# Molly E. Payne Ph.D.*

Patent Agent
New Orleans | 504.566.8651 | mepayne@bakerdonelson.com

Dr. Molly Payne is a registered patent agent in the Firm's New Orleans office and is also a member of the Firm's Intellectual Property Group.

Dr. Payne concentrates her practice on U.S. patent prosecution across the chemical, materials science, pharmaceutical, and biotechnology industries. She also manages patent portfolios and assists with IP due diligence, patentability assessments, non-infringement and invalidity opinions, and freedom-to-operate analyses. With a broad technical foundation spanning both physical and life sciences, Dr. Payne offers clients a unique perspective that integrates scientific depth with strategic patent prosecution and global portfolio management.

Dr. Payne received her Ph.D. in chemistry from Tulane University, specializing in polymer and organic chemistry. As a senior doctoral student, she led a consulting project with a major materials and microdevices company, characterizing batch samples and presenting findings to its research and development team.

Dr. Payne's areas of technical knowledge encompass additive manufacturing, adhesives, polymer and composite materials, engineering and high-performance polymers, materials characterization, surfactants and defoamers, solid-state electrolytes, stimuli-responsive materials, gas separation and purification technologies, small-molecule therapies, pharmaceutical salts/co-crystals/polymorphs, cannabis/cannabinoid compositions, psychedelic derivatives and therapies, biomedical devices, and analytical devices.

Prior to joining Baker Donelson, Dr. Payne held internship positions with:

- an industrial chemical reaction monitoring start-up, conducting prior art searches and providing research assistance and documentation preparation for freedom-to-operate analysis;
- the Tulane Office of Technology Transfer and Intellectual Property, evaluating technologies for commercialization potential, drafting provisional patent applications, and conducting market research and competitive analysis;
- a government-funded biotechnology accelerator, performing landscape reviews and identifying emerging technologies for medical countermeasures; and
- a major pulp and paper manufacturer.

Dr. Payne is the first author and supporting author for numerous peer-reviewed publications, as well as an invited author for a technical spotlight by a major chemical distributor. She has presented numerous poster and oral presentations at national chemistry and physics conferences.

## Professional Honors & Activities

- Member of Content Advisory Board – American Bar Association Section of Intellectual Property Law (2025 – present)
- Co-chair of Diversity Action Group – American Bar Association Section of Intellectual Property Law (2024 – present)
- Member – American Chemical Society (2013 – present)
- Executive Vice President (Elected) – Tulane Graduate and Professional Student Association (2016 – 2018)

- Chair – Tulane's Women in Science and Engineering (WISE) (2016 – 2017)

## Publications

- "2025 Trademark Takeaways: Highlights of Key Rulings Shaping Trademark Law" (February 2026)

### Legal Publications

- "*Vidal v. Elster*: Disagreeing to Agree on the Constitutionality of Viewpoint-Neutral Trademark Registration Restrictions," 71 *Loyola Law Review* 511 (2025)
- "Trademark Trouble: When the F-Word Fails to Function" (July 2025)

### Scientific Publications

- Lead Author – "Spectrometry Investigation into the Oxidative Degradation of Polyethylene Glycol," *Polymer Degradation and Stability* (2021)
- Lead Author – "Comparison of Crosslinked Branched and Linear Polyethyleneimine Microgel Microstructures and Its Impact in Antimicrobial Behavior, Metal Chelation, and Carbon Dioxide Capture," *ACS Applied Polymer Materials* (2020)
- Contributing Author – "Synthesis and Characterization of Polylactide – PAMAM 'Janus-Type' Linear-Dendritic Hybrids," *Journal of Polymer Science Part A Polymer Chemistry* (2019)
- Lead Author – "Characterization of Synthetic Polymers via Matrix Assisted Laser Desorption Ionization Time of Flight (MALDI-TOF) Mass Spectrometry," *Journal of Visualized Experiments* (2018)
- Lead Author – "MALDI-TOF Characterization of Functionalized Polymers," *Sigma-Aldrich Technical Spotlight* (2017)
- Contributing Author – "The synthesis of cyclic poly (ethylene imine) and exact linear analogs: an evaluation of gene delivery comparing polymer architectures," *Journal of the American Chemical Society* (2015)

## Webinars

- Trending Topics in Trademark Law: Perspectives from Practitioners (November 2025)

## Education

- Loyola University New Orleans College of Law, J.D., expected 2027
  - Managing Editor, *Loyola Law Review*, 2025 – 2026
  - Law Excellence Award – Legal Research & Writing I, Obligations I (Louisiana Civil Law Contracts), Business Organizations, Evidence
  - Dean's Scholarship
  - W. Clifton Stoutz Scholarship
  - Louisiana State Bar Association Corporate and Business Law Section Award
  - Association of Corporate Counsel Award from the Association of Corporate Counsel's Louisiana Chapter
- Tulane University, Ph.D. in Chemistry, 2019
  - Louisiana Board of Regents Graduate Student Fellowship (2014 – 2018)
- University of Tennessee, Knoxville, B.S. in Chemistry and Biological Sciences – Concentration in Biochemistry, Cellular and Molecular Biology, 2014, cum laude
  - University of Tennessee Chancellor's Honors Program (2010 – 2014)

## Admissions

- U.S. Patent and Trademark Office, 2022

** Baker Donelson professional not admitted to the practice of law.*