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2. Talks

Becker, P.R., ***“The US National Biomonitoring Specimen Bank and the Marine ESB,”*** International Environmental Specimen Bank Symposium, Charleston, SC, November 13-16, 2005.

Becker, P.R., ***“Expanding the Seabird Tissue Archival and Monitoring Project (STAMP) in the North Pacific: Interim Analytical Results,”*** Marine Science in Alaska Symposium, Anchorage, Alaska, January 22-26, 2006.

Becker, P.R., ***“Overview of STAMP,”*** AMAP POPs Experts Group Meeting and Workshop, Burlington, Ontario, Canada, March 6-8, 2006.

Bedner, M., ***“Transformations of Pharmaceutical Compounds by Chlorination and Dechlorination Processes used in Wastewater Treatment,”*** The Society of Environmental Toxicology and Chemistry (SETAC) 26th Annual Meeting, Baltimore, MD, November 14, 2005.

Bedner, M., ***“Transformations of Pharmaceutical Compounds during Wastewater Treatment,”*** Washington Chromatography Discussion Group (WCDG), Rockville, MD, January 18, 2006.
Invited

Bedner, M., ***“Transformations of Pharmaceutical Compounds during Chlorination and Dechlorination Processes in Wastewater Treatment,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 13, 2006.

Benner, B.A., Jr., ***“Development and Characterization of a Prototype Explosives-Contaminated Soil Reference Material to Support Environmental Measurements,”*** The Society of Environmental Toxicology and Chemistry (SETAC) 26th Annual Meeting, Baltimore, MD, November 13, 2005.

Benner, B.A., Jr., ***“Instrument-Corrected Raman Libraries of Toxic Industrial Chemicals (TICs) to Support First Responders,”*** Fourth Annual TICs and TIMs Symposium, Richmond, VA, July 11, 2006.

Camara, J.E., ***“Development of a Reference Method for the Quantitation of B-type Natriuretic Peptide in Serum by Liquid Chromatography-Mass Spectrometry,”*** 13th Annual Sigma Xi Postdoctoral Poster Presentation, NIST, Gaithersburg, MD, February 17, 2006.

Camara, J.E., ***“Development of a Reference Method for the Quantitation of B-type Natriuretic Peptide in Serum by Liquid Chromatography-Mass Spectrometry,”*** Developing New Standards for Autoantibody Measurement: Bringing Metrology to Serology Workshop, NIST, Gaithersburg, MD, February 21, 2006.

Camara, J.E., ***“Development of a Reference Method for the Quantitation of B-type Natriuretic Peptide in Serum by Liquid Chromatography-Mass Spectrometry,”*** 54th American Society for Mass Spectrometry (ASMS) Conference on Mass Spectrometry, Seattle, WA, May 28, 2006.

Dodder, N.G., ***“Protein Biomarker Analysis: Measurement of the Analytical Variability Due to Tryptic Digestion and MALDI-TOF-MS Analysis,”*** United States Human Proteome Organization (US HUPO) Conference, Boston, MA, March 14, 2006.

Dorko, W.D., ***“Calibration Gas Standards and the Gas Mixture NTRM Program,”*** NTRM Producers Workshop, Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 14, 2006.

Dorko, W.D., ***“NIST Mercury Calibrations and Traceability,”*** EPA Mercury Meeting, Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 14, 2006.

Dorko, W.D., ***“NIST Mercury Calibrations and Traceability,”*** EPA Mercury Meeting, Columbus OH, May 1, 2006.

Dorko, W.D., ***“Quality Assurance in Calibration Gas Standards,”*** NASA Quality Leadership Forum, Los Angeles, CA, September 26, 2006.

Downing, R.G., ***“Development of Delayed-Neutron Activation Analysis at NIST,”*** 2005 IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC), Fajardo, Puerto Rico, October 23, 2005.

Downing, R.G., ***“High Resolution Neutron Imaging Detector,”*** Ionizing Radiation Division Seminar, NIST Center for Neutron Research, Gaithersburg, MD, February 7, 2006. Invited

Downing, R.G., and Parikh, N., ***“UNC He Implantation and Desorption Results,”*** The High Average Power Laser (HAPL) Workshop, San Diego, CA, August 9, 2006. Invited

Downing, R.G., ***“Novel High-Efficiency Converters for Neutron Detectors,”*** Ionizing Radiation Division Seminar, NIST Center for Neutron Research, Gaithersburg, MD, September 12, 2006. Invited

Duewer, D.L., ***“How to Combine Results Having Stated Uncertainties: To MU or Not to MU?”*** International Workshop on Combining and Reporting Analytical Results. The Role of (Metrological) Traceability and (Measurement) Uncertainty for Comparing Analytical Results, Rome, 6-8 March, 2006.

Ellisor, M.B., ***“The National Marine Mammal Tissue Bank - Sample Collection, Tissue Archival and Specimen Analysis,”*** Southeast Region Marine Mammal Stranding Network (SERMMSN) Biennial Conference, Panama City Beach, FL, May 4, 2006.

Greenberg, R.R., ***“SIM 8.16P, Toxic Metals in Seafood – Evaluation of Measurement Results,”*** Toxic Metals in Seafood Workshop, SIM General Assembly, Trinidad and Tobago, October 14, 2005. Invited

Greenberg, R.R., ***“Chemical Metrology Research at NIST,”*** Nuclear Engineering Seminar, University of Texas, Austin, TX, February 17, 2006. Invited

Greenberg, R.R., ***“Recent Applications of Nuclear Analytical Methods to the Certification of Elemental Content in NIST Standard Reference Materials,”*** 15th Radiochemical Conference, Marianske Lazne, Czech Republic, April 23, 2006. Invited

Greenberg, R.R., ***“Analytical Chemistry Research at NIST,”*** Chemistry Dept. Seminar, Dalhousie University, Halifax, Canada, September 7, 2006. Invited

Guenther, F.R., ***“CCQM-K41 Draft A Report, Hydrogen Sulfide in Nitrogen,”*** CCQM Gas Analysis Working Group Meeting, CENAM Mexico, October 28, 2005.

Guenther, F.R., ***“Gas Metrology Group Update,”*** NTRM Producers Meeting, Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 14, 2006.

Guenther, F.R., ***“CCQM-K41 Draft B Report, Hydrogen Sulfide in Nitrogen,”*** CCQM Gas Analysis Working Group Meeting, Paris, France, April 4, 2006.

Guenther, F.R., ***“Upgrades to the NIST SRP to Correct Biases Found in the CCQM P28 Pilot Study,”*** CCQM Gas Analysis Working Group Meeting, Paris, France, April 5, 2006.

Heltsley, R.M., ***“Assessing Organic Contaminants in Aquatic Ecosystems,”*** Department of Chemistry Seminar Series, College of Charleston, Charleston, SC, December 1, 2005.

Heltsley, R.M., ***“Use of Non-Lethal Techniques to Evaluate Organic Contaminants in Aquatic Ecosystems,”*** Fort Johnson Marine Science Seminar Series, Charleston, SC, April 7, 2006.

Heltsley, R.M., ***“Prozac Exposure Found to Disrupt Mussel Reproduction,”*** Fort Johnson Brown Bag Seminar Series, Hollings Marine Laboratory, September 26, 2006.

Keller, J.M., ***“Use of a Sea Turtle Blood Bank for the Analysis of Temporal Trends in Organohalogen Contaminant Concentrations,”*** International Environmental Specimen Bank Symposium, Charleston, SC, November 14, 2005.

Keller, J.M., ***“Organic Contaminant Concentrations are Higher in Debilitated Loggerhead Turtles Compared to Apparently Healthy Turtles,”*** The 26th Annual Symposium on Sea Turtle Biology and Conservation, Island of Crete, Greece, April 2, 2006.

Keller, J.M., ***“Organohalogen Contaminant Measurements in NIST Human Serum SRM 1589a: Method Development and Re-certification,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, April 30, 2006.

Kelley, M.E., ***“Uncertainties in NTRMs – Can We Reduce Them?”*** NTRM Producers Workshop, Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 14, 2006.

Kelly, W.R., ***“Customizing Analyte Levels in Coals by Mixing Powdered SRMs Approaches and Pitfalls,”*** 31st International Technical Conference on Coal Utilization and Fuel Systems, Clearwater, FL, May 21, 2006.

Kelly, W.R., ***“NIST’s International Activities in Support of Fossil Fuel Standards, Establishing Equivalences of US Standards and Foreign Standards through CCQM***

Activities,” 31st International Technical Conference on Coal Utilization and Fuel Systems, Clearwater, FL, May 22, 2006.

Kucklick J.R., “*Value Assignment of Selected SRMs for Polychlorinated Naphthalene and Coplanar PCB Congeners*,” 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 1, 2006.

Lindstrom, R.M., “*Design of the New Analytical Cold-Neutron Beam Line at NCNR*,” American Nuclear Society Winter Meeting, Washington, DC, November 16, 2005. Invited

Lindstrom, R.M., “*Delayed-Neutron Activation Analysis for Determining Trace Fissionables at NIST*,” Methods and Applications of Radioanalytical Chemistry Conference, Kona, Hawaii, April 3, 2006. Invited

Lindstrom, R.M., “*Trace Fissile Measurement by Delayed-Neutron Activation Analysis at NIST*,” American Chemical Society 232nd National Meeting & Exposition, San Francisco, CA, September 10, 2006. Invited

Long, S.E., “*Calibration of Mercury Generator Systems using Isotope Dilution ICP-MS*,” Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 11, 2006.

Long, S.E., “*The Use of Isotope Dilution ICP-MS for the Development of Reference Standards for Mercury in Gas Streams*,” 8th International Conference on Mercury as a Global Pollutant (Mercury 2006), Madison, WI, August, 9, 2006.

Mackey, E.A., “*Quality Assurance in Inorganic Analyses for the National Biomonitoring Specimen Bank*,” International Environmental Specimen Bank (IESB) Symposium, November 14, 2005. Invited

Mackey, E.A., “*Results of Analysis Performed at NIST on SRM 695 Multi-Nutrient Fertilizer*,” Association of American Plant Food Control Officials, San Diego, CA, February 23, 2006. Invited

Mackey, E.A., “*Development of the New Standard Reference Material (SRM) 695 Trace Elements in Multi-Nutrient Fertilizer*,” 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 4, 2006. Invited

Mann, J.L., “*Measurement of Sulfur Isotope Composition in Two High-Elevation Snowpits by Multiple-Collector Thermal Ionization Mass Spectrometry (MC-TIMS) Using a ^{33}S - ^{36}S Double Spike*,” European Geosciences Union Meeting, Vienna, Austria, April 7, 2006.

Mann, J.L., “*Measurement of Sulfur Isotopic Composition ($d^{34}\text{S}$) by Multiple-Collector Thermal Ionization Mass Spectrometry (MC-TIMS) Using a ^{33}S - ^{36}S Double Spike*,” American Geophysical Union Meeting, Baltimore, MD, May 25-26, 2006.

Murphy, K.E., ***“Standard Reference Materials for Measurement of Inorganic Constituents in Environmental Samples,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 12, 2006.

Miller, W.R., ***“The Certification of a Nominal 20 $\mu\text{mol/mol}$ $\text{H}_2\text{S}/\text{N}_2$ SRM Using Two Independent Methods,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Mitchell, G.D., ***“National Traceability for Mercury,”*** 2006 Electric Utilities Environmental Conference (EUEC), Tucson, AZ, January 23, 2006.

Mitchell, G.D., ***“Status Report on Elemental Mercury Generator Measurements,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando FL., March 12, 2006

Nelson, B., ***“Scientific Accomplishment -- How is It Defined?”*** 14th Science & Engineering Academic Support Network - New England Board of Higher Education, MIT, Cambridge, Massachusetts, October 22, 2005.

Nelson, B., ***“Folate Deficiency - An Emerging Cardiovascular Disease Risk Factor?”*** Northeastern University, Department of Chemistry and Chemical Biology, Boston, Massachusetts, March 1, 2006.

Nelson, B., ***“Development of Analytical Methods for the Quantification of Biotin Levels in Dietary Supplements,”*** 20th American Association for Clinical Chemistry (AACC) Conference, Chicago, IL, July 13, 2006.

Norris, J.E., ***“Ozone Traceability through CCQM,”*** Instituto do Ambiente, Lisbon, Portugal, November 17, 2005.

Norris, J.E., ***“Temperature and Path-length Bias Modifications to the NIST Standard Reference Photometer,”*** CCQM Gas Analysis Working Group, BIPM, Sevres, France, April 5, 2006.

Norris, J.E., ***“Ozone Traceability through CCQM,”*** and ***“Temperature and Path-length Bias Modifications to the NIST Standard Reference Photometer,”*** D.I. Mendeleev Institute for Metrology, St. Petersburg, Russia, April 13, 2006.

Norris, J.E., ***“Temperature Gradient and Path-length Bias Improvement Modifications to the NIST Ozone Reference Standards,”*** Air and Waste Management Association's 99th Annual Conference and Exhibition, New Orleans, LA, June 22, 2006.

Paul, R.L., ***“The Use of k_0 Factors in Cold Neutron Prompt Gamma-Ray Activation Analysis,”*** American Nuclear Society Winter Meeting, Washington, DC, November 17, 2005. Invited

Paul, R.L., ***“Determination of Low Level Sulfur in Steels by Radiochemical Neutron Activation Analysis with Liquid Scintillation Counting,”*** Methods and Applications of Radioanalytical Chemistry Conference, Kona, Hawaii, April 5, 2006. Invited

Paul, R.L., ***“Cold Neutron Prompt Gamma-ray Activation Analysis for Characterization of Hydrogen Storage and Fuel Cell Materials,”*** Materials Research Society Meeting, San Francisco, CA, April 18, 2006. Invited

Phinney, K.W., ***“Development of a Standard Reference Material for Vitamin D in Human Serum,”*** Vitamin D Workshop, Victoria, British Columbia, Canada, April 8, 2006.

Phinney, K.W., ***“Development of a Standard Reference Material for Metabolites in Human Plasma (Metabolomics),”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 1, 2006.

