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Place/Date of Birth: Scottsdale, Arizona, USA on July 31, 1977

Education

1998 B.A., Chemistry, Macalester College, St. Paul, MN
1999 M.S., Chemistry, Northwestern University, Evanston, IL
2003 Ph.D., Chemistry, Northwestern University, Evanston, IL
 Thesis: Fundamentals and Applications of Nanoparticle Optics and Surface-Enhanced Raman Scattering

Employment

2015 – Elmore H. Northey Professor of Chemistry
2014 – Professor at the University of Minnesota, Department of Chemistry
2010 - 2014 Associate Professor at the University of Minnesota, Department of Chemistry
2007 - 2009 McKnight Land-Grant Assistant Professor at the University of Minnesota, Department of Chemistry
2005 - 2010 Assistant Professor at the University of Minnesota, Department of Chemistry and in the Graduate Faculty of Chemical Physics
2003 - 2005 NRSA Post-Doctoral Fellow at the University of North Carolina at Chapel Hill, Department of Chemistry. Advisor: R. Mark Wightman
1998 - 2003 Graduate Student and Teaching Assistant at Northwestern University, Department of Chemistry. Advisor: Richard P. Van Duyne

Awards and Recognition

2017 Finalist for 2017 Blavatnik National Awards for Young Scientists
 Top 10 “Giants of Nano” on *Analytical Scientist’s* Power List
2016 *Analytical Scientist’s* Power List
2015 Advising and Mentoring Award from the UMN Graduate and Professional Student Assembly
 Sara Evans Faculty Woman Scholar/Leader Award

- 2014 One of the Top 100 Inspiring Women in STEM from "Insight into Diversity" magazine
Taylor Award for Distinguished Research from the University of Minnesota
Featured on *Analytical Scientist's* "Top 40 Under 40" Power List
- 2013 Kavli Foundation Emerging Leader in Chemistry Lecture
University of Minnesota "Outstanding Postdoctoral Mentor"
- 2012 Pittsburgh Conference Achievement Award
One of "Brilliant 10" chosen by *Popular Science* magazine
- 2011 Joseph Black Award from the Royal Society of Chemistry
- 2010 Alfred P. Sloan Fellow
Arthur F. Findeis Award for Achievements by a Young Analytical Scientist from the American Chemical Society Division of Analytical Chemistry
- 2009 Society for Electroanalytical Chemistry Young Investigator Award
Camille and Henry Dreyfus Teacher-Scholar Award
- 2008 NIH New Innovator
3M Nontenured Faculty Grant
- 2007 Delegate for Japan-U.S. Young Researchers Exchange on Nanotechnology
University of Minnesota McKnight Land-Grant Assistant Professor
3M Nontenured Faculty Grant
- 2006 Kinship Foundation Searle Scholar
3M Nontenured Faculty Grant
National Science Foundation CAREER Award
- 2005 Victor K. LaMer Award from the American Chemical Society Division of Colloid and Surface Science
- 2004 Ruth L. Kirschstein National Research Service Award Postdoctoral Fellowship from the National Institutes of Health
Nobel Laureate Signature Award for Graduate Education in Chemistry from the American Chemical Society
- 2003 Award for Excellence in Graduate Research from Northwestern University
Nanoscale Science and Engineering Center International Travel Grant from Northwestern University
- 2002 Kirkbright Bursary from the Association of British Spectroscopists
Presidential Fellowship from Northwestern University
Graduate Student Gold Award from the Materials Research Society

Peer-Reviewed Publication List (149), h-index = 44

149. Carbon Dots: A Modular Activity to Teach Fluorescence and Nanotechnology at Multiple Levels, Pham, S.; Kuether, J.; Gallagher, M.; Hernandez, R.; Williams, D.; Zhi, B.; Mensch, A.; Hamers, R.; Rosenzweig, Z.; Fairbrother, D.; Krause, M.; Feng, Z.; Haynes, C.L. *J. Chem. Ed.*, 94(8) 1143-1149 (2017).
148. Establishing the Overlap of IONP Quantification with Echo and Echoless MR Relaxation Mapping, Ring, H.L.; Zhang, J.; Klein, N.D.; Eberly, L.; Haynes, C.L.; Garwood, M. *Magn. Res. Med.*, doi:10.1002/mrm.26800 (2017).
147. The Effect of Filtered Nanoparticles on Changing Gas Filtration Efficiency of Granular Activated Carbons, Kim, C.; Lee, H.; Juelfs, A.; Haynes, C.L.; Pui, D.Y.H. *Carbon*, 121 63-71 (2017).
146. Oxygen Sensing with Perfluorocarbon-Loaded Ultraporous Mesostructured Silica Nanoparticles, Lee, A.; Gee, C.; Weegman, B.; Einstein, S.; Juelfs, A.; Ring, H.; Hurley, K.; Egger, S.; Swindlehurst, G.; Garwood, M.; Pomerantz, W.; Haynes, C.L. *ACS Nano*, 11(6) 5623-5632 (2017).
145. Stereochemistry- and Concentration-Dependent Effects of Phosphatidylserine Enrichment on Platelet Function, Meyer, A.F.; Gruba, S.M.; Kim, D.; Meyer, B.M.; Koseoglu, S.; Dalluge, J.J.; Haynes, C.L. *Biochim. Biophys. Acta – Biomem.*, 1859(8) 1381-1387 (2017).
144. Improved Tissue Cryopreservation using Inductive Heating of Magnetic Nanoparticles, Manuchehrabadi, N.; Gao, Z.; Zhang, J.; Ring, H.L.; Shao, Q.; Liu, F.; McDermott, M.; Fok, A.; Rabin, Y.; Brockbank, K.G.M.; Garwood, M.; Haynes, C.L.; Bischof, J. *Science Trans. Med.*, 9, eaah4586 (2017).
143. A Versatile Microfluidic Platform for the Study of Cellular Interactions between Endothelial Cells and Neutrophils, Wu, X.; Newbold, M.A.; Gao, Z.; Haynes, C.L. *Biochim. Biophys. Acta – Gen. Subj.*, 1861(5) 1122-1130 (2017).
142. A Finite-element Model of Granular Serotonin Exocytosis, Datta, A.; Haynes, C.L.; Barocas, V. *Integrat. Bio.*, 9 248-256 (2017).
141. Influence of Nickel Manganese Cobalt Oxide Nanoparticle Composition on Toxicity toward *Shewanella oneidensis* MR-1: Redesigning for Reduced Biological Impact, Gunsolus, I.L.; Hang, M.N.; Hudson-Smith, N.V.; Buchman, J.T.; Bennett, J.W.; Conroy, D.; Mason, S.E.; Hamers, R.J.; Haynes, C.L.; *Env. Sci.:Nano*, 4 636-646 (2017).
140. A Growth-based Bacterial Viability Assay for Interference-free and High-throughput Toxicity Screening of Nanomaterials, Qiu, T.A.; Nguyen, T.; Hudson-Smith, N.V.; Clement, P.; Forester, D.-C.; Frew, H.; Hang, M.; Murphy, C.J.; Hamers, R.J.; Feng, Z.V.; Haynes, C.L.; *Anal. Chem.*, 89(3) 2057-2064 (2017).
139. Quantification of Free Polyelectrolytes Present in Colloidal Suspension Reveals Source of Toxic Responses for Polyelectrolyte-wrapped Gold Nanoparticles, Qiu, T.A.; Torelli, M.; Vartanian, A.; Rackstraw, N.; Buchman, J.; Jacob, L.; Murphy, C.J.; Hamers, R.J.; Haynes, C.L.; *Anal. Chem.*, 89(3) 1823-1830 (2017).
138. Research Highlights: Speciation and Transformations of Silver Released from Ag NPs in Three Species, Hudson-Smith, N.V.; Clement, P.L.; Brown, R.P.; Krause, M.O.P.; Pedersen, J.S.; Haynes, C.L. *Env. Sci.: Nano*, 3 1236-1240 (2016). *Not peer reviewed
137. A Mechanistic Study of TiO₂ Nanoparticle Toxicity on *Shewanella oneidensis* MR-1 with UVA Illumination: Bacterial Growth, Riboflavin Secretion, and Gene Expression, Qiu, T.A.; Meyer, B.M.; Christenson, K.G.; Klaper, R.D.; Haynes, C.L.; *Chemosphere*, 168 1158-1168 (2017).
136. Checkpoints for Preliminary Identification of Small Molecules found Enriched in Autophagosomes and Activated Mast Cell Secretions Analyzed by Comparative UPLC/MSe, Satori, C.P.; Ramezani, M.; Koopmeiners, J.S.; Meyer, A.F.; Rodriguez-Navarro, J.A.; Kuhns, M.M.; Taylor, T.H.; Haynes, C.L.; Dalluge, J.J.; Arriaga, E.A. *Anal. Methods*, 9, 46-54 (2017).
135. Ion Mobility based Quantification of Surface Coating Dependent Binding of Serum Albumin to Superparamagnetic Iron Oxide Nanoparticles, Jeon, S.; Obberreit, D.; Van Schooneveld, G.; Gao, Z.; Bischof, J.; Haynes, C.L.; Hogan Jr., C. *ACS Appl. Mat. Inter.*, 8(37), 24482-24490 (2016).

134. Analysis of Neuropeptide-Induced Mast Cell Degranulation and Characterization of Signaling Modulation in Response To IgE Conditioning, Manning, B.; Gruba, S.; Meyer, A.F.; Haynes, C.L. *ACS Chem. Bio.*, 11(11), 3077-3083 (2016).
133. Quantifying Intra- and Extracellular Aggregation of Iron Oxide Nanoparticles and its Influence on Specific Absorption Rate, Jeon, S.; Hurley, K.R.; Bischof, J.C.; Haynes, C.L.; Hogan, C.J. *Nanoscale*, 8 16053-16064 (2016).
132. Research Highlights: Unveiling the Mechanisms Underlying Nanoparticle-induced ROS Generation and Oxidative Stress, Qiu, T.A.; Gallagher, M.J.; Hudson-Smith, N.V.; Wu, J.; Krause, M.O.P.; Fortner, J.D.; Haynes, C.L. *Environ. Sci.: Nano*, 3 940-945 (2016). *Not peer reviewed
131. Super-Resolution Imaging for Monitoring Cytoskeleton Dynamics, Finkenstaedt-Quinn, S.; Qiu, T.A.; Shin, K.; Haynes, C.L. *Analyst*, 141, 5674-5688 (2016).
130. Quantification and Biodistribution of Iron Oxide Nanoparticles in the Primary Clearance Organs of Mice using T1 Contrast for Heating, Zhang, J.; Ring, H.L.; Hurley, K.R.; Shao, W.; Carlson, C.S.; Idiyatullin, D.; Haynes, C.L.; Bischof, J.C.; Garwood, M. *Mag. Res. in Med.*, in press, DOI: 10.1002/mrm.26394.
129. In Solution SERS Sensing using Mesoporous Silica-coated Gold Nanorods, Gao, Z.; Burrows, N.D.; Valley, N.A.; Schatz, G.C.; Murphy, C.J.; Haynes, C.L. *Analyst*, 141 5088-5095 (2016).
128. Surface-Enhanced Raman Spectroscopy Detection of Ricin B Chain in Human Blood, Campos, A.R.; Gao, Z.; Blaber, M.G.; Huang, R.; Schatz, G.C.; Van Duyne, R.P.; Haynes, C.L. *J. Phys. Chem. C*, 120(37) 20961-20969 (2016).
127. SERS Detection of Ricin B-Chain via N-Acetyl-Galactosamine Glycopolymers, Szlag, V.M.; Styles, M.; Madison, L.; Campos, A.; Wagh, B.; Sprouse, D.; Schatz, G.C.; Reineke, T.M.; Haynes, C.L. *ACS Sensors*, 1(7) 842-846 (2016).
126. Predictable Heating and Positive MRI Contrast from a Mesoporous Silica-Coated Iron Oxide Nanoparticle, Hurley, K.R., Ring, H.L., Etheridge, M., Zhang, J., Gao, Z., Shao, Q., Klein, N., Szlag, V.M., Chung, C., Reineke, T.M., Garwood, M., Bischof, J., Haynes, C.L. *Molec. Pharm.*, 13(7) 2172-2183 (2016).
125. Impact of Nanoscale Lithium Nickel Manganese Cobalt Oxide (NMC) on the Bacterium *Shewanella oneidensis* MR-1, Hang, M., Gunsolus, I., Wayland, H., Melby, E., Mensch, A., Hurley, K., Pedersen, J., Haynes, C.L., Hamers, R. *Chem. Mater.*, 28(4) 1092-1100 (2016).
124. Variations in Fusion Pore Formation in Cholesterol-Treated Platelets, Finkenstaedt-Quinn, S., Gruba, S., and Haynes, C.L. *Biophys. J.*, 110(4) 922-929 (2016).
123. Quantifying Gold Nanoparticle Concentration in a Dietary Supplement Using Smartphone Colorimetry and Google Applications, Campos, A.R., Knutson, C.M., Knutson, T.R., Mozzetti, A.R., Haynes, C.L., Penn, R.L. *J. Chem. Ed.*, 93(2) 318-321 (2016).
122. Analytical Aspects of Nanotoxicology, Gunsolus, I.L. and Haynes, C.L. *Anal. Chem.*, 88(1) 451-479 (2016).
121. Characterization of Magnetic Nanoparticles in Biological Matrices, Hurley, K., Ring, H., Kang, H., Klein, N., and Haynes, C.L. *Anal. Chem.*, 87(23) 11611-11619 (2015).
120. 2D-IR Spectroscopy of Porous Silica Nanoparticles: Measuring the Distance Sensitivity of Spectral Diffusion, Huber, C., Egger, S., Spector, I., Juelfs, A., Haynes, C.L., Massari, A. *J. Phys. Chem. C*, 119(45) 25135-25144 (2015).
119. Gene Expression Response of the Gram-negative Bacterium *Shewanella oneidensis* and the Water Flea *Daphnia magna* Exposed to Functionalized Gold Nanoparticles, Qiu, T. A., Bozich, J. S., Lohse, S. E., Vartanian, A. M., Jacob, L. M., Meyer, B. M., Gunsolus, I. L., Niemuth, N. J., Murphy, C. J., Haynes, C. L., Klaper, R. D. *ES:Nano*, 2 615-629 (2015).
118. Dynamic Silver Speciation as Studied with Fluorous-phase Ion-selective Electrodes: Effect of Natural Organic Matter on the Toxicity and Speciation of Silver, Mousavi, M.P.S., Gunsolus, I., Perez de Jesus, C.E., Lancaster, M., Hussein, K., Haynes, C.L., Buhlmann, P. *Sci. Total Environ.*, 537 453-461 (2015).

117. Lipopolysaccharide Density and Structure Governs the Extent and Distance of Nanoparticle Interaction with Actual and Model Bacterial Outer Membranes, Jacobson, K., Gunsolus, I., Kuech, T., Troiano, J., Melby, E., Lohse, S., Hu, D., Chrisler, W., Murphy, C., Orr, G., Geiger, F., Haynes, C.L., Pedersen, J.A. *ES & T*, 49(17) 10642-10650 (2015).
116. Are We There Yet? Biases in Hiring Women Faculty Candidates [editorial], Haynes, C.L. and Sweedler, J. *Anal. Chem.*, 87(14) 6989-6989 (2015).
115. Impacts of Gold Nanoparticle Charge and Ligand Type on Surface Binding and Toxicity to Gram-Negative and Gram-Positive Bacteria, Feng, Z.V., Gunsolus, I.L., Qiu, T.A., Hurley, K.R., Nyberg, L.H., Frew, H., Johnson, K.P., Vartanian, A.M., Jacob, L.M., Lohse, S.E., Torelli, M.D., Hamers, R.J., Murphy, C.J., and Haynes, C.L. *Chem. Sci.*, 6 5186-5196 (2015).
114. Recapitulation of in vivo-like Neutrophil Transendothelial Migration using a Microfluidic Platform, Wu, X., Newbold, M. and Haynes, C.L. *Analyst*, 140 5055-5064 (2015).
113. Effects of Humic and Fulvic Acids on Silver Nanoparticle Stability, Dissolution, and Toxicity, Gunsolus, I.L., Mousavi, M.P.S., Hussein, K., Buhlmann, P., and Haynes, C.L. *ES & T*, 49(13) 8078-8086 (2015).
112. Biological Responses to Engineered Nanomaterials: Needs for the Next Decade, Murphy, C.J., Vartanian, A., Geiger, F.M., Hamers, R.J., Pedersen, J., Cui, Q., Haynes, C.L., Carlson, E.E., Hernandez, R., Klaper, R., Orr, G., and Rosenzweig, Z. *ACS Central Sci.*, 1(3) 117-123 (2015).
111. Single-Cell Analysis of Mast Cell Degranulation Induced by Airway Smooth Muscle-Secreted Chemokines, Manning, B.M., Meyer, A.F., Gruba, S.M., and Haynes, C.L. *Biochim. Biophys. Acta - General Subjects*, 1850(9) 1862-1868 (2015).
110. Ultraporous Mesostructured Silica Nanoparticles, Egger, S.M., Hurley, K.R., Datt, A., Swindlehurst, G., and Haynes, C.L. *Chem. Mat.*, 27(9) 3193-3196 (2015).
109. Platelet Membrane Variations and their Effects on δ -Granule Secretion Kinetics and Aggregation Spreading among Different Species, Gruba, S.M., Koseoglu, S., Meyer, A.F., Meyer, B.M., Maurer-Jones, M.A., and Haynes, C.L. *Biochim. Biophys. Acta - Biomembranes*, 1848(7) 1609-1618 (2015).
108. Dark Field Transmission Electron Microscopy as a Tool for Identifying Inorganic Nanoparticles in Biological Matrices, Klein, N.D., Hurley, K.R., Feng, Z.V., and Haynes, C.L. *Anal. Chem.*, 87(8) 4356-4362 (2015).
1076. A Fresh Look at the Crystal Violet Lab with Handheld Camera Colorimetry, Knutson, T., Knutson, C., Mozzetti, A., Campos, A., Haynes, C.L., Penn, R.L. *J. Chem. Ed.*, 92(10) 1692-1695 (2015).
106. Imaging Cytoskeleton Dynamics in Drug-treated Platelets, Finkenstaedt-Quinn, S.A., Ge, S., and Haynes, C.L. *Anal. Bioanal. Chem.*, 407(10) 2803-2809 (2015).
105. Analytical Characterization of the Role of Phospholipids in Platelet Adhesion and Secretion, Koseoglu, S., Meyer, A.F., Kim, D., Meyer, B.M., Wang, Y., Dalluge, J., Haynes, C.L. *Anal. Chem.*, 87(1) 413-421 (2015).
104. Enhancing Graduate Student Communication to General Audiences through Blogging about Nanotechnology and Sustainability, Bishop, L., Tillman, A., Geiger, F., Haynes, C.L., Klaper, R., Murphy, C.J., Orr, G., Pedersen, J., DeStefano, L., and Hamers, R. *J. Chem. Ed.*, 91(10) 1600-1605 (2014).
103. Accounting for Biological Aggregation in Heating and Imaging of Magnetic Nanoparticles, Etheridge, M.L., Hurley, K.R., Zhang, J., Jeon, S., Hogan, C., Haynes, C.L., Garwood, M., and Bischof, J.C. *Technology*, 2(3) 1-15 (2014).
102. Exploring Inflammatory Disease Drug Effects on Neutrophil Function, Wu, X., Kim, D., Young, A.T., and Haynes, C.L. *Analyst*, 139(16) 4056-4063 (2014).
101. Facile Method to Stain the Bacterial Cell Surface for Super-Resolution Fluorescence Microscopy, Gunsolus, I.L., Hu, D., Mihai, C., Lohse, S.E., Lee, C.-S., Torelli, M.D., Hamers, R.J., Murphy, C.J., Orr, G., and Haynes, C.L. *Analyst*, 139(12) 3174-3178 (2014).

100. Microfluidic-SERS Devices for One Shot Limit-of-Detection, Kim, D., Campos, A.R., Datt, A., Gao, A., Rycenga, M., Burrows, N.D., Greeneltch, N.G., Mirkin, C.A., Murphy, C.J., Van Duyne, R.P., and Haynes, C.L. *Analyst*, 139(13) 3227-3234 (2014).
99. Rapid and Sensitive in situ SERS Detection using Dielectrophoresis, Cherukulappurath, S., Lee, S., Campos, A., Haynes, C.L., and Oh, S.-H. *Chem. Mat.*, 26(7) 2445-2452 (2014).
98. Microfluidics-based in vivo Mimetic Systems for the Study of Cellular Biology, Kim, D., Wu, X., Young, A.T., and Haynes, C.L. *Acc. Chem. Res.*, 47(4) 1165-1173 (2014).
97. Time- and Concentration-Dependent Effects of Exogenous Serotonin and Inflammatory Cytokines on Mast Cell Function, Gruba, S.M., Meyer, A.F., Manning, B.M., Wang, Y., Thompson, J.W., Dalluge, J.J., and Haynes, C.L. *ACS Chem. Bio.*, 9(2) 503-509 (2014).
96. Activities for Middle School Students To Sleuth a Chemistry “Whodunit” and Investigate the Scientific Method, Meyer, A.F., Knutson, C.M., Finkenstaedt-Quinn, S. A., Gruba, S. M., Meyer, B.M., Thompson, J.W., Maurer-Jones, M.A., Halderman, S., Tillman, A.S., DeStefano, L., Haynes, C.L. *J. Chem. Ed.*, 91(3) 410-413 (2014).
95. Death and Axes': Unexpected Ca^{2+} Entry Phenologs Predict New Anti-Schistosomal Agents, Chan, J.D., Agbedanu, P.N., Zamanian, M., Gruba, S.M., Haynes, C.L., Day, T.A., Marchant, J.S. *PLoS Pathogens*, 10(2): e1003942.
94. Analytical Toxicology of Nanoparticles, Haynes, C.L. *Analyst*, 139(5) 868-869 (2014).
93. On-Chip Evaluation of Platelet Adhesion and Aggregation upon Exposure to Mesoporous Silica Nanoparticles, Kim, D., Finkenstaedt-Quinn, S., Hurley, K., Buchman, J.T., and Haynes, C.L. *Analyst*, 139(5) 906-913 (2014).
92. On-Chip Evaluation of Neutrophil Activation and Neutrophil-Endothelial Cell Interaction during Neutrophil Chemotaxis, Kim, D. and Haynes, C.L. *Anal. Chem.*, 85(22) 10787-10796 (2013).
91. Re-Examining the Size/Charge Paradigm: Differing In Vivo Characteristics of Size and Charge-Matched Mesoporous Silica Nanoparticles, Townson, J., Lin, Y.-S., Agola, J., Carnes, E., Leong, H.S., Lewis, J., Haynes, C.L., and Brinker, C.J. *J. Am. Chem. Soc.*, 135(43), 16030-16033 (2013).
90. The Role of p38 MAPK in Neutrophil Functions: Single Cell Chemotaxis and Surface Marker Expression, Kim, D. and Haynes, C.L. *Analyst*, 138, 6826-6833 (2013).
89. Isotope-Dilution UPLC-MS/MS Determination of Cell-Secreted Bioactive Lipids, Meyer, A.F., Thompson, J.T., Wang, Y., Koseoglu, S., Dalluge, J.J., and Haynes, C.L. *Analyst*, 138(19), 5697 - 5705 (2013).
88. Impact of TiO_2 Nanoparticles on Growth, Biofilm Formation, and Flavin Secretion in *Shewanella oneidensis*, Maurer-Jones, M.A., Gunsolus, I., Meyer, B., Christenson, C., and Haynes, C.L. *Anal. Chem.*, 85(12) 5810-5818 (2013).
87. Effects of Mesoporous Silica Coating and Post-Synthetic Treatment on the Transverse Relaxivity of Iron Oxide Nanoparticles, Hurley, K., Lin, Y.-S., Zhang, J., Egger, S., Haynes, C.L. *Chem. Mat.*, 25(9) 1968-1978 (2013).
86. Characterization of Silver Ion Dissolution from Silver Nanoparticles using Fluorous-phase Ion-Selective Electrodes and Assessment of Resultant Toxicity to *Shewanella oneidensis*, Maurer-Jones, M.A., Mousavi, M.P.S., Chen, L.D., Bühlmann, P., and Haynes, C.L. *Chem. Sci.*, 4(6) 2564-2572 (2013)
85. Toxicity of Engineered Nanoparticles in the Environment, Maurer-Jones, M.A., Gunsolus, I.L., Murphy, C.J., and Haynes, C.L. *Anal. Chem.*, 85(6) 3036-3049 (2013).
84. Self-assembled Plasmonic Nanoring Cavity Arrays for SERS and LSPR Biosensing, Im, H., Bantz, K.C., Lee, S., Johnson, T.W., Haynes, C.L., and Oh, S.-H. *Adv. Mater.*, 25(19) 2678-2685 (2013).
83. Dynamin-related Protein-1 Controls Fusion Pore Dynamics during Platelet Granule Exocytosis, Koseoglu, S., Dilks, J.R., Peters, C.G., Fitch, J.L., Fadel, N.A., Jusuja, R., Italiano, J.E., Haynes, C.L., and Flaumenhaft, R. *Atheroscler., Thromb., and Vasc. Bio.*, 33 481-485 (2013).

82. Toxicity of Nanoparticles to Brine Shrimp: An Introduction to Nanotoxicity and Interdisciplinary Science, Maurer-Jones, M.A., Love, S.A., Meierhofer, S., Marquis, B.J., Liu, Z., and Haynes, C.L. *J. Chem. Ed.*, 90(4) 475-478 (2013).
81. TiO₂ Nanoparticle-Induced ROS Correlates with Modulated Immune Cell Function, Maurer-Jones, M.A., Christenson, J. R., and Haynes, C.L. *J. Nano. Res.*, 14 1291-1303 (2012).
80. Toward Correlation in In Vivo and In Vitro Nanotoxicology Studies, Maurer-Jones, M.A. and Haynes, C.L., *J. Law, Medicine, and Ethics*, 40(4) 795-801 (2012).
79. Recommendations for Nanomedicine Human Subjects Research Oversight: An Evolutionary Approach for an Emerging Field, Fatehi, L., Wolf, S. M., McCullough, J., Hall, R., Lawrenz, F., Kahn, J.P., Jones, C., Campbell, S.A., Dresser, R. S., Erdman, A. G., Haynes, C.L., Hoerr, R.A., Hogle, L.F., Keane, M.A., Khushf, G., King, N.M.P., Kokkoli, E., Marchant, G., Maynard, A.D., Philbert, M., Ramachandran, G., Siegel, R.A., and Wickline, S. *J. Law, Medicine, and Ethics*, 40(4) 716-750 (2012).
78. Neutrophil Chemotaxis within a Competing Gradient of Chemoattractants, Kim, D. and Haynes, C.L. *Anal. Chem.*, 84(14) 6070-6078 (2012).
77. The Big Picture on Nanomedicine: The State of Investigational and Approved Nanomedicine Products, Etheridge, M.L., Campbell, S.A., Erdman, A.G., Haynes, C.L., Wolf, S.M., and McCullough, *J. Nanomedicine: Nanotechnology, Biology, and Medicine*, 9(1) 1-14 (2013).
76. Examining Changes in Cellular Communication in Neuroendocrine Cells after Noble Metal Nanoparticle Exposure, Love, S.A., Liu, Z., and Haynes, C.L. *Analyst*, 137(13) 3004-3010 (2012)
75. Development of Screening Assays for Nanoparticle Toxicity Assessment in Human Blood: Preliminary Studies with Charged Au Nanoparticles, Love, S.A., Thompson, J.W., and Haynes, C.L. *Nanomed.*, 7(9) 1355-1364 (2012).
74. Plasmon-Enabled Study of Self-Assembled Alkanethiol Ordering on Roughened Ag Substrates, Bantz, K.C., Nelson, H., and Haynes, C.L. *J. Phys. Chem. C*, 116(5) 3585-3593 (2012).
73. Carbon-fiber Microelectrode Amperometry Reveals Sickle Cell-induced Inflammation and Chronic Morphine Effects on Single Mast Cells, Manning, B., Hebbel, R., Gupta, K., and Haynes, C.L., *ACS Chem. Bio.*, 7(3) 543-551 (2012).
72. Critical Considerations in the Biomedical Use of Mesoporous Silica Nanoparticles, Lin, Y.S., Hurley, K. R., and Haynes, C. L., *J. Phys. Chem. Lett.*, 3 364-374 (2012).
71. Assessing Nanoparticle Toxicity, Love, S.A., Maurer-Jones, M.A., Thompson, J., Lin, Y.-S., and Haynes, C.L. *Ann. Rev. Anal. Chem.*, 5 181-205 (2012).
70. Ultrastable, Redispersible, Small, and Highly Organo-Modified Mesoporous Silica Nanotherapeutics, Lin, Y.-S., Abadeer, N., Hurley, K. R., and Haynes, C. L., *J. Am. Chem. Soc.*, 133(50) 20444-20457 (2011).
69. On-Chip Evaluation of Shear Stress Effect on Cytotoxicity of Mesoporous Silica Nanoparticles, Kim, D., Lin, Y.-S., and Haynes, C. L., *Anal. Chem.*, 83(22) 8377-8382 (2011).
68. Quantal Regulation and Exocytosis of Platelet Dense-Body Granules, Ge, S., Woo, E., and Haynes, C. L., *Biophys. J.*, 101(10) 2351-2359 (2011).
67. Cytoskeletal F-actin, Not the Circumferential Coil of Microtubules, Regulates Platelet Dense-body Granule Secretion, Ge, S., White, J. G., and Haynes, C. L., *Platelets*, 23(4) 259-263 (2012).
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16. The CsLnMSe_3 Semiconductors (Ln=Rare-Earth Element, Y; M=Zn, Cd, Hg), Mitchell, K., Huang, F. Q., McFarland, A.D., Haynes, C. L., Somers, R. C., Van Duyne, R. P., and Ibers, J. A., *Inorg. Chem.*, 42, 4109-4116 (2003).
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14. Synthesis, Structure, and Optical Properties of the New Lanthanum Copper Oxysulfide $\text{La}_3\text{CuO}_2\text{S}_3$, Ijjaali, I., Haynes, C. L., McFarland, A. D., Van Duyne, R. P., and Ibers, J. A. *J. Solid State Chem.*, 172, 257-260 (2003).
13. Synthesis and Characterization of $\text{La}_4\text{MnCu}_6\text{S}_{10}$, Ijjaali, I., McFarland, A. D., Haynes, C. L., Van Duyne, R. P., and Ibers, J. A. *J. Solid State Chem.*, 172, 127-131 (2003).
12. Plasmon-Sampled Surface-Enhanced Raman Excitation Spectroscopy, Haynes, C. L. and Van Duyne, R. P. *J. Phys. Chem. B*, 107, 7426-7433 (2003).
11. Toward a Glucose Biosensor Based on Surface-Enhanced Raman Scattering, Shafer-Peltier, K. E., Haynes, C. L., Glucksberg, M. R., and Van Duyne, R. P. *J. Am. Chem. Soc.*, 125, 588-593 (2003).
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9. Tuning of Optical Band Gaps: Syntheses, Structures, Magnetic, and Optical Properties of CsLnZnSe_3 (Ln = Sm, Tb, Dy, Ho, Er, Tm, Yb, and Y), Mitchell, K., Haynes, C. L., McFarland, A.D., Van Duyne, R.P., and Ibers, J.A. *Inorg. Chem.*, 41(5), 1199-1204 (2002).
8. Metal Film Over Nanosphere (MFON) Electrodes for Surface-Enhanced Raman Spectroscopy (SERS): Improvements in Surface Nanostructure Stability and Suppression of Irreversible Loss, Dick, L.A., McFarland, A.D., Haynes, C. L., and Van Duyne, R.P. , *J. Phys. Chem. B*, 106(4), 853-860 (2002).
7. Angle-Resolved Nanosphere Lithography: Manipulation of Nanoparticle Size, Shape, and Interparticle Spacing, Haynes, C. L., McFarland, A.D., Smith, M.T., Hulteen, J.C., and Van Duyne, R.P., *J. Phys. Chem. B*, 106, 1898-1902 (2002).

6. Surface-Enhanced Raman Scattering Detected Temperature Programmed Desorption: Optical Properties, Nanostructure and Stability of Silver Film Over SiO₂ Nanosphere Surfaces, Litorja, M., Haynes, C. L., Haes, A. J., Jensen, T. R., and Van Duyne, R. P., *J. Phys. Chem. B*, 105(29), 6907-6915 (2001).
5. Nanosphere Lithography: A Versatile Nanofabrication Tool for Studies of Size-Dependent Nanoparticle Optics, Haynes, C. L. and Van Duyne, R. P., *J. Phys. Chem. B*, 105(24), 5599-5611 (2001).
4. Nanosphere Lithography: Synthesis and Application of Nanoparticles with Inherently Anisotropic Structures and Surface Chemistry, Haynes, C. L., Haes, A. J., and Van Duyne, R. P., *Mat. Res. Soc. Symp. Proc.*, 635, C6.3/1-C6.3/6 (2001).
3. Nanosphere Lithography: Self-assembled Photonic and Magnetic Materials, Haes, A. J., Haynes, C. L., and Van Duyne, R. P., *Mat. Res. Soc. Symp. Proc.*, 636, D4.8/1-D4.8/6 (2001).
2. "Raman Spectroscopy," Haynes, C. L. and Van Duyne, R. P., in *Encyclopedia of Physical Science and Technology*, Third Edition, A. J. Bard, Ed., San Diego, Academic Press, 2001, Volume 13, 845-866.
1. Nanosphere Lithography: Tunable Localized Surface Plasmon Resonance Spectra of Silver Nanoparticles, Jensen, T. R., Duval Malinsky, M., Haynes, C. L., and Van Duyne, R. P., *J. Phys. Chem. B*, 104, 10549-10556 (2000).

Patents

- "Coupling Surface-Enhanced Raman Spectroscopy and Glycopolymers to Create Bio-Sensors," Haynes, C. L., Reineke, T. M., Szlag, V., Application #20150324, application filed 05/10/2017.
- "Mesoporous Silica-Coated Nanoparticles," Haynes, C.L., Hurley, K., Application # 62/030,383, application filed 07/29/2015.
- "Porous Silica having High Pore Volume and Methods of Making and Using the Same," Haynes, C. L., Egger, S., and Datt, A. US 2016/0193588-A1, application filed 09/26/2014.
- "Surface-Enhanced Raman Nanobiosensor," Van Duyne, R. P., Glucksberg, M. R., Peltier, K. E., Haynes, C. L., Walsh, J. T., Yonzon, C. R., Shah, N. S., Lyandres, O., Stuart, D. A., Yuen, J. M., Application #: 11/364,978, Publication #: US 2009/0118605 A1, filed 03/01/2006.

Presentations

- 2017
- Keynote Lecture, International Conference on SERS, Xiamen, China
 - Invited Lecture, Ecolab, Eagan, MN
 - Invited Lecture, Hispanic Engineering, Science, and Technology (HESTEC) Week, Rio Grande Valley, TX
 - Invited Lecture, National American Institute of Chemical Engineers Meeting, Minneapolis, MN
 - Invited Lecture, University of North Carolina, Chapel Hill, NC
 - Invited Lecture, University of Michigan, Ann Arbor, MI
 - Invited Lecture, University of Virginia, Charlottesville, VA
 - Invited Lecture, Eastern Analytical Symposium, Princeton, NJ
 - Invited Lecture, National American Chemical Society Meeting, Washington, DC
 - Invited Lecture, University of Rochester, Rochester, NY
 - Invited Lecture, PittCon 2017, Chicago, IL
 - Invited Lecture, TEDxEdina, Edina, MN

2016

- Invited Lecture, University of Colorado, Denver, CO
- 4 Invited Lectures, Fall 2016 National American Chemical Society Meeting, Philadelphia, PA
- Keynote Lecture, 11th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Golden, CO
- Invited Lecture, IPrime Annual Meeting, Minneapolis, MN
- Invited Lecture, The Ohio State University, Columbus, OH
- Invited Lecture, University of Arizona, Tempe, AZ
- Invited Lecture, University of Minnesota Department of Integrative Biology and Physiology, Minneapolis, MN

2015

- Invited Lecture, Pacificchem 2015, Honolulu, HI
- Contributed Lecture, Sustainable Nanotechnology Organization (SNO) 2015, Portland, OR
- Invited Lecture, SciX 2015, Providence, RI
- Invited Lecture, Hope College, Holland, MI
- Contributed Lecture, ACS National Meeting, Fall 2015, Boston, MA
- Invited Lecture, 3M Tech Forum, Woodbury, MN
- Invited Lecture, American Society of Mechanical Engineers 4th Annual Nanoengineering for Biology and Medicine Conference, Minneapolis, MN
- Invited Lecture, Design of Medical Devices, Minneapolis, MN
- Invited Lecture, Gustavus Adolphus College, St. Peter, MN
- Invited Lecture, University of Pittsburgh, Pittsburgh, PA
- Invited Lecture, Nanomaterials for Energy Gordon Research Conference, Santa Barbara, CA

2014

- Invited Lecture, IIT Madras, Chennai, India
- Invited Lecture, University of Hyderabad, Hyderabad, India
- Invited Lecture IIT Delhi, Delhi, India
- Invited Lecture, University of Washington, Seattle, WA
- Invited Lecture, "Women in Chemical Sciences", University of Washington, Seattle, WA
- Invited Lecture, SciX 2014, Reno, NV
- Invited Lecture, American Chemical Society Fall 2014 Meeting, San Francisco, CA
- Invited Lecture, Nobel Metal Nanoparticles GRC
- Invited Lecture, Society for Thermal Medicine Conference, Minneapolis, MN
- 3M/Mitsch Lectures, Hamline University, St. Paul, MN
- Welch Lectures, Concordia College, Moorhead, MN
- Invited Lecture, UMN MinneCollege, Naples, FL
- Invited Lecture, PittCon 2014, Chicago, IL
- Invited Lecture, Society for Thermal Medicine Conference, Minneapolis, MN

2013
Invited Lecture, University of North Carolina, Chapel Hill
Invited Lecture, GlaxoSmithKline, Durham, NC
Invited Lecture, University of Victoria
Invited Lecture, University of British Columbia
Invited Lecture, Simon Fraser University
Invited Lecture, Society of Analytical Chemists of Pittsburgh
Invited Lecture, Cambridge University
Invited Lecture, Plymouth University
Invited Lecture, Strathclyde University
Invited Lecture, UMN "Headliners," St. Paul, MN
Keynote Lecture, Kavli Foundation Emerging Leader in Chemistry Lecture at Spring 2013 ACS
Invited Lecture, Eli Lilly, Indianapolis, IN
Keynote Lecture, New Mexico "Nanoparticle Synthesis and Applications for Cancer Imaging and Therapy" Symposium, Albuquerque, NM
Invited Lecture, University of Minnesota
Keynote Lecture, "Nanoscience and Nanotechnology: Environmental and Health Aspects", Iowa City, IA
Invited Lecture, Macalester College
Contributed Lecture, Sustainable Nanotechnology Organization 2013 Meeting, Santa Barbara, CA
Invited Lecture, University of California, Riverside

2012
Invited Lectures (2), PittCon 2012
Invited Lecture, Bioanalytical Sensors 2012 Gordon Research Conference
Invited Lecture, SciX 2012, Kansas City, MO
Invited Lecture, Institute for Engineering in Medicine 5th Annual Symposium
Invited Lecture, American Chemical Society Fall 2012 Meeting, Philadelphia

2011
Invited Lecture, Symposium on Nanodiagnosics and Nanotherapeutics: Building Research Ethics & Oversight, University of Minnesota
Invited Lectures (2), American Chemical Society Fall 2011 Meeting, Denver
Plenary Lecture, ICAVS, Sonoma, CA
Invited Lectures (2), American Chemical Society Spring 2011 Meeting, Anaheim
Invited Participant, 2011 German-American Kavli Frontiers of Science Symposium
Invited Lecture, University of Notre Dame
Invited Lecture, Northwestern University
"Speaker of the Year" Invited Lecture, University of Cincinnati
Invited Lecture, MN ACS Featured Speaker

2010
Invited Lecture, PittCon 2010 "Reilly Award Symposium"

Invited Lecture, PittCon 2010 “Bomem-Michelson Symposium”
Invited Lecture, PittCon 2010 “Benchtop to Bedside Symposium”
Invited Lecture, Twin Cities Electrochemical Society
Invited Lecture, Pennsylvania State University
Invited Lecture, Governing Nanobiotechnology Conference
Invited Lecture, University of Chicago
Invited Lecture, Blood Center of Wisconsin
Invited Lecture, Clemson University
Invited Lecture, Tongji University, China
Invited Lecture, Fudan University, China
Invited Lecture, Shanghai Normal University, China
Invited Lecture, University of Minnesota Pharmaceutics Department
Plenary Lecture, FACSS 2010 “Findeis Award Symposium”
Invited Lecture, National Institute of Standards and Technology
Invited Lecture, EcoLab Corporation
2009
Invited Lecture, Mayo Clinic
Invited Lecture, University of Illinois
Invited Lecture, University of Indiana
Invited Lecture, University of Kansas
Invited Lecture, University of Texas at Austin
Invited Lecture, Georgia Tech Department of Chemistry
Invited Lecture, University of Minnesota Department of Chemistry
Invited Lecture, University of Minnesota Department of Genetics, Cell Biology, and Development
Invited Lecture, University of Minnesota Chemical Biology Symposium
Invited Lecture, “Drug Delivery” Session of Design of Medical Devices Symposium
Invited Lecture, PittCon 2009
Invited Lecture, University of St. Thomas
Contributed Lecture, 4th International Conference on Nanotechnology - Occupational and Environmental Health
Analytical Seminar, University of Minnesota
Analytical Seminar, University of Minnesota
2008
Invited Poster, Transatlantic Frontiers of Chemistry
Invited Lecture, 3M
Invited Lecture, Spring 2008 American Chemical Society National Meeting
Pittcon 2008 Poster Session

- Biophysics 2008 Poster Session
- 2007 Invited Lecture, 2007 Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) Meeting
- Invited Lecture, 5th Potter's Lodge Meeting on Electrochemistry
- Invited Lecture, 3rd International Symposium on Nanotechnology, Occupational and Environmental Health
- Invited Lecture, Fall 2007 American Chemical Society National Meeting
- Invited Lecture, Electrochemistry Gordon Conference
- Biophysics 2007 Poster Session
- Invited Lecture, Japan-U.S. Young Researchers Exchange Kick-off Meeting
- Invited Lecture, St. Olaf College
- Searle Scholar Poster Session
- Invited Lecture, "Nanotox" Session of Design of Medical Devices Symposium
- Invited Lecture, Japan National Institute of Materials Science
- Tohoku University Poster Session
- 3M Non-Tenured Faculty Grant Poster Session
- 2006 Biophysics 2006 Poster Session
- Invited Lecture, 3M Tech Forum
- Invited Speaker, 3rd Annual Minnesota Nanomedicine Workshop
- 2005 Plenary Lecture, 79th American Chemical Society Division of Colloid and Surface Science Symposium
- Invited Seminar, Northwestern University
- Invited Speaker, National American Chemical Society Spring Meeting
- PittCon 2005, Bioanalytical Electrochemistry Session
- 2004 Invited Speaker, National American Chemical Society Spring Meeting
- 2003 Invited Seminar, Chalmers Technical University, Göteborg, Sweden
- Invited Seminar, University of Wisconsin at Madison
- Invited Seminar, University of Illinois at Urbana-Champaign
- Invited Seminar, University of Indiana at Bloomington
- 2002 Invited Seminar, University of Minnesota.
- Invited Seminar, University of California at Irvine
- International Conference on Raman Spectroscopy 2002
- Northwestern University Physical Chemistry Seminar
- Spring Materials Research Society Meeting, Symposium S

Teaching Experience

- Chemical Principles II (CHEM 1022) at the University of Minnesota, Fall 2005, enrollment = 224
- Analytical Spectroscopy (CHEM 8152) at the University of Minnesota, Fall 2006, Fall 2007, Spring 2009, Fall 2009, Fall 2010, Fall 2011, and Fall 2012 enrollment = 10, 15, 11, 7, 17, 10, and 14 respectively
- Freshman Seminar (CHEM 1905, The End of the World as We Know It) at the University of Minnesota, Fall 2006, Spring 2007, Spring 2012, Fall 2013, and Fall 2014 enrollment = 14, 9, 15, 11, and 15, respectively
- Process Analytical Chemistry (CHEM 2121) at the University of Minnesota, Spring 2010 and Spring 2011, enrollment = 164 and 156, respectively
- Chemical Principles II (CHEM 1072) at the University of Minnesota, Spring 2014 and Spring 2015, enrollment = 79 and 78, respectively
- Freshman Seminar (CHEM 1905, Ideas Worth Spreading: Digging into TED Talks) at the University of Minnesota, Fall 2015 (2 sections, enrollment = 15 and 13), Fall 2016 (2 sections, enrollment = 15 and 14), and Fall 2017 (2 sections, enrollment = 15 and 14)

Selected Synergistic Activities and University Service

- 2017 Featured on PBS' [Hands-On Science](#) (10/2017 air date)
 Featured on "People Behind the Science" [Podcast](#)
 Vice Chair, UMN Chemistry Department
 Associate Director, Center for Sustainable Nanotechnology
 Member of Executive Board for "Energy and U"
 Member of Advisory Board for "Open Chemical Collaborative in Diversity Equity (OXIDE)"
 Member of Executive Committee for University of Minnesota Materials Research Science and Engineering Center (MRSEC)
 Member of "Nanostructural Materials and Processes" Committee in *Industrial Partnership for Research in Interfacial Materials and Engineering (IPRIME)*
 Member of Executive Committee for University of Minnesota Institute for Engineering in Medicine
 Performed "Energy and U" show for 14000 Children
 Regular contributor to [sustainable-nano.com](#)
- 2016 Associate Head, UMN Chemistry Department
 Associate Director, Center for Sustainable Nanotechnology
 Member of Executive Board for "Energy and U"
 Member of Advisory Board for "Open Chemical Collaborative in Diversity Equity (OXIDE)"
 Member of "Nanostructural Materials and Processes" Committee in *Industrial Partnership for Research in Interfacial Materials and Engineering (IPRIME)*
 Organized 2-day Retreat for Women Faculty in the UMN College of Science and Engineering
 Performed "Energy and U" show for 14000 Children
 Regular contributor to [sustainable-nano.com](#)
 Organized 11th Annual "Chemistry Day" for West 7th Street Community Center
- 2015 Associate Head, UMN Chemistry Department

Associate Director, Center for Sustainable Nanotechnology
 Member of Executive Board for “Energy and U”
 Performed “Energy and U” show for 10000 Children
 Steering Committee for Biotechnology Training Grant
 Co-Chair of UMN Women’s Faculty Cabinet
 Organized 10th Annual “Chemistry Day” for West 7th Street Community Center

2014 Chair, UMN Faculty Search Committee
 Associate Director, Center for Sustainable Nanotechnology
 Symposium organizer (Colloid Division) for ACS Fall 2014
 Member of Executive Board for “Energy and U”
 Performed “Energy and U” show for 10000 Children
 Steering Committee for Chemistry/Biology Interface Training Grant
 Steering Committee for Biotechnology Training Grant
 Co-Chair of UMN Women’s Faculty Cabinet
 Organized 9th Annual “Chemistry Day” for West 7th Street Community Center
 Featured speaker for UMN “MinneCollege”
 Chair, UMN Chemistry Awards Committee

2013 Steering Committee for Chemistry/Biology Interface Training Grant
 Steering Committee for Biotechnology Training Grant
 Co-Chair of UMN Women’s Faculty Cabinet
 Organized 8th Annual “Chemistry Day” for West 7th Street Community Center
 Performed “Energy and U” show for 9000 Children
 Featured speaker for UMN “Headliners” Series
 Chair, UMN Chemistry Awards Committee
 Chair, UMN Analytical Chemistry Specialty Area

2012 Appointed member of U of MN Women’s Faculty Cabinet
 Faculty Judge for U MN Graduate Symposium
 Performed “Energy and U” show for 4500 Children
 Organized 7th Annual “Chemistry Day” for West 7th Street Community Center
 Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
 Chair, UMN Chemistry Awards Committee

2011 Featured speaker for UMN Alumni “Lunch and Learn”
 Performed “Energy and U” show for 3000 Children
 Organized 6th Annual “Chemistry Day” for West 7th Street Community Center

- Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
Chair, UMN Chemistry Awards Committee
- 2010 Performed “Energy and U” Show for 1540 Children
Organized 5th Annual “Chemistry Day” for West 7th Street Community Center
Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
Co-Chair, UMN Chemistry Awards Committee
- 2009 Featured speaker for founding meeting of Minnesota chapter of Achievement Rewards for College Scientists (ARCS)
Hosted Chemistry Department Ethics Discussion on “Plastic Fantastic”
Organized 4th Annual “Chemistry Day” for West 7th Street Community Center and Centennial Elementary School
Featured speaker for Chemical Engineering/Materials Science Women's Lunch
Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
Co-Chair, UMN Chemistry Awards Committee
- 2008 Organized 3rd Annual “Chemistry Day” for West 7th Street Community Center
Featured on PBS' DragonFly TV (11/29/08 air date)
Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
Co-Chair, UMN Chemistry Awards Committee
- 2007 Organizer of 3-part Graduate Fellowship Writing Workshop
Host and organizer for 2nd Annual Chemistry Day at the W. 7th Community Center
Panel Member for Preparing Future Faculty Discussion on “Exploring Careers in Academia”
Visited Congressional Offices as American Chemical Society Representative to Discuss Science Education Standards and R&D Funding
Organized and Hosted PittCon Workshop on “Junior Faculty Initiating Competitive Research Programs”
Initiated “Bioanalytical Supergroup Meeting” with Arriaga and Bowser Groups
Judge for Graduate Student Research Symposium and Undergraduate Poster Session
Invited Speaker for UMN High School Chemistry Teachers Workshop, “Teaching Chemistry through Interdisciplinary Examples”
Organized 2nd Annual “Chemistry Day” for West 7th Street Community Center
Invited Speaker for IT “Sneak Preview”
Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
UMN Chemistry Awards Committee
- 2006 Organized “Chemistry Day” for West 7th Street Community Center
Judge for Graduate Student Research Symposium and Undergraduate Poster Session
FOX News Appearance Promoting “Everyday Chemistry” and “National Chemistry Week” Events

- Chair of Analytical Seminar Series
- Organizer of UMN Chemistry Graduate Fellowship Writing Workshop
- 2005 Co-author for Northwestern University Nanoscale Science and Engineering Center education outreach website, <http://www.discovernano.northwestern.edu/>
- Co-interviewer and Author of 4-part Series Addressing Life Balance in Science Careers, Science Advisory Board, <http://humans.scienceboard.net/>
- 2004 Virtual Mentor for Northwestern University's Professional Development Listserv
- 2003 Co-author of Materials World Module on Nanoscience, Haynes, C.; McFarland, A.; Van Duyne, R.; Godwin, H. Nanoscience and Nanotechnology Module, Materials World Modules; Northwestern University: Evanston, Illinois, 2008.

Professional Affiliations

- Associate Editor, *Analytical Chemistry* (2016 – present)
- Advisory Board, *Journal of Raman Spectroscopy* (2009 – present)
- Editorial Advisory Board, *Chemical Sciences* (2010 – present)
- Editorial Board, *The Analyst* (2010 – present)
- Editorial Advisory Board, *Chemical Research in Toxicology* (2013 – present)
- Vice Editor-in-Chief, *Environmental Science: Nano* (2013 – 2015)
- Editorial Advisory Board, *Analytical Chemistry* (2013 – 2016)
- Editorial Advisory Board, *Environmental Science: Nano* (2016 – present)
- Phil Beta Kappa, Honor Society for Liberal Arts and Sciences
- Alpha Chi Sigma, Chemistry Honor Society
- American Chemical Society
- Biophysical Society
- Iota Sigma Pi, Women in Chemistry Honor Society
- Phi Lambda Upsilon, Graduate Chemistry Honor Society
- Society for Applied Spectroscopy
- Society for Electroanalytical Chemistry
- Coblentz Society