognition, 53rd Pittsburgh Conference on Analytical Chemistry - Pittcon 2002
- Spring 2000 Maeser-Bauer Graduate Teaching Assistant Award, Department of Chemistry and Biochemistry, USU
- Coherent® Scholarship, 5th Annual Rocky Mountain Symposium on Photons and Chemistry, Estes Park, CO, November 1999
- 1994-1997 Outstanding Graduate Student Scholarship, Department of Chemistry STU, Gliwice, Poland

Peer-Reviewed Publications

1. Park, D. S.; Hupert, M.; **Witek, M.**; Guy, J.; Datta, P.; You, B. H.; Soper, S. A.; and Murphy, M. C. ***A 96-Well SPRI Reactor in a Photo-Activated Polycarbonate (PPC) Microfluidic Chip.*** Proceedings of MEMS 2007
2. Park, D. S.; Hupert, M.; Guy, J.; Datta, P.; Lee, J.-B.; **Witek, M.**; You, B. H.; Soper, S. A.; Nikitopoulos, D. E.; and Murphy, M. C. ***Microtiter Plate-Based Microfluidic Platforms: Sealing, Leakage Testing, and Performance of A 96-Well SPRI Device.*** Proceedings of IMECE 2006-15275
3. **Witek, M. A.** , Llopis, S. D., Weatley, A., McCarley, R. L., Soper, S. A. **Purification and preconcentration of genomic DNA from whole cell lysates using photoactivated polycarbonate (PPC) microfluidic chips.** Nucleic Acids Research, 2006, 34 (10), e74
4. **Witek, M. A.**; Wei, S.; Vaidya, B.; Adams, A. A.; Zhu, L.; Stryjewski, W.; McCarley, R. L. and Soper, S. A. **Cell Transport via Electromigration in Polymer-Based Microfluidic Devices.** Lab on a Chip, 2004, 4, 464-472
5. Soper, S.A. and **M. Witek**, *18th international symposium on microscale bioseparations (msb) New Orleans, LA, February 12-17, 2005.* Journal of Separation Science, 2005. **28**(9-10): p. 1111
6. Hupert, M. L.; **Witek, M. A.**; Wang, Y.; Mitchel, M. W.; Liu, X.; Bejat, Y.; Nikitopoulos, D. E.; Goettert, J.; Murphy, M. C.; Soper, S. A. **Polymer-based Microfluidic Devices for Biomedical Applications.** Proceedings of SPIE-The International Society for Optical Engineering **2003**, 4982 (Microfluidics, BioMEMS, and Medical Biosystems), 52-64
7. Show Y., **Witek M. A.**, Sonthalia, P., Swain G. M. **The Characterization and Electrochemical Responsiveness of Boron-Doped Nanocrystalline Diamond Thin-Film Electrodes** Chem. Mater. **2003**, 15, 879-888
8. **Witek, M. A.**, Wang, J.; Stotter, J. M.; Hupert, M. L.; Haymond, S.; Sonthalia, P.; Zak, J. K., Chen, Q., Gruen, D. M., Butler, J. E., Kobashi, K., Tachibana, T. and Swain, G. M. **Summary of Recent**

- Progress with Diamond Electrodes in Electroanalysis, Spectroelectrochemistry and Electrocatalysis**, *J. Wide Bandgap Materials* **2002**, 8(3-4), 171-188.
9. Chen, Q.; Gruen, D. M.; Krauss, A. R.; Corrigan, T. D.; **Witek, M.**; Swain, G. M. **The Structure and Electrochemical Behavior of Nitrogen - Containing Nanocrystalline Diamond Films Deposited from CH₄/N₂/Ar Mixtures**. *J. Electrochem. Soc.*, **2001** 148,(1), E44
 10. **Witek M.** and Swain G. M. **Aliphatic Polyamine Oxidation Response Variability and Stability at Boron-Doped Diamond Thin-Film Electrodes as Studied by Flow-Injection Analysis**. *Anal. Chim. Acta*, **2001**,440, 119
 11. Granger, M. C.; **Witek, M.**; Xu, J.; Wang, J.; Hupert, M.; Hanks, A.; Koppang, M. D.; Butler, J. E.; Lucazeau, G.; Mermoux, M.; Strojek, J. W.; Swain, G. M. **Standard Electrochemical Behavior of High-Quality, Boron-Doped Polycrystalline Diamond Thin-Film Electrodes**. *Anal. Chem.* **2000**, 72, 3793
 12. Xu, J.; Granger, M. C.; Wang, J.; Chen, Q.; **Witek, M.**; Hupert, M.; Hanks, A.; Swain, G. M.; Sakaguchi, I.; Nishitani-Gamo, M.; Ando, T. **Structure-Reactivity Studies at Boron-Doped Single and Polycrystalline Diamond Thin-Film Electrodes: Relationship To Applications In Electroanalysis**. *Proc.-Electrochem. Soc.* **2000**, 403
 13. Koppang, M.; **Witek, M.**; Blau, J.; Swain, G. M. **Electrochemical Oxidation of Polyamines at Diamond Thin-Film Electrodes**. *Anal. Chem.* **1999**,71, 1188

