

STEPHANIE FLORES ZOPF

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EDUCATION

- **2011 - 2013** – Tufts University, Chemical and Biological Engineering, Medford, MA - MS in Chemical Engineering
- **2003 - 2006** – Columbia University, Chemical Engineering Department, New York, NY - BS in Chemical Engineering
- **2005** – Parsons School of Design, New York, NY - Summer Intensive Studies in Graphic Design

RELEVANT EXPERIENCE

- **2017 - present** – HP, Inc., San Diego, CA
R&D Engineer, Imaging and Printing Writing Systems Group
 - Elucidated mechanisms of thermal inkjet printing with textile ink to guide development of ink towards improved compatibility
- **2013 - 2016** – US Army Natick Soldier Research, Development and Engineering Center, Natick, MA
Research Chemical Engineer, Chemical Science and Engineering Team
 - Created a flexible supercapacitor from concept to prototype based on ionogel ("ionic liquid gel") electrolytes and silicone packaging to provide a more lightweight and safer wearable energy source for the Soldier
- **2012 - 2013** – Tufts University, Chemical and Biological Engineering Department, Medford, MA
Research Assistant, Prof. Matthew Panzer's lab
 - Designed and fabricated flexible supercapacitor architectures to electrochemically characterize the ionogel electrolyte/carbon paper electrode interface to optimize future supercapacitor device configurations
- **2007 - 2011** – US Army Natick Soldier Research, Development and Engineering Center, Natick, MA
Chemical engineer, Chemical Technology Team
 - Developed 3D test methods characterizing chemical protective fabrics to provide a more realistic assessment of textile protective chemistries than traditional 2D techniques enabling garment scale-up

PUBLICATIONS

- **Zopf, SF** and Manser, MJ. "Screen-printed Military Textiles for Wearable Energy Storage," *Journal of Engineered Fibers and Fabrics*, 11(3), 2016.
- **Zopf, SF** and Panzer, MJ. "Integration of UV-cured Ionogel Electrolyte with Carbon Paper Electrodes," *AIMS Material Science*, 1(1), 59-69. 2014.

BOOK CHAPTERS

- **Zopf, SF**, D'Angelo, AJ, Qin, H, and Panzer MJ. "Wearable Energy Storage Based on Ionic Liquid Gels." *Polymerized Ionic Liquids*, edited by A. Eftekhari. Royal Society of Chemistry. 2017. 381-415.

ABSTRACTS

- **Flores, S.**, Saylor, J., Truong, Q., Rittenhouse, T. "Scale-Up Assessment of Superoleophobic Technologies into Textiles" Published in Chemical and Biological Defense Science and Technology (CBD PS&T) Conference, Las Vegas, NV, 14-18 November **2011**.
- **Flores, S.** and Zukas, W. "Development of a Simulant Vapor Sorption Analysis Technique for Microgram Quantities of Adsorbents." Poster DTRA Conference Chemical and Biological Defense Science and Technology (CBD S&T) Conference, ... Orlando, FL, 15-19 November **2010**.
- Hill, J., Hanley, J., Neafsey, A., Dunn, J., **Flores, S.** and MacLeod, D. "Methodology Development for Use of a Full-Body Fluorescent Imaging System in Aerosol Systems Tests of Chemical Protective Ensembles" Published in: CBD PS&T Conference, New Orleans, Louisiana, 17-21 November **2008**.

AWARDS

- **2011 - 2013** – Science, Mathematics and Research for Transformation (SMART) Scholarship
The SMART Scholarship for Service Program is sponsored by the Department of Defense to support students pursuing degrees in Science, Technology, Engineering and Mathematics (STEM) disciplines

VOLUNTEERING

- **2016** - FAB LAB San Diego, San Diego, CA - Geek-in-Residence
 - Prepared learning materials to teach an introductory wearable electronics class in making electronic puppets
- **2013-2014** – Army Educational Outreach Program - CyberGuide
 - Provided technical advice to high school students competing in the eCybermission online science fair