



Below is a selected list of publications and presentations at national and international scientific meetings that our SURF students have presented or co-authored while a student in the SURF program at CSTL. This list is especially impressive given it was accomplished by undergraduate students just beginning their research careers and the work was accomplished in a short 3 month period. These accomplishments show the success that the CSTL SURF program achieves in training and facilitating world-class research with its participants.

Publications and Proceedings

- Barker, L., Kelly, R.W., Guthrie, W.F. Determination of Sulfur in Biodiesel and Petroleum Diesel by X-ray Fluorescence (XRF) Using the Gravimetric Standard Addition Method-II. *Energy & Fuels* 22, 2488-2490. (SURF student Lydia Barker, 2007)
- Holbrook, R.D., Breidenich, J., DeRose, P.C. 2005. The Impact of Reclaimed Water on Select Organic Matter Properties of a Receiving Stream, Fluorescence and Perylene Sorption Behavior. *Environmental Science and Technology*. 39(17),6453 - 6460. (SURF student Breidenich, 2007)
- Holbrook, R.D., Breidenich, J., DeRose, P.C. 2005. Indirect water reuse and aquatic systems: Investigating changes in the characteristics and behavior of colloidal material. *ACS Conference Proceedings (Division of Colloid and Surface Chemistry)*, San Diego, CA.
- Ravichandran V., Khan A., Barker, P. E., O'Connell C., Zullo S., Vasquez G., Bhat T. N., Gilliland G. 2002. Human Mitochondrial Protein Database. *Mitoproteomics Workshop. Mitochondrion* 3:20.
- Pettit E. 2006. Michael Peretich, *Chemistry Whiz. Madison, Magazine of JMU*, Winter edition:28.
- Scott G. E., Irikura, K. K. 2005. Performance of Binary-Encounter Bethe Theory for Electron-Impact Ionization Cross-Sections of Molecules Containing Heavy Elements. *Surf. Interf. Analysis*, 37:973-977.
- Scott G. E. Irikura, K. K. 2005. Electron-Impact Ionization Cross-Sections of Molecules Containing Heavy Elements ($Z > 10$). *J. Chem. Theory Comput.*, 1:1153-1161.
- Hoebel, S.J.; Balss, K. M.; Jones, B.J.; Mallaris, C.D.; Munson, M.S.; Vreeland, W. N.; Ross, D., Scanning Temperature Gradient Focusing, *Analytical Chemistry*, 78(20): 7186-7190. (2006).
- Vanderah, D.J., Par, T., Silin, V., Meuse, C.W., Gates, R.S., La, H., Valincius, G. "Isostructural Self-Assembled Monolayers. 2. *Langmuir* 2004, 20, 1311-1316. SURF student Thomas Parr (2001, 2002)
- Vanderah, D.J., La, H, Naff, J., Silin, V., Rubinson, K. A. "Control of Protein Adsorption: Molecular Level Structural and Spatial Variables" *J. Am. Chem. Soc.* 2004, 126, 31639-31641. SURF student Jessica Naff (2003)
- F.A. Tsai, C.M. Mahoney and G. Gillen. "Analysis of a Model Drug Delivery System Using Cluster Secondary Ion Mass Spectrometry." *Abstracts of Papers of ACS 229: U126-U126 227-Anyl, Part 1*, Mar 13 2005. SURF student Felicia Tsai (2004).



CSTL SURF Student Publications and Outputs

- Widegren, J. A.; Saurer, E. M.; Marsh, K. N.; Magee, J. W. Electrolytic conductivity of four imidazolium-based room-temperature ionic liquids and the effect of a water impurity. *J. Chem. Thermodyn.* 2005, 37, 569-575.

Presentations at National and International Meetings

- K. M. Smith, M. B. Satterfield, B. C. Nelson,; Determination of Folate Vitamers in Spinach via Liquid Chromatography Combined with Ultraviolet and Fluorescence Detection, Abstracts of Papers of the American Chemical Society, 2005, 229(Part 1), U386-U386.
- K.M. Smith, M.B. Satterfield, B. C. Nelson; Determination of Folate Vitamers in Spinach via Liquid Chromatography Combined with Ultraviolet and Fluorescence Detection, AIChE Annual Meeting (2004), Austin, TX, November 2004.
- Ross, D., Begley, H., and Olsen, K., "Temperature Gradient Focusing," Presentations at the Thirteenth Annual Frederick Conference on Capillary Electrophoresis in Frederick, MD October 21-22 and at the MicroTas meeting in Nara, Japan, Nov. 3-7, 2002. SURF student Heather Begley (2002)
- Vanderah, D.J., Valincius, G., Silin, V., Gates, R.S., Nickel, B., Woodward, J., Arsenault, J., Pham, C.P., springer, S.K., Zeiger, D., Daiub, A., Parr, T., La, H., Meuse, C.W. "Oligo(ethylene oxide) Self-Assembled Monolayers: Protein Resistance and Thin-film Metrology Tools", Presented at the Gordon Conference, Barga, Il. May 24, 2003. SURF students Thomas Parr (2001, 2002), Jessica Arsenault (2001) and Abraham Daiub (2000)
- Vanderah, D.J., Parr, T., Silin, V., Meuse, C.W., Gates, R.S., La, H. "Characterization of a Series of Self-Assembled Monolayers of Methyl 1-(3-Mercaptopropyl)oli-go(ethylene oxides)", Presented at the 77th ACS Colloids and Surface Science Symposium, Georgia Tech. Univ., Atlanta, GA. June 16, 2003. SURF student Thomas Parr (2001, 2002)
- M. Peretich and R. G. Downing. "A Comparison of Charged Particle Detectors Using Neutron Depth Profiling", presented at the American Nuclear Society National Meeting, Washington, D.C., November 2005. SURF student Michael Peretich (2005)
- Marinez, N., McCleskey, M., Peretich, M.E., Downing, G., Duggan, J.L., Naab, F., Guo, B.N. "Analysis of Several Methods of Determining the Concentration of 11B on Implanted Si Wafers used in the Semiconductor Industry", presented at the Joint Fall Meeting of the Texas Sections of the American Physical Society, American Association of Physics Teachers, Forum on Industrial & Applied Physics, and the Society of Physics Students, Houston, Texas, October 20-22, 2005. SURF student Michael Peretich (2005)
- Hutchison, B., Brazhnik, K., Russell, C., Locascio, L. "Construction of integrated micro- and nanofluidic components by photopolymerization", Presented at the National ACS Meeting, Washington DC, August 31. SURF student Christopher Russell (2005)

