

Quan "Jason" Cheng

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A. Education

University of Florida, Ph.D., Analytical Chemistry, May 1995
Nanjing University, China, M.S., Chemistry, July 1989
Nanjing University, China, B.S., Chemistry, July 1986

B. Professional Appointments

Associate Professor, Department of Chemistry, UC Riverside, July 2007-
Assistant Professor, Department of Chemistry, UC Riverside, July 2001-June 2007
Affiliate, Environmental Toxicology, UC Riverside, April 2003-
Affiliate, Cell, Molecular, and Developmental Biology, UC Riverside, September 2005-
Affiliate, Center for Plant Cell Biology, March 2006-
Staff Scientist and Group Leader, Materials Sciences Division, Lawrence Berkeley National
Laboratory, June 1997-June 2001
Postdoctoral Research Fellow, Department of Chemistry, UC Berkeley/LBNL, April 1995-
May 1997

C. Awards and Honors

Eli Lilly Young Analytical Chemist Award/Grantee, 2002, 2003
Regents' Faculty Fellowship, University of California, 2004
Regents' Faculty Development Award, University of California, 2006

D. Synergistic Activities

Journal Referees

Journal of the American Chemical Society, Langmuir, Analytical Chemistry, Biomacromolecules, Macromolecules, Journal of Physical Chemistry, Biotechnology Progress, Biomaterials, ChemPhysChem, Polymer, Micro. Chem. Phys., Journal of Colloid and Interface Science, Environmental Science & Technology, Biosensors and Bioelectronics, Inter. J. Machine Tools & Manufacturer, Mat. Res. Soc. Symp. Proc, Electrochemistry Communications, Frontiers in Bioscience, Advanced Materials, etc.

Review Panels

NIH Chemistry/Biophysics SBIR/STTR Panel, June 2003
NIH Chemistry/Biophysics SBIR/STTR Panel, November 2003
NIH Chemistry/Biophysics SBIR/STTR Panel, February 2004
NIH Bioanalytical Chemistry/Chemistry/Biophysics SBIR Panel, March 2005
NSF BES Sensors and Sensor Networks Panel, May 2005

Grant Review

National Science Foundation (NSF), National Institute of Health (NIH), Hong Kong Research Grants Council (RGC), ACS Petroleum Research Fund (PRF), US Department of State (U.S. Civilian Research and Development Foundation (CRDF)), University of

Missouri, United States-Israel Binational Agricultural Research and Development Fund (BARD).

Symposium Organization/Presiding Chair

1. Session Chair, First UC Surface Science Symposium, Riverside, February 2003.
2. Session Chair, “Bioanalytical Techniques for Detection of Bacteria, Toxins and Proteins”, 229th ACS National Meeting, San Diego, March 13-17, 2005.
3. Symposium Organizer and Session Chair, “Biosensors”, ACS Western Regional Meeting (WRM2006), Anaheim, January 23-24, 2006.
4. Symposium Organizer, “Supported Membranes for Biosensing”, Pittcon, Chicago, February 2007.

E. Publications (50+ Peer-reviewed journal papers, latest 10 shown here)

1. K. Scott Phillips, Jong Ho Han, and Quan Cheng. “Development of a ‘Membrane Cloaking’ Method for Amperometric Enzyme Immunoassay and Surface Plasmon Resonance Analysis of Proteins in Serum Samples”, *Anal. Chem.* **2007**, *79*, 899-907.
2. Thomas Wilkop, Danke Xu and Quan Cheng. “Characterization of Pore Formation by Streptolysin O on Supported Lipid Membranes by Impedance Spectroscopy and Surface Plasmon Resonance Spectroscopy”, *Langmuir* **2007**, *23*, 1403-1409.
3. Na Zhang, Thomas Wilkop, Soohyun Lee and Quan Cheng. “Bi-Functionalization of a Patterned Prussian Blue Array for Dual-Potential Amperometric Detection of Glucose”, *Analyst* **2007**, *132*, 164-172.
4. K. Scott Phillips and Quan Cheng. “Recent Advances in Surface Plasmon Resonance Based Techniques for Bioanalysis”, *Anal. Bioanal. Chem.* **2007**, *387*, 1831-1840.
5. Guangyu Ma, Astrid M. Müller, Christopher J. Bardeen and Quan Cheng. “Self-Assembly Combined with Photopolymerization for the Fabrication of Fluorescence ‘Turn-On’ Vesicle Sensors with Reversible ‘On-Off’ Switching Properties”, *Adv. Mater.* **2006**, *18*, 55-60.
6. K. Scott Phillips, Jong-Ho Han, Marilyn Martinez, Zhuangzhi Wang, David Carter and Quan Cheng. “Nanoscale Glassification of Gold Substrates for Novel Surface Plasmon Resonance Analysis with Supported Lipid Membranes”, *Anal. Chem.* **2006**, *78*, 596-603.
7. Yi Dong, K. Scott Phillips and Quan Cheng. “Immunosensing of Staphylococcus Enterotoxin B (SEB) in Milk with PDMS Microfluidic Systems Using Reinforced Supported Bilayer Membranes (r-SBMs)”, *Lab-on-a-Chip*, **2006**, *6*, 675 – 681.
8. K. Scott Phillips, Thomas Wilkop, Jiing-Jong Wu, Rabih O. Al-Kaysi, and Quan Cheng. “SPR Imaging Analysis of Protein-Receptor Binding in Supported Membrane Arrays on Gold Substrates with Calcinated Silicate Films”, *J. Am. Chem. Soc.* **2006**, *128*, 9590-9591.
9. Guangyu Ma and Quan Cheng. “Manipulating FRET with Polymeric Vesicles: Development of a “Mix-and-Detect” Type Fluorescence Sensor for Bacterial Toxin”, *Langmuir* **2006**, *22*, 6743-6745.
10. Xiaobo Yu, Danke Xu and Quan Cheng. “Label-Free Detection Methods for Protein Microarrays”, *Proteomics* **2006**, *6*, 5493-5503.