Total citation of published work: 237 (source: Sci-Finder Search Engine)

Patents and Books

1. **Witek, M. A.**, Hupert, M. L., Soper, S. A. Book Chapter: **“Single-Cell and Single Molecule Analyses using Microfluidic Devices”** in *BiMEMS: Technologies and Applications* (**2006**)
2. *Modular Microfluidic Devices* Murphy, M. C.; Chen, P. C.; Nikitopoulos, D.; Soper, S. A.; Park, D. S.; Hupert, M.; **Witek, M.**; (provisional patent application) **2006**
3. Swain, Greg M.; Show, Yoshiyuki; Sonthalia, Prerna; **Witek, M. A.** **Boron-Doped Nanocrystalline Diamond**. U.S. Pat. Appl. Publ. (**2005**), 19 pp, US 2005110024

Oral Presentations and Posters

1. **Application of Polymeric Microfluidic Chips in Clinical Applications** Pittcon/ACS, Chicago, IL, **2007** (Invited oral presentation)
2. **High-throughput Purification of DNA from Cell Lysates Using Photoactivated Polycarbonate Microfluidic Devices**. AIChE/AES Conference **2006**, San Francisco, CA (Oral presentation)
3. **Integrated Microfluidic System for the Processing of Membrane Proteins Isolated From Stem Cells**. MicroTAS Conference, Japan **2006** (poster)

4. **Purification of Genomic DNA from Whole Cell Lysates Using Photoactivated Polycarbonate (PPC) Microfluidic Devices.** Pittcon, Orlando, FL, **2006** (Oral presentation)
5. **Analyzing Genomes Using Microfluidics: Meeting the Demands of High Throughput for Clinical Applications.** Pittcon **2005**, Orlando, FL (Oral presentation)
6. **Applications of Polymer-Based Microfluidic Devices for Biological Cell Transport, Manipulation and Capture.** Pittcon **2005**, Orlando, FL (Oral presentation)
7. **Applications of Polymer-Based Microfluidic Devices for Biological Moieties Manipulation,** CBM² Colloquium, LSU, Baton Rouge, LA **2004** (Oral presentation)
8. **Cell Transport and Manipulations in Polymer-Based Microfluidic Devices.** BRP Meeting, Baton Rouge, LA, November **2003** (Oral presentation)
9. **Electrooxidation of Aliphatic Polyamines at Microcrystalline and Nanocrystalline Boron-Doped Diamond Thin Films.** 16th Annual CFMR Symposium, East Lansing, MI, April **2002** (poster)
10. **Electrooxidation and Detection of Aliphatic Polyamines at Boron-Doped Diamond Thin Film Electrodes.** Pittcon 2002, New Orleans, LA (Oral presentation)
11. **Electrooxidation and Detection of Aliphatic Polyamines at Boron-Doped Diamond Thin Films.** 28th Annual Conference of the FACSS, Detroit, MI October 2001 (Oral presentation)
12. **Electrooxidation and Detection of Aliphatic Polyamines at Boron-Doped Diamond Thin Films.** Abstracts of Papers, 222nd ACS National Meeting, Chicago, IL, August 2001 (poster)
13. **Electrochemical Oxidation of Aliphatic Biogenic Amines.** Rocky Mountain Conference on Analytical Chemistry, Broomfield, CO, July 2000 (Oral presentation)
14. **Electrochemical Oxidation of Aliphatic Biogenic Amines at Boron-Doped Diamond Electrodes.** Joint 55th Northwest/16th Rocky Mountain Regional Meeting of the ACS, Idaho Falls, ID, June 2000 (poster)
15. **Electrochemical Oxidation of Aliphatic Biogenic Amines at Boron-Doped Diamond Electrodes.** 5th Annual Rocky Mountain Symposium on Photons and Chemistry, Estes Park, CO, November 1999 (Oral presentation)