Phinney, K.W., ***“Development of a Standard Reference Material for Vitamin D in Human Serum,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Phinney, K.W., ***“Analysis of Capsaicinoids in Pepper Spray Products,”*** 30th International Symposium on High Performance Liquid Phase Separations and Related Techniques (HPLC 2006), San Francisco, CA, June 17, 2006.

Phinney, K.W., ***“Determination of Water-soluble Vitamins in a Multivitamin/ Multielement Tablet Standard Reference Material by Liquid Chromatography/Mass Spectrometry,”*** 30th International Symposium on High Performance Liquid Phase Separations and Related Techniques (HPLC 2006), San Francisco, CA, June 17, 2006.

Porter, B.J., ***“Overview of Specimen Banking Activities at NIST,”*** Center for Neutron Research, NIST, Gaithersburg, MD, September 2006.

Poster, D.L., ***“Ionizing Radiation-Induced Degradation of Chlorinated Contaminants in Marine Sediment,”*** The International Chemical Congress of Pacific Basin Societies (Pacifichem 2005), Honolulu, Hawaii, December 18, 2005.

Poster, D.L., ***“Newly Developed Standard Reference Materials (SRMs) for Environmental Forensics,”*** The International Chemical Congress of Pacific Basin Societies (Pacifichem 2005), Honolulu, Hawaii, December 18, 2005.

Poster, D.L., ***“Performance-Based Quality Assurance Programs for the Determination of Organic Species in Air Particulate and Marine Environmental Samples,”*** The International Chemical Congress of Pacific Basin Societies (Pacifichem 2005), Honolulu, Hawaii, December 18, 2005.

Poster, D.L., ***“Nanotechnology at NIST,”*** National Toxicology Program Board of Scientific Counselors Nanotechnology Working Group, Arlington, VA, March 15, 2006.

Poster, D.L., ***“Performance-Based Quality Assurance Programs for the Determination of Organic Contaminants in Marine Tissue, Sediment, and Air Particulate Samples,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Poster, D.L., ***“Determination of Polychlorinated Biphenyls (PCBs) in a River Sediment Standard Reference Material,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 3, 2006.

Poster, D.L., ***“Determination of Polybrominated Diphenyl Ethers in Mussel Tissue and Sediment Standard Reference Materials,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 3, 2006.

Poster, D.L., ***“Development of a New House Dust Standard Reference Material for the Determination of Organic Contaminants,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 3, 2006.

Poster, D.L., ***“Determination of Polybrominated Diphenyl Ethers in Mussel Tissue and Sediment Standard Reference Materials,”*** 26th International Symposium on Halogenated Environmental Organic Pollutants (Dioxin 2006), Oslo, Norway, August 21, 2006.

Poster, D.L., ***“Recent Developments in Environmental Tissue Standard Reference Materials for the Determination of Organohalogen Compounds,”*** 26th International Symposium on Halogenated Environmental Organic Pollutants (Dioxin 2006), Oslo, Norway, August 21, 2006.

Poster, D.L., ***“Particle-Related Standard Reference Materials for the Determination of Organic and Inorganic Contaminants,”*** Association of the Powder Process Industry and Engineering, Kyoto, Japan, September 4, 2006.

Poster, D.L., ***“Particle-Related Standard Reference Materials for the Determination of Organic and Inorganic Contaminants,”*** The Second International Conference on the Characterization and Control of Interfaces for High Quality Advanced Materials, and Joining Technology for New Metallic Glass and Inorganic Materials, Energy and the Environment Session, Kurashiki, Japan, September 8, 2006.

Poster, D.L., ***“Nanotechnology at the National Institute of Standards and Technology,”*** Nanotechnology: Entrepreneurship & Research Opportunities in the Chemical Industry, Synthetic Organic Chemical Manufacturers Association, Cambridge, MA, September 19, 2006.

Rabb, S.A., ***“High Performance ICP-OES: A Potential Primary Measurement Tool for Quantitation of Total Plant DNA,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 15, 2006.

Rhoderick, G.C., ***“VOC Standards Needs for Ambient and Auto Exhaust Emissions Measurements in the United States,”*** CCQM Gas Analysis Working Group Meeting, CENAM, Queretaro, Mexico, October 8, 2005.

Rhoderick, G.G., ***“Development of a 100 nmol/mol Propane in Air SRM for Automobile Exhaust Testing for New Low Emission Requirements,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Rhoderick, G.C., ***“NIST VOC Gas Standards Program,”*** World Metrology Organization/Global Air Watch Workshop on Volatile Organic Carbon, Garmisch, Germany, July 3, 2006.

Sander, L.C., ***“Shape Recognition in Liquid Chromatography: The Role of Stationary Phase Order,”*** Hyphenation-Conference, Tübingen, March 26, 2006. Invited.

Sander, L.C., ***“The Origins of Shape Selectivity in Liquid Chromatography”*** Seminar, Dow Deutschland GmbH, Hügelshheim, Germany, March 27, 2006. Invited.

Sander, L.C., ***“Analytical Challenges in the Certification of Botanical Dietary Supplement Standard Reference Materials,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, April 30, 2006.

Sander, L.C., ***“The Certification of Botanical Dietary Supplement Standard Reference Materials,”*** 30th International Symposium on High Performance Liquid Phase Separations and Related Techniques (HPLC 2006), San Francisco, CA, June 17, 2006.

Sander, L.C., ***“Challenges in the Chemical Metrology of Botanical Reference Materials,”*** 120th AOAC Annual Meeting and Exposition, Minneapolis, MN, September 17, 2006.

Schantz, M., ***“Stability of PAH, PCB, and Chlorinated Pesticide Concentrations in Frozen Mussel Tissue,”*** International Environmental Specimen Bank Symposium, Charleston, SC, November 13, 2005.

Schantz, M., ***“Current Activities in Environmental Standard Reference Materials for Trace Organic Contaminants,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 12, 2006.

Schantz, M., ***“Performance-based Quality Assurance Programs for the Determination of Organic Contaminants in Marine Tissue, Sediment, and Air Particulate Samples,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 13, 2006.

Schantz, M., ***“Certification of a House Dust Standard Reference Material for Determination of Organic Contaminants,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 14, 2006.

Schantz, M., ***“Expanding Analyte Information for Existing Environmental SRMs,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Schantz, M., ***“Development of Human Serum and Human Milk SRMs for Organic Contaminants,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Schantz, M., ***“Recertification of Diesel Particulate, Coal Tar, and Cod Liver Oil SRMs,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 3, 2006.

Schantz, M., ***“New Solution SRMs for Organic Contaminants,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 4, 2006.

Schantz, M., ***“Current Activities in Environmental SRMs for Organic Contaminants,”*** 120th AOAC Annual Meeting and Exposition, Minneapolis, MN, September 17, 2006.

Sharpless, K.E., ***“SRMs for Analysis of Foods and Dietary Supplements,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, Florida, March 12, 2006.

