



Michael D. Schmitt, PhD

SENIOR ASSOCIATE

📞 617-248-4789

✉️ mschmitt@choate.com

Dr. Michael Schmitt helps clients across diverse technology spaces including semiconductor devices and processing, batteries, nanotechnology, optics, software, and medical devices to build and protect their intellectual property portfolios. Working in interdisciplinary teams that span the fields of chemistry, materials characterization, semiconductor devices and processing, computational modeling, nanotechnology and soft materials, he provides key insights into patent prosecution, portfolio strategy, due diligence, freedom-to-operate, invalidation, and litigation matters for a range of academic and industrial clients.

While working as a postdoctoral researcher in Carnegie Mellon University's Department of Materials Science and Engineering, Michael's work focused on utilizing polymer-based grafting approaches for improving efficiency and patternability of quantum-dot-based solid-state lighting devices. This work built on that done during his Ph.D. at Carnegie Mellon in Professor Michael Bockstaller's lab where he utilized surface-initiated atom transfer radical polymerization to control interactions between nanoparticles by precisely tailoring polymer graft architecture for improved mechanical performance, facile nano-domain patterning, and tunable bulk properties of flexible particulate assemblies. By treating these grafted particles as "building blocks" and focusing on simple systems comprised of one type of block, his work made significant advances in overcoming fundamental materