

Melanie A. McNeil
Department of Chemical and Materials Engineering
San Jose State University
(408) 924-3873

PROFESSIONAL PREPARATION

University of California, Santa Barbara	Chemistry	B.S.	1986
University of California, Santa Barbara	Chemical Engineering	B.S.	1986
University of California, Santa Barbara	Chemical Engineering	Ph.D.	1990

APPOINTMENTS

San Jose State University, San Jose, California
Department of Chemical and Materials Engineering

Professor	8/99 - Present
Associate Professor	8/94 - 8/99
Assistant Professor	8/90 - 8/94

Teaching in the following areas: Chemical kinetics, catalysis and reactor design, biochemical engineering, environmental engineering, safety, ethics, statistics, undergraduate chemical engineering lab. Research in the areas of nanowire synthesis, DNA sequence search algorithm development, RNA/peptide binding, and thin film applications for drug delivery and photovoltaics. Co-Lab Director: Biochemical and Environmental Engineering Laboratory.

U.S.A. Petrochem Corporation, Ventura, California

Chemist **2/80 – 9/83**

Performed quality control tests on refined petroleum products and analyzed waste water and other refinery waste materials.

PUBLICATIONS AND PRE

Nuno, Hector; Lee, Victor Y.; Shah, Shimul K.; Krupp, Leslie; McNeil, Melanie; Miller, Robert D.; Sly, Joseph. Star polymer templated, dye occluded, functionalized silica nanoparticles for optoelectronic applications. Abstracts of Papers, 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010 (2010)

Duhamel, P., Bonifacio, C., Chang, L., McNeil, M., Magbitang, T., Frommer, J., Lee, V., Park, O., Pl., Jefferson, M., Risk, W., Kim, H., Sly, J., and Miller, R., "Nanostructuring Porous Evanescent Wave Biosensors," Proceedings of the 235th ACS National Meeting, New Orleans, LA (2008).

Joseph Sly, J. D. Jeyaprakash Samuel, Cecile S. Bonifacio, Lilian Chang, Victor Y. Lee, Melanie McNeil, William P. Risk, C. Michael Jefferson, and Functionalized Star-polymers and Epitaxial Polyvalent Self-assembly," presented at American Chemical Society Meeting, Chicago, IL (2007).

Joseph Sly, Cecile Bonifacio, Lilian Chang, Eric Appel, James L Hedrick, Melanie McNeil, C. M Jefferson, William P Risk and Robert D Miller, Nanostructured Thin Films From Biodegradable Star Polymer Occlusion Complexes: A Versatile and Controlled Platform for Layered Surface Based Drug Delivery, Poster FF2.9, Materials Research Society Fall Meeting, Boston, MA (2008).

Joseph Sly, Fatemeh Parayandeh, Cecile Bonifacio, Lilian Chang, Pierre Duhamel, Melanie McNeil, C. M Jefferson, William Risk, Andre Knoesen and Robert D Miller; Combining Chemical and Physical Molecular

Tandem Molecular Recognition Motifs for Enhanced SPR-based Biodetection, Fatemeh Parayandeh, Cecile S. Bonifacio, Lilian Chang, Hector Nuno, Melanie McNeil, Andre Knoesen, Joseph Sly, Robert D. Miller

Sly, J.; Bonifacio, C. S.; Chang, L.; Glab, K. L.; Lee, V. Y.; McNeil, M.; Jefferson, C. M.; Frommer, J. E.; Risk, W. P.; Miller, R. D.; "Reaching for the Stars: Layered Polyvalent Self-Assembly of Hyperbranched Pigment Arrays". PMSE Preprints, 97, 200-201, 2007.

J. Sly, J. D. Jeyaprakash Samuel, C. S. Bonifacio, L. Chang, V. Y. Lee, M. McNeil, W. P. Risk, C. M. Jefferson, and R. D. Miller,

Presented at American Chemical Society Meeting,
Chicago, IL (March 2007).

R. Scheffler, L. Q. Ye and M. McNeil, Electrodeposition of Bismuth Telluride Nanowires for Thermoelectric Applications: Synthesis, Characterization, and Properties, Proceedings of Annual Meeting of American Institute of Chemical Engineers, November (2006).

A. Mao, H.T. Ng, P. Nguyen, M. McNeil, and M. Meyyappan(C) -5 (h) -2 (a) -1 (n) -2 (g) -2 (,) (i) 6 (Tc 45 0 0 45 0 0 ')

- 1993 Awarded \$75,600 research grant by NSF subcontract for Bioremediation with co-PI Dr. Rhea Williamson
- 1995 PI with two co-PIs (Drs. Pam Stack and John Boothby) \$25,000 Camille and Henry Dreyfus Grant, Development of a Biochemical Engineering Laboratory
- 1995 PI \$45,000 research grant by EPRI to study corrosion in boiling water reactors
- 1997 PI \$45,000 by EPRI to continue study of corrosion in boiling water reactors
- 1998 PI with 2 co-PIs \$230,000 as lead PI from Fund for Improvement of PostSecondary Education for Development of an Industry-driven Environmental Health and Safety Degree Program
- 1998 PI \$54,000 by EPRI to continue study of corrosion in boiling water reactors
- 1999 PI \$54,000 by EPRI to expand study of corrosion in boiling water reactors
- 1999 Director of \$100,000 grant from City of San Jose Environmental Services Division
- 2001 Co-PI with one other PI (Dr. Claire Komives) \$ 175,000 from NSF CCLI Program for Acquisition of Equipment for a Bioprocess Engineering Laboratory NSF #0088653
- 2001 Co-PI with one other PI (Dr. Claire Komives) \$ 26,000 California Workforce Initiative Grant
- 2004 PI -