

**Cory E. Muraco; MSc.**

Position : Biomolecule Workflows Manager  
Department : Analytical Chromatography and Solvents  
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**Education**

2011.08 – 2013.05	Master of Science, Chemistry	Youngstown State University, Youngstown, OH, USA
2007.08 – 2011.05	Bachelor of Science, Chemistry	Youngstown State University, Youngstown, OH, USA

**Professional Experience**

2022.03 - Present	Biomolecule Workflows Manager	Merck KGaA, Darmstadt, Germany
2019.06 – 2022.03	Global Product Manager, Liquid Chromatography	Merck KGaA, Darmstadt, Germany
2015.10 – 2019.06	Senior R&D Scientist, LC Research & Development	Merck KGaA, Darmstadt, Germany
2013.08 – 2015.10	R&D Scientist, Chemical Standards	Merck KGaA, Darmstadt, Germany

**Academic Society**

2008.04 - Present	Member	American Chemical Society (ACS)
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## Publications

- Muraco, Cory E. Ye, Michael, Frantz, Curtis, Maule, William L. III, and Corman, Clinton. “Applications of Newly Developed 2.7  $\mu\text{m}$  Porous Graphitic Carbon Particles in Liquid Chromatography.” *AnalytixReporter*, 1, **2021**, 3.
- Muraco, Cory E. “Strategies for Efficient LC-MS Methods for Protein and Peptide Analysis.” Oral Presentation given at the *Asia-Oceania Human Proteome Congress*. June, 2021.
- Muraco, Cory E., Corman, Clinton, Maule, William L. III., Frantz, Curtis, and Ye, Michael. “A Novel Carbon HPLC Column for Polar Analyte Analysis.” Oral Presentation given at the *Virtual Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*. March, 2021.
- Muraco, Cory E. and Way, Wayne K. “Practical Tips for High-Throughput Size Exclusion Chromatographic Analysis of Biomolecules.” *American Pharmaceutical Review*. 11, **2020**.
- Muraco, Cory E., Kohler, David A., and Przybyciel, Matt. “SFC Chiral Separation of the Pesticide Diniconazole.” *AnalytixReporter*, 1, **2020**.
- Muraco, Cory E., Brandes, Hillel K., and Bell, David S. “High Throughput and High Efficiency Separations of Antibodies by Reversed Phase Chromatography Using Organic Alcohols.” *LC/GC North America*, 37, 7, **2020**, 385.
- Muraco, Cory E. “A Light In the Black: Investigating the Polar Retention Effect on Graphite as a Unique Mechanism for Liquid Chromatography.” Oral Presentation given at the *Virtual Eastern Analytical Symposium*. November, 2020.
- Muraco, Cory E. “Advances in Chromatography Using Porous Graphitic Carbon Stationary Phases.” Webinar given through *SelectScience*. November, 2020.
- Muraco, Cory E. “Choose Wisely: The Importance of Phase Chemistry and Particle Architecture on Small and Large Molecule U/HPLC Separations.” Invited Presentation given to the *Chinese American Chromatography Association Virtual Meeting*. March, 2020.
- Muraco, Cory E., Frantz, Curtis, Jones, Jay, Maule, William L. III, and Ye, Michael. “Fade to Black: Recent Advances in Chromatography Employing Carbon Particles.” Oral Presentation given at the *Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*. March, 2020.
- Muraco, Cory E. and Schuster, Stephanie. “Threading the Molecular Needle: The Importance of Particle Pore Diameter for Biomacromolecule Separations.” *AnalytixReporter*, 2, **2019**.
- Muraco, Cory E., Frantz, Curtis and Ye, Michael. “Recent Advances in Liquid Chromatography Employing Carbon Particles.” Oral Presentation given at *Eastern Analytical Symposium*. November, 2019.
- Muraco, Cory E., Ye, Michael and Lewits, Petra. “The Role of Phase Chemistry on Antibody Separations: An Important Consideration or an Afterthought.” Poster Presentation given at the *International Symposium on High Performance Liquid Chromatography and Related Techniques*. June, 2019.
- Muraco, Cory E. *et. al.* “Into the Black: Advances in Liquid Separations Employing Carbon Particles.” Oral Presentation given at the *International Symposium on High Performance Liquid Chromatography and Related Techniques*. June, 2019.
- Muraco, Cory E., Peters, Benjamin and Lewits, Petra. “Maximum Resolution for the Separation of Biomolecules.” Vendor Seminar given at the *International Symposium on High Performance Liquid Chromatography and Related Techniques*. June, 2019.
- Muraco, Cory E. and Ye, Michael. “Monolithic Chromatography Revisited: Not Just for Small Molecules Anymore.” Oral Presentation given at the *Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*. March, 2019.
- Muraco, Cory E. and Ye, Michael. “Face to Phase: How Antibody Domains Affect Retention on Chromatographic Stationary Phases.” Oral Presentation given at the *Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*. March, 2019.
- Muraco, Cory E. and Bell, David S. “Drawing A Better Map: Recent Advances in Protein Digestion and Peptide Mapping.” *LC/GC North America*, 36, 12, **2018**, 850.
- Muraco, Cory E. “Improved Biomacromolecule Separations Using Superficially Porous Particles with 1000 Å Pore Diameters.” *Chromatography Today*. December, **2018**.
- Muraco Cory E. “Recent Advances in Native Chromatographic Techniques for Biomacromolecule Separations.” Oral Presentation given at the *Eastern Analytical Symposium*. November, 2018.
- Muraco, Cory E., C. Flannery, and David S. Bell. “Highlights from the HPLC 2018 Symposium.” *LC/GC North America*. 36, 10, **2018**, 736.
- Muraco, Cory E. “Bringing Stability to Peptide Mapping Workflows.” *LC/GC Dedicated Dialogue*

- Podcast. September, 2018.
- Muraco, Cory E. “Breaking Up Is Not So Hard to Do: Recent Advances in Peptide Mapping.” Oral Presentation given at the *International Symposium on High Performance Liquid Chromatography and Related Techniques*. August, 2018
  - Muraco, Cory E. “Characterization of A Novel Antibody Drug Conjugate Mimic by Several Modes of Chromatography.” Poster Presentation given at the *International Symposium on High Performance Liquid Chromatography and Related Techniques*. July, 2018.
  - Muraco, Cory E. “BIOshell IgG 1000 Å C4 UHPLC Column for Improved Biomacromolecule Separations.” *European Pharmaceutical Review*, 8, **2018**.
  - Muraco, Cory E. “Panel Discussion on Large Molecule LC/MS.” Bioanalysis Zone. June, 2018.
  - Muraco, Cory E. “New Technologies and New Methods for Enhanced Biomacromolecule Separations.” Bioanalysis Zone Webinar. June, 2018.
  - Muraco, Cory E. “An Interview with Cory Muraco.” Bioanalysis Zone Webinar. May, 2018.
  - Muraco, Cory E. and Bell, David S. “How combined new approaches can improve quantitative and qualitative LC-MS.” Oral Presentation given at the *Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*. February, 2018.
  - Muraco, Cory E. “From A Pit to A Ladder: New Strategies for Improved Biomacromolecule Separations.” Oral Presentation given at the *Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy*. February 2018.
  - Muraco, Cory E. and Shollenberger, Stacy L. “Analysis of a Bispecific Monoclonal Antibody Using Size Exclusion Chromatography and Mass Spectrometry.” *AnalytixReporter*, 2, **2018**.
  - Muraco, Cory E. “BIOshell IgG 1000 Å C4 UHPLC Column for Improved Biomacromolecule Separations.” *AnalytixReporter*, 2, **2018**.
  - Muraco, Cory E. “ADC Analysis by SEC-MS and HIC.” *LC/GC Application Notebook*. October 2017.
  - Muraco, Cory E. and Machtejevus, Egidijus. “New Column Modalities for Improved Biomolecule Separations.” Separation Science Webinar. October 25, 2017.
  - Muraco, Cory E. and Bell, David S. “Resolving the Complexity of Biomacromolecules Using Multiple Modes of Chromatography.” *LC/GC North America*, 35, 10, **2017**, 734 – 745.
  - Muraco, Cory E. “Complete Characterization and Analysis of an ADC Mimic by Multiple Modes of Chromatography.” Poster Presentation given at the *International Symposium on Proteins, Peptides, and Polynucleotides*. July 2017.
  - Muraco, Cory E. and Fridstrom, Anders. “Unique Coupling of Size Exclusion Chromatography to Mass Spectrometry for the Analysis of Proteins and Antibodies Using A Novel Mobile Phase Composition.” Poster Presentation given at the *International Symposium on High Performance Liquid Chromatography and Related Techniques*. June, 2017.