Sharpless, K.E., ***“Production of Standard Reference Materials for Dietary Supplements,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, South Carolina, May 2, 2006. Invited

Sharpless, K.E., ***“Reference Materials for the Analysis of Foods,”*** 120th AOAC Annual Meeting and Exposition, Minneapolis, Minnesota, September 18, 2006. Invited

Sharpless, K.E. ***“Status of NIST Activities to Produce Standard Reference Materials for Dietary Supplements,”*** 120th AOAC Annual Meeting and Exposition, Minneapolis, Minnesota, September 19, 2006.

Sharpless, K.E., ***“NIST Experiences with Reference Material Stability,”*** 120th AOAC Annual Meeting and Exposition, Minneapolis, Minnesota, September 19, 2006. Invited

Sieber, J.R., ***“Calibration Choices for X-Ray Fluorescence Analysis of Additive Elements in Polymers,”*** ASTM International Committee D20 Plastics, Toronto, Ontario, Canada, April 25, 2006.

Sieber, J.R., ***“Validation of an Alkali Reaction, Borate Fusion X-Ray Fluorescence Method for Silicon,”*** The 55th Annual Denver X-ray Conference (DXC 2006), Denver, CO, August 10, 2006.

Swarthout, B., ***“Organohalogen Contaminant Concentrations in Blood of Kemp's Ridley Sea Turtles from the Gulf of Mexico,”*** The Society of Environmental Toxicology and Chemistry (SETAC) 26th Annual Meeting, Baltimore, MD, November 13-17, 2005.

Spatz, R.O., ***“Investigation of Methods to Produce Improved Certified Reference Materials for Inorganic Constituents in PM_{2.5} of Urban Particulate Matter,”*** American Association for Aerosol Research (AAAR) 2005 Annual Conference, Austin, TX, October 17, 2005. Invited

Tai S., ***“Method Validation and Determination of 19-Norandrosterone for CCQM-P68 Using Isotope-Dilution Liquid Chromatography Tandem Mass Spectrometry,”*** CCQM Organic Analysis Working Group Meeting, BIPM, Sevres, France, April 4, 2006.

Tai S., ***“Method Development for the Determination of 19-Norandrosterone in Human Urine Using Isotope-Dilution Liquid Chromatography-Tandem Mass Spectrometry,”*** 54th American Society for Mass Spectrometry (ASMS) Conference, Seattle, WA, May 28, 2006.

Tims, M.C., ***“How Unlearning Begins with Asking Good Questions: Teaching Critical Thinking Skills in a Multi-disciplinary Course on Medicinal Plants,”*** Annual Meeting of the International Society for the Scholarship of Teaching and Learning, Washington, DC, November 9, 2006.

Thorn, W.J., ***“New Low Concentration Nitric Oxide SRMs 2737 and 2738,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 2, 2006.

Thorn, W.J., ***“Recent Progress Meeting AIGER Needs for Low Concentration NO SRMs,”*** Ford Motor Co. Allen Park Test Laboratory, Dearborn, MI, May 22, 2006.

Thorn, W.J., ***“Recent Progress Meeting AIGER Needs for Low Concentration NO SRMs,”*** General Motors Proving Ground, Milford, MI, May 23, 2006.

Thorn, W.J., ***“Recent Progress Meeting AIGER Needs for Low Concentration NO SRMs,”*** Daimler-Chrysler Technology Center, Auburn Hills, MI, May 24, 2006.

Thorn, W.J., ***“Recent Progress Meeting AIGER Needs for Low Concentration NO SRMs,”*** U.S. EPA National Fuels and Vehicle Emission Laboratories, Ann Arbor, MI, May 25, 2006.

Turk, G.C., ***“SRMs to Support Calibration Traceability for Inorganic Analysis: Solutions, Metals, and Fossil Fuels,”*** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 12, 2006.

Turk, G.C., ***“A High Performance Method to Establish Traceability of Elemental Calibration Solutions to the NIST SRM 3100 Series,”*** 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 1, 2006.

Vetter, T.W., "**Gravimetric Determination of Calcium in Calcium Carbonate,**" Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 14, 2006.

Vocke, R.D., "**NIST's 3-Tiered Value Assignment Model-The Growing Importance of RMs and Industry's Role in Accelerating RM Production,**" The 31st International Technical Conference on Coal Utilization & Fuel Systems, Clearwater, FL, May 21, 2006.

Vocke, R.D., "**The Evolution of Analyte Certification in Fossil Fuel SRM's at NIST from Sulfur, Mercury, Chlorine and Carbon,**" The 31st International Technical Conference on Coal Utilization & Fuel Systems, Clearwater, FL, May 22, 2006.

Yordy, J., "**Tissue Distribution and Lactational Transfer of Organohalogen Contaminants in Free-Ranging Bottlenose Dolphins: Implications for Biomonitoring,**" Graduate Student Seminar, Medical University of South Carolina, Charleston, SC, January 23, 2006.

Yordy, J., "**Characterization of Complex Organohalogen Mixtures in Bottlenose Dolphins (*Tursiops truncatus*),**" Dissertation Proposal, Hollings Marine Laboratory, Charleston, SC, April 22, 2006.

Yordy, J., "**Factors Influencing Brominated Flame Retardant Mixtures in Free-Ranging Bottlenose Dolphins,**" Graduate Student Seminar, Medical University of South Carolina, Charleston, SC, September 18, 2006.

Yu, L.L., "**Development of a New Frozen Urine SRM for As Speciation,**" 10th International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC, May 1, 2006.

Winchester, M.R., "**Accurate Determinations of Si: Ge Ratios in Semiconductor Materials Using ICP-OES,**" Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2006), Orlando, FL, March 15, 2006.

Wise, S.A., "**International Environmental Specimen Banking (ESB): What Has Happened in 30 Years?**" International Environmental Specimen Banking Symposium, Charleston, SC, November 14, 2005. Invited

Wise, S.A., "**Urban Dust, Human Serum, Whale Blubber, Peanut Butter and Gingko in the Development of Standard Reference Materials for Trace Organic Analysis,**" Division of Laboratory Sciences, Centers for Disease Control and Prevention (CDC), Atlanta, GA, February 10, 2006. Invited

Wise, S.A., "**From Shale Oil to Gingko biloba: The Development of Reference Materials for Organic Measurements,**" Physikalisch-Technische Bundesanstalt (PTB), Braunschweig, Germany, March 31, 2006. Invited

Wise, S.A., “*Certification of Botanical Dietary Supplement Standard Reference Materials – Analytical Challenges*,” 30th International Symposium on High Performance Liquid Phase Separations and Related Techniques (HPLC 2006), San Francisco, CA, June 20, 2006.

Wise, S.A., “*From Shale Oil to Ginkgo biloba: 25 Years of Standard Reference Materials for Organic Measurements*,” 120th AOAC Annual Meeting and Exposition, September 18, 2006. Invited

Wise, S.A., “*Traceability for Chemical Measurements: What This Is, Why It Is Important, and Why You Should Care*,” Interact 2006: Air, Water, and Earth Interact in Perth, Perth, Western Australia, September 26, 2006. Invited

Zdankiewicz, D., “*Distribution and Stratification of Persistent Organic Pollutants in the Blubber of Bottlenose Dolphin (Tursiops truncatus)*,” Graduate Student Research Colloquium, College of Charleston, Charleston, SC, February 25, 2006.

Zeisler, R., “*Uses of NAA in the Development of Standard Reference Materials (SRMs) for Dietary Supplements*,” American Nuclear Society Winter Meeting, Washington, D.C., November 15, 2005. Invited

Zeisler, R., “*Limits and Opportunities of INAA Determinations in Serum and Brain Tissue Samples*,” Methods and Applications of Radioanalytical Chemistry Conference, Kona, Hawaii, April 7, 2006. Invited

3. Cooperative Research Development Agreements (CRADAs) and Consortia

- Nova Scientific, “Development of High Resolution Imaging for Neutrons”

3a. Guest Researchers (GR)/Research Associates (RA)

Mariana Arce Osuna	CENAM – Mexico
Brandi Benford	SAIC
Ronald Lee Bishop	Smithsonian National Museum of Natural History
Ryan Brennan	George Washington University
Aurore Guichard	Lab. de Chimie Analytique Bioinorganique et Environment
Mary Kamande	Louisiana State University
George Lamaze	Self
Yunqiao Li	National Institute of Metrology, China
John Ondov	University of Maryland
David Point	Lab. de Chimie Analytique Bioinorganique et Environment
Karsten Putzbach	University of Tuebingen, Germany
Joseph Rovani, Jr.	Electric Power Research Institute
Lorna Sniegoski	Self
Annapoorna Sriram	Self

John Travis	Self
Brandy Johnson-White	Naval Research Laboratory
Bei Xu	National Institute of Metrology, China
M. James Blackman	Smithsonian Institution
Bruce Feller	Nova Scientific, Inc.
Stephen McGuire	Southern University and A&M College

4. Patent Awards/Applications

1. Downing, R.G., *“High Resolution Position Sensitive Neutron Detector (HRPSND),”* NIST IP Disclosures, IP.com Number IPCOM000137417D, June 19, 2006
2. Downing, R.G., *“Electron Multipliers and Radiation Detectors,”* (Application Publication No. US 2004/0256967 A1), December 23, 2005

5. Measurement Services

5a. SRM Activities

8	k	Bessemer Steel
57	b	Silicon Metal
331	a	Total Mercury in Copper Ore Mill Tails
634	a	Portland Cement
695		Trace Elements in Multi Nutrient Fertilizer
699		Alumina (Reduction Grade)
915	b	Calcium Carbonate
918	b	Potassium Chloride
955	c	Lead in Caprine Blood
966		Toxic Metals in Bovine Blood
999	b	Potassium Chloride
1241	c	Aluminum Alloy 5182
1549		Non-Fat Milk Powder
1566	b	Oyster Tissue
1566	c	Oyster Tissue
1577	c	Bovine Liver
1598	a	Animal Serum
1648	a	Urban Particulate Matter
1649	b	Urban Dust
1680	b	500 $\mu\text{mol/mol}$ Carbon Monoxide
1681	b	1000 $\mu\text{mol/mol}$ Carbon Monoxide
1849		Infant/Adult Nutritional Formula
1947		Lake Michigan Fish Tissue
1974	c	Organics in Mussel Tissue (fresh frozen)
2426		55% Aluminum-Zinc Alloy
2617		500 $\mu\text{mol/mol}$ Carbon Dioxide in Nitrogen
2631	a	3000 $\mu\text{mol/mol}$ Nitric oxide
2635		25 $\mu\text{mol/mol}$ Carbon Monoxide
2639	a	1% mol/mol Carbon Dioxide in Nitrogen

2657	a	2 % mol/mol Oxygen in Nitrogen
2658	a	10 % mol/mol Oxygen in Nitrogen
2682	b	Coal
2685	b	Sulfur and Mercury in Coal
2692	b	Sulfur and Mercury in Coal
2693		Sulfur and Mercury in Coal
2702		Inorganics in Marine Sediment
2703		Sediment for Solid Sampling
2709		San Joaquin Soil
2709	a	San Joaquin Soil
2710	a	Montana I Soil
2711	a	Montana II Soil
2718		Green Petroleum Coke
2719		Calcined Petroleum Coke
2720		Di- <i>n</i> -Butyl Sulfide
2735		800 μ mol/mol Nitric Oxide
2737		500 nmol/mol Nitric Oxide
2738		1000 nmol/mol Nitric Oxide
2745		16% mol/mol Carbon Dioxide in Nitrogen
2765		100 nmol/mol Propane in Air
2775		Sulfur in Foundry Coke
2776		Sulfur in Furnace Coke
2900		Ethanol-Water Solution (nominal 95.6% by mass)
2950-2958		Respirable Alpha Quartz on Filter Media
2960-2967		Respirable Cristobalite on Filter Media
2978	a	Organics in Mussel Tissue (freeze dried)
3101	a	Aluminum Standard Solution Lot No: 060502
3105	a	Beryllium NIST Primary Material NP-Be-2
3108		Cadmium Standard Solution, Lot No. 060531
3109	a	Calcium Standard Solution Lot No: 050825
3111	a	Cesium Standard Solution, Lot No. 050614
3119	a	Gallium Standard Solution Lot No: 890709
3123		Holmium Standard Solution Lot No: 790812
3124	a	Fe Standard Solution Lot No: 051031
3126	a	Iron Standard Solution, Lot No. 051031
3127	a	Lanthanum Standard Solution Lot No: 890402
3131	a	Magnesium Standard Solution, Lot No. 050302
3132		Manganese Standard Solution, Lot No. 050429
3139	a	Phosphorus Standard Solution, Lot No. 060717
3141	a	Potassium Standard Solution, Lot No. 051220
3145	a	Rubidium Standard Solution Lot No: 891203
3154		Sulfur Standard Solution, Lot No. 892205
3156		Tellurium Standard Solution Lot No: 892901
3157	a	Terbium Standard Solution Lot No: 891603
3160	a	Thulium Standard Solution Lot No: 790912
3162	a	Titanium Standard Solution, Lot No. 060808

3164	Uranium Standard Solution Lot No: 891509
3166	a Ytterbium Standard Solution Lot No: 790512
3182	Chloride Anion Standard Solution, Lot No. 060925
3183	Fluoride Anion Standard Solution
3185	Nitrate Anion Standard Solution Lot No: 050517
3190	Electrolytic Conductivity (25 $\mu\text{S}/\text{cm}$), Lot No. 060309
3191	Electrolytic Conductivity Lot No: 050403
3192	Electrolytic Conductivity (500 $\mu\text{S}/\text{cm}$), Lot No. 031121
3193	Electrolytic Conductivity (1000 $\mu\text{S}/\text{cm}$), Lot Nos. 032608 and 060125
3194	Electrolytic Conductivity (10,000 $\mu\text{S}/\text{cm}$), Lot No. 011511
3199	Electrolytic Conductivity (5 $\mu\text{S}/\text{cm}$), Lot No. 190905
3245	Ephedra Dietary Supplement Suite
3246	<i>Ginkgo biloba</i> (Leaves)
3247	<i>Ginkgo biloba</i> Extract
3248	<i>Ginkgo biloba</i> Tablets
3280	Multivitamin/Multimineral Supplement

5b. New Primary Standards

M. E. Kelley

Suite of 15 SO_2 primary standards from 3000 $\mu\text{mol}/\text{mol}$ to 5 % mol/mol

W.R. Miller

0.05 % mol/mol 0.5 % mol/mol, and 1 % mol/mol CO in nitrogen

15 % mol/mol and 30 % mol/mol He in nitrogen

5 % mol/mol CO_2 In nitrogen

W.J. Thorn

Suite of 17 gravimetric primary standards containing argon, helium, hydrogen, and oxygen in nitrogen for NASA Kennedy Space Center

Suite of 60 primary standards containing NO at 50 to 5000 $\mu\text{mol}/\text{mol}$ completed (2005 through 2006)

Suite of 4 primary standards containing NO at 500 to 1100 nmol/mol

Analytical services have been provided for the following

- Advanced Micron Devices
- AIGER Consortia
- Air Force Technical Applications Center
- Argonne National Laboratory
- Cornell University
- Corning Glass Works
- Dow Chemical
- E.I. DuPont de Nemours & Co., Inc.
- Institute of Isotope and Surface Chemistry - Budapest
- Johns Hopkins University

- NASA-Goddard Space Flight Center
- NASA Kennedy Space Flight Center
- Neutek, Inc.
- NIST Center for Neutron Research
- Oak Ridge National Laboratory
- Oregon State University
- Pacific Northwest National Laboratory
- Penn State University
- Proportional Technologies, Inc.
- Rutgers University
- Sandia National Laboratories
- Southern University
- Texas Instruments
- Thomas Jefferson National Accelerator Laboratory
- Tufts University
- University of California – Berkeley
- University of Delaware
- University of Erlangen-Nürnberg
- University of North Carolina
- University of North Texas
- University of Puerto Rico
- U.S. Army Research Laboratory
- U.S. Environmental Protection Agency
- United States Navy
- X-Ray Optical Systems, Inc.

Gas NTRMs (44) were certified in collaboration with the following companies:

Airgas Specialty Gases (BOC)	(15)
Linde Gas LLC (AGA)	(08)
Scott Specialty Gases	(18)
Specialty Gas Products	(01)
Spectra Gases	(02)

NTRM (29) Re-Certification reports:

Airgas (BOC)	(21)
Linde Gas LLC (AGA)	(01)
Scott Specialty Gases	(06)
Spectra Gases	(01)

NTRM Prime:

None

6. SRD Activities

None

7. Calibrations

AirGas, Riverton, N.J.	14
Florida Dept. of Environmental Protection, Tallahassee, FL	1
Ford Motor Co., Allen Park, MI	5
Linde Gas LLC, Maumee, OH	25
Matheson Tri-Gas, Twinsburg, OH	3
Prax Air Distribution, Los Angeles, CA	30
Scott Specialty Gases, Inc., San Bernadino, CA	1
Scott Specialty Gases, Inc., Troy, MI	13
Scott-Marrin, Inc., Riverside, CA	12
Spectra Gas Inc., Alpha, N.J.	7
Wisconsin Department of Natural Resources	1

Commercial Ozone Instrument Calibrations have been provided for the following:

- NASA Langley Research Center
- Teledyne API
- Thermo Electron Nippon
- Wedeco Ozone Technologies
- IN USA, Inc.

NIST Standard Reference Photometer (SRP) Certifications/Re-certifications have been provided for the following:

- Instituto do Ambiente, Portugal; SRP 25 validation, control upgrade and training
- Hong Kong EPD, Hong Kong S.A.R., China; SRP 34 validation
- Department of Environment and Conservation, New South Wales, Australia; SRP 21 Bias upgrade and validation
- U.S. EPA; SRP 7 validation.

8. Committee Assignments

P.R. Becker

Fort Johnson Five (Committee on inter-organizational activities and policies at the Fort Johnson Campus, Charleston, SC)
Hollings Marine Laboratory Science Board
HML Cell and Molecular Biology Research Planning Committee
Dolphin Advisory Committee for the Florida Protect Wild Dolphins Program
Local Planning Committee, 10th International Symposium on Biological and Environmental Reference Materials (BERM 10)
Planning Committee, International Environmental Specimen Bank Symposium (Chair)
Arctic Monitoring and Assessment Programme's POPs Expert Working Group

CSTL ZP Stature Document Team

J. Brown Thomas

NIST Internal Review Board

D.M. Bunk

Area Committee on Clinical Chemistry and Toxicology, Clinical Laboratory Standards Institute (NIST representative)

Subcommittee on Validation and Implementation of Commutable Reference Materials for Laboratory Medicine, Clinical Laboratory Standards Institute (Advisor)

Committee for the Standardization of Markers of Cardiac Damage, International Federation of Clinical Chemistry (Advisor)

Scientific Division, International Federation of Clinical Chemistry (Consultant)

Protein Review Team, Joint Committee for Traceability in Laboratory Medicine (JCTLM)

J. Camara

Washington Chromatography Discussion Group (Social committee)

S.J. Christopher

Fort Johnson Marine Science Seminar Committee (Chair)

Local Planning Committee, 10th International Symposium on Biological and Environmental Reference Materials (BERM 10)

Fort Johnson Marine Science Seminar Series Committee (Chair)

HML Environmental Chemistry Committee

R.D. Day

Ecological Responses and Outreach Subcommittee, National Atmospheric Deposition Program

W.D. Dorko

ASTM D22, Sampling and Analyses of Atmospheres

ASTM SC.03, Ambient Atmospheres

R.G. Downing

FCR/Academy of Chemists and Biochemists, University of Missouri

International Union of Pure and Applied Chemists (IUPAC) (Fellow)

American Nuclear Society, Executive Committee – Isotopes and Radiation Division

D.L. Duewer

CLSI Area Committee on Evaluation Protocols

CLSI C51 Subcommittee on Expression of Uncertainty of Measurement

CLSI Working Group on Revision of EP9-A3, Method Comparison and Bias Estimation Using Patient Samples (Chair)

CLSI Working Group on Validation of EP15-A2 Companion Software, User Verification of Performance for Precision and Trueness (Chair)

Joint Committee for Traceability in Laboratory Medicine (JCTLM), WG-I Quality System
Team
North American Chapter of the International Chemometrics Society
Analytical Chemistry Division Safety Officer

R.R. Greenberg

American Nuclear Society, Executive Committee – Isotopes and Radiation Division
American Nuclear Society, Executive Committee – Biology and Medicine
Division
International Committee on Activation Analysis
International Scientific Committee on Nuclear Analytical Methods in the Life
Sciences

F.R. Guenther

CCQM Working Group on Gas Standards
ASTM D22, Sampling and Analysis of Atmospheres
ASTM SC.03, Ambient Atmosphere
ASTM SC05, Indoor Air
ASTM D22 member, Sampling and Analysis of Environments
SAE International

J.M. Keller

Secretary for College of Charleston's Graduate Program in Marine Biology

E. Kilpatrick

HML Communications Committee

J. Kucklick

HML Science Board (Alternate)
Nominations Committee for College of Charleston's Graduate Program in Marine Biology
Marine Biology Graduate Council for the College of Charleston Fort Johnson Library
Committee

R.M. Lindstrom

NIST Ionizing Radiation Safety Committee (Vice-Chair)
NCNR Safety Evaluation Committee (Chair)
k0 Users Workshop International Scientific Committee
American Nuclear Society, ANS representative to the AAAS Section Committee for
Chemistry – Isotopes and Radiation Division (Vice Chair)
Technical Program Committee, International Conference on Methods and
Applications of Radioanalytical Chemistry
International Committee on Activation Analysis: Site Selection Subcommittee (Chair)
Reviewers Committee of *Nuclear Engineering and Technology*
Department of Nuclear Engineering, North Carolina State University (Adjunct Professor)

K.A. Lippa

Analytical Chemistry Division Safety Committee

S.E. Long

Joint Committee for Traceability in Laboratory Medicine (JCTLM), Electrolytes Review Team

E.A. Mackey

ACD QS Committee (Group Quality Manager)
International Scientific Committee on Nuclear Analytical Methods in the Life Sciences
RML on NIST IRSC and NCNR SEC (Alternate)

W. MacCrehan

ASTM E54.01 Homeland Security Applications: CBRNE Sensors and Detectors
ASTM WK8290 "Standard Practice to Verify Minimum Acceptable Performance of Trace Explosive Detectors" (Task group chairperson)

W.R. Miller

AIGER Direct Measurement of Non-Methane Hydrocarbon Group

B.C. Nelson

Analytical Chemistry Division Safety Committee

D. L. Poster

Interagency Working Group on Nanotechnology Environmental and Health Implications
TSCA Interagency Agency Testing Committee, U.S. EPA Methods Subgroup of the Network Coordinating Group, Integrated Consortium of Laboratory Networks
CSTL Summer Undergraduate Research Fellowship Program (Director)
Division 839 Radiation Materials Custodian
Analytical Chemistry Division Quality Manager
International Society for Polycyclic Aromatic Compounds (Secretary)

K.W. Pratt

Clinical and Laboratory Standards Institute (formerly NCCLS), Area Committee on Clinical Chemistry and Toxicology, Subcommittee on Reagent Water
Danish Primary Laboratory for Electrochemistry Evaluation Committee (Review Panel Member)
CCQM Inorganic Analysis Working Group (IAWG)
CCQM Electrochemical Analysis Working Group (EAWG)
CCQM, Working Group on Key Comparisons and CMC Quality
IUPAC pH Working Group
ASTM Committee D19.05, Trace Inorganics in Water

R.S. Pugh

Hollings Marine Lab Safety, Environmental Compliance, and Security Committee
Hollings Marine Laboratory Biosafety Committee

Education and Training Committee, International Society for Biological and Environmental Repositories (ISBER)

G.C. Rhoderick

Steering/Planning Committee, International Halocarbon in Air Comparison Experiment (IHALACE)

C.A. Rimmer

Washington Chromatography Discussion Group, President

M.M. Schantz

Washington Chromatography Discussion Group, Co-Chair
International Society for Polycyclic Aromatic Compounds (Board of Directors)

J.R. Sieber

ASTM E01, Committee on Analysis of Metals, Ores and Related Materials
Subcommittee E01.20 Fundamental Practices and Measurement Traceability
Subcommittee E01.21 on Laboratory Quality
Subcommittee E01.22 on Fundamental Practices
ASTM F40 Declarable Substances in Materials
IEC TC111 WG3 Test Methods for Electrotechnical Products

K.E. Sharpless

Analytical Chemistry Division Quality Manager
Food Nutrition Methods Committee, AOAC International (Chair)
Official Methods Board, AOAC International (Member)
Dietary Supplements Task Group, AOAC International, (Member)
Executive Committee, AOAC Technical Division on Reference Materials (Secretary)
Vitamin Review Team, JCTLM Working Group 1 (Leader)
Quality Systems Team, JCTLM Working Group 1 (Member)
NIH Dietary Supplement Ingredient Database Working Group
Product Quality Working Group, NIH National Center for Complementary and Alternative Medicine (Member)
NSF International Joint Committee on Dietary Supplements
United States Pharmacopeia Advisory Panel on Botanicals
Washington Editorial Review Board (Member and Vice-Chair)

R. Oflaz Spatz

Analytical Chemistry Division Safety Committee

W.J. Thorn

ASTM F29.01.11 Nitric Oxide Devices

S.S. VanderPol

Hollings Marine Lab Safety, Environmental Compliance, and Security Committee

M.J. Welch

Joint Committee for Traceability in Laboratory Medicine (JCTLM), Working Group 1,
Metabolites (Substrates Review Team Leader)

E. White V

Validation Group for the Updating of the Organization for the Prohibition of Chemical
Weapons Central Analytical Database (Mass Spectrometry Coordinator)
Temporary Working Group on Sampling and Analysis of the Science Advisory Board of
the Organization for the Prohibition of Chemical Weapons
NIST Museum Committee

M.R. Winchester

ISO TC201 SC8 (Glow Discharge Spectrometry): U.S. Delegate
ISO TC201 SC8 WG1 (Characterization of Coatings): U.S. Expert
ISO TC201 SC1 (Terminology); U.S. Delegate
ASTM E42.92 (ISO US TAG TC201)

S.A. Wise

Scientific Committee, 10th International Symposium on Biological and Environmental
Reference Materials (BERM 10) (Chair)
Planning Committee, International Environmental Specimen Bank Symposium (Co-Chair)
Trans-NIH/Agency ODS Dietary Supplement Working Group

Lee L. Yu

Joint Committee for Traceability in Laboratory Medicine (JCTLM), Nonelectrolyte Metals
(Review Team Leader)
Analytical Chemistry Division Safety Committee

R. Zeisler

Committee on the Environment and Natural Resources, Air Quality Research
Subcommittee (Member)
American Nuclear Society, Executive Committee – Biology and Medicine Division
American Nuclear Society, Executive Committee – Isotopes and Radiation Division
American Nuclear Society, TC Metrology in Nuclear Methods of Analysis – Biology and
Medicine Division
International Scientific Committee on Nuclear Analytical Methods in the Life
Sciences
Technical Program Committee – Methods and Applications of Radioanalytical
Chemistry
International Advisory Board 14th Radiochemical Conference
International Committee on Activation Analysis (Secretary)

9. Editorships

P.R. Becker

Journal of Environmental Monitoring, Special Issue on Environmental Specimen Banking (Guest Editor)

D.L. Poster

Polycyclic Aromatic Compounds (Editorial Advisory Board)

R.S. Pugh

Cell Preservation Technology (Editorial Advisory Board)

L.C. Sander

Journal of Chromatography (Editorial Advisory Board)

S.A. Wise

Analytical and Bioanalytical Chemistry (Editor)

Polycyclic Aromatic Compounds (Topical Editor)

Accreditation and Quality Assurance (Editorial Board)

Journal of Environmental Monitoring, Special Issue on Environmental Specimen Banking (Guest Editor)

10. Seminars

October 18, 2005

“Fabrication of Biofunctional Thin Films via Living-Radical Photopolymerizations,” Andrew T. Metters, Clemson University (Sponsor: B. Hutchison)

