# **Chemical Science and Technology Laboratory Office FY04 Outputs and Interactions**

## **1.** Publications

Koch, W.F, Steel, E.S., Beary, E.S. Conny, J.M., Schwennsen, C.C. Chemical Science and Technology Laboratory, Annual Report FY2003, US Department of Commerce, NISTIR 7084, February 2004.

## 2. Talks

Beary, E. S., "CCR Annual Report on the Action Network on Long Range and Societal Issues", Tampa, FL, April 18 and April 20, 2004.

Beary, E.S., "Metrology: Its impact on the Economy, International Trade, and Quality of Life, UWV, April 23, 2004.

Koch, W.F., Conny, J.M., "Optimizing thermal-optical analysis for elemental carbon in atmospheric particulate matter by focusing on optical behavior," 22<sup>nd</sup> Annual American Association for Aerosol Research Conference, Anaheim, CA, October 23, 2003.

Koch, W.F., "How to Work With and Leverage the Capabilities of the National Laboratories", ALMA 24th Annual Conference, Pittsburgh, PA, October 31, 2003

Koch, W.F., "Welcome to NIST and CSTL Overview", University of Maryland Visit, November 3, 2003.

Koch, W.F., "Chemical Science and Technology At NIST", University of Illinois, Chicago, Illinois, December 4, 2003

Koch, W.F., "Safety at NIST: Update to the VCAT", Meeting of the NIST Visiting Committee for Advanced Technology, NIST, Gaithersburg, MD, December 9, 2003

Koch, W.F., "Chemical Science and Technology at NIST," at Illinois Institute of Technology, Chicago, IL, February 25, 2004

Koch, W.F., "Chemical Science and Technology at NIST," at Illinois Institute of Technology, Chicago, Illinois, February 25, 2004

Koch, W. F., "Chemical Science and Technology at NIST," Overivew to the Scientific and Engineering Allliance, March 26, 2004.

Koch, W. F., "Chemical Science and Technology at NIST," at Agilent Laboratories, Palo Alto, CA, May 6, 2004.

Koch, W. F., "Chemical Science and Technology Laboratory: An Overview," CSTL SubPanel Meetings of the Board on Assessment for NIST, Gaithersburg, MD, June 3, 2004.

Koch, W.F., "So You Think You Might Want to be a Scientist", Seneca Valley High School, Germantown, MD June 4, 2004.

Koch, W.F., "Chemical Science and Technology Laboratory: An Overview," at Beckman Coulter, Inc., Brea, CA, July 22, 2004

Koch, W.F., "Chemical Science and Technology Laboratory: An Overview," at Praxair, Los Angeles, CA, July 27, 2004.

Koch, W.F., "Chemical Science and Technology Laboratory: An Overview," at Roche Diagnostics, Indianapolis, IN, August 6, 2004

Koch, W.F., "Chemical Science and Technology at NIST", Departments of Chemistry and Chemical Engineering, University of Colorado, Boulder, CO, Sept. 15, 2004.

Steel, E.B., "Tools and Techniques for Nanoparticle Characterization", Nanoparticles 2003, Cambridge, MA, October 27, 2003

Steel, E.B., "3D Chemical Analysis at Nanoscales", National Nanotechnology Initiative Workshop, Gaithersburg, MD, January 28, 2004

Steel, E.B., "The SMNA program at NIST in the Surface and Microanalysis Science Division, the Semiconductor Electronics Division and the Center for Neutron Research", Sevres, France, April 21, 2004

### 3. Patent Awards and Applications

US Patent # 6679938, "Method of producing metal particles by spray pyrolysis", Kim; Jung Hyeun (College Park, MD); Ehrman; Sheryl H. (College Park, MD); Germer; Thomas A. (Gaithersburg, MD); Mulholland; George W. (Gaithersburg, MD); Steel; Eric B. (Gaithersburg, MD)

### 4. Committee Assignments

### E. S. Beary

NCCLS (National Committee for Clinical Laboratory Standards), Sub-Committee on Microwave Device Use in the Medical Laboratory NIST Advisor's Committee Sigma Xi Admissions Committee, chair Green Chemistry and Engineering Conference Organizing Committee Council for Chemical Research, Board Council for Chemical Research, Long Range Issues Team Leader

# W.F. Koch

NCCLS (National Committee for Clinical Laboratory Standards) Global Programs Committee, Member CCR (Council for Chemical Research) ASTM (American Society for Testing and Materials) D19 Water, Member D22 Sampling and Analysis of Atmospheres, Member ISO (International Organization of Standards) Technical Committee 212, Clinical Laboratory Testing and in vitro Diagnostics, Member US Technical Advisory Group for TC 212, Executive Committee Chair

#### 5. Seminars

CSTL Colloquium Series October 1, 2003 Michele Schantz, Analytical Chemistry Division, NIST "Lake Superior Fish Tissue Standard Reference Material 1946"

October 15, 2003 Daniel Frisbie, University of Minnesota "Contact Effects in Molecular Junctions"

December 10, 2003 Joseph Betz, Office of Dietary Supplements (NIH) "Analytical Challenges – Standardization Issues"

December 12, 2003 Francis Collins, National Human Genome Research Institute (NIH) "A Vision for the Future of Genomics Research" (joint sponsorship by NIST and CSTL colloquia programs)

January 14, 2004 Christopher Bowman, University of Colorado "Novel Polymerizations and Their Applications"

February 11, 2004 Donald Patterson, Jr., National Center for Environmental Health (CDC)

April 21, 2004, 10:30 am, Lecture Room A Richard McCreery, Ohio State University "Carbon Based Molecular Junctions: A New Paradigm for Molecular Electronics"

May 5, 2004, 10:30 am, Lecture Room B Chung Law, Princeton University

#### 6. Customer Visits by W. F. Koch in 2004

May 5-8, 2004 Darlene Solomon, Agilent Labs, Palo Alto, CA

July 22, 2004 Chandra Jain, Beckman Coulter, Los Angeles, CA July 27, 2004 Paul Kibbe, Praxair, Los Angeles, CA

August 6, 2004 Melanie Swartzenruber, Roche Diagnostics, Indianapolis, IN