October 31, 2005

“The Chemical Ecology of *Hydrastis canadensis* L. (Ranunculaceae): Effects of Root Isoquinoline Alkaloids on *Fusarium oxysporum*, an *Hydrastis Endophyte*,” Michael C. Tims, University of Maryland (Sponsor: L. Sander)

November 21, 2005

“Improved Methods of Tandem Mass Spectrometry for Proteomics Analysis in rf Trapping Mass Analyzers,” Connell Cunningham, University of North Carolina Chapel Hill (Sponsor: S. Wise)

December 7, 2005

“Fifty-Five Years of Rudjer Boskovic Institute- Continuous Change,” Berserka Raspor, Rudjer Boskovich Institute, Zagreb, Croatia (Sponsor: P. Becker)

January 13, 2006

“An Independent Laboratory Perspective of NIST,” Timothy McGrady, IMR Test Labs, Ithaca, NY (Sponsor: G. Turk)

January 17, 2006

“Enhanced Recovery of Intact Proteins with Ultrahigh Pressure Liquid Chromatography,” John Eschelbach, University of North Carolina at Chapel Hill (Sponsor: M. Welch)

January 31, 2006

“Coupling Capillary Electrophoresis to Mass Spectrometry for On-Line CE-Microreactor-CE-MS-MS Analyses of Proteins,” Regine M. Schoenherr, University of Washington (Sponsor: M. Welch)

February 8, 2006

“Heavy Metal Pesticide Contamination of Museum Objects,” Aaron Shugar, Smithsonian Center for Materials Research and Education, Jessica Johnson, National Museum for the American Indian and Jane Sirios, Canadian Conservation Institute (Sponsor: J. Sieber)

February 23, 2006

“Integrated Nano/Microfluidic Systems for Nanobiotechnology,” Jong Wook Hong, Auburn University (Sponsor: L. Locascio)

February 28, 2006

“Biochemometrics: A Novel Application for Herbal Standardization,” Ryan J. Case, University of Illinois at Chicago (Sponsor: L. Sander)

March 3, 2006

“Single Molecule Spectroscopy in Submicrometer Fluidic Channels,” Samuel Stavis, Cornell University (Sponsor: L. Locascio)

March 21, 2006

“A Study on the Changes of Ribosomes as a Result of Acquired Multi-drug Resistance in MCF-7 Drug Susceptible and Drug Resistant Cell Lines,” Faith Hays, University of Maryland at College Park (Sponsor: M. Welch)

May 16

“Investigation of the Phenomena of Cold Vapor Atoms in Aqueous Solution: Atoms in Bubbles,” John Molloy, University of Texas at Austin, (Sponsor: R. Greenberg)

May 17

“An Easier Way to Calculate Uncertainty: The Kragten Spreadsheet,” T. Vetter, NIST, Gaithersburg, MD (Sponsor: S. Wise)

May 18

“Investigating the Possibility of N = 82 Shell Quenching in Neutron-Rich Nuclides: The Decay of ^{120}Rh into Levels of ^{120}Pd ,” Bryan Tomlin, Michigan State University (Sponsor: R. Greenberg)

June 8, 2006

“Transfer of Explosives to Human Hair,” Kishore Marimganti, University of Rhode Island (Sponsor: W. MacCrehan)

July 7

“Catalytically Induced Electrokinetics for Motors and Micropumps,” Walter Paxton, Penn State University (Sponsor: L. Locascio)

11. Conferences/Workshops/Sessions Sponsored/Co-Sponsored

November 13-16, 2005

International Environmental Specimen Bank Symposium, Charleston, SC (P.R. Becker)

December 8-16, 2005

Workshop on NBSB/MESB Collection and Processing for the Marine Mammal Health and Response Program (MMHSRP), Southwest Stranding Network, Southwest Fisheries Science Center, La Jolla, CA, (M. Ellisor)

March 12, 2006

Standard Reference Materials (SRMs) for /environmental, Food, Metal, Fossil fuel, and Forensic DNA Analysis, Workshop at Pittcon 2006, Orlando, FL (S. Wise)

March 14, 2006

NTRM Producers Workshop, Pittcon 2006, Orlando, FL (W. Dorko and F. Guenther)

May 1-5, 2006

Tenth International Symposium on Biological and Environmental Reference Materials (BERM 10), Charleston, SC (S. Wise)

September 6, 2006

Workshop on NBSB/MESB Collection and Processing for Marine Mammal Health and Stranding Response Program, National Marine Fisheries Service, Panama City, FL, (M. Ellisor and A. Moors)

12. Awards

David Duewer received **Recognition of Achievement** for outstanding contributions in establishing a quality system for the Joint Committee for Traceability in Laboratory Medicine (JCTLM) Database for Reference Materials and Reference Measurement Procedures (January 2006).

Jim Norris received the NIST **Judson C. French Award** for his outstanding work in continued development and dissemination of the NIST Standard Reference Photometer (SRP) for ozone measurements (December 2005).

John R. Sieber received the **B.F. Scribner Award**, Committee on E01 on Analytical Chemistry for Metals, Ores, and Related Materials in recognition of his efforts supporting subcommittees in many areas including more accurate and precise standard test methods and guides with his statistical expertise, improved communications between NIST and ASTM, and expert knowledge of the XRF spectrometry and associated emission spectrometry fields (November 2005).

Heather Stapleton, Nathan Dodder, Michele Schantz, And Stephen Wise received the *Environmental Science and Technology's* first runner-up environmental science paper of 2005 for their paper on "Polybrominated Diphenyl Ethers in House Dust and Clothes Dryer Lint," *Environ. Sci. Technol.*, 39(4), 925-931 (2005).

Michael J. Welch received the 2006 Analytical Chemistry Division Chemical Metrology Award for outstanding contributions in the development of definitive analytical methods and standard reference materials to support chemical metrology in clinical medicine (October 2005).

Stephen A. Wise received the 2006 Harvey W. Wiley Award from AOAC International for significant contributions for advancements in the analysis of organic compounds and development of reference materials in the environmental, clinical, food and nutrition fields, in addition to important contributions in chemical metrology (September 2006).

13. Intercomparisons

CCQM-K18	Results of Key Comparison on pH (Carbonate Buffer)
CCQM-K27.2	Ethanol in Water
CCQM-K41	H ₂ S in Air/Nitrogen
CCQM-K47	Volatile Organic Compounds in Solvent
CCQM-K49/P85	Essential and Toxic Elements in Bovine Liver
CCQM-K52	CO ₂ in Air
CCQM-K53	O ₂ in Nitrogen Preparative
CCQM-K54	<i>n</i> -Hexane in Nitrogen
CCQM-P66	Determination of Cu and Cd (Candidate SRM 695 Trace Elements in Multi-Nutrient Fertilizer)
CCQM-P73	NO in Nitrogen
CCQM-P75	Measurement of $\delta^{34}\text{S}$ in Methionine
CCQM-P77 a and b	Cortisol and Progesterone in Serum
CCQM-P78	Nutrients in Adult/Infant Formula
CCQM-P86	Analysis of Total Se and Selenomethionine in Pharmaceutical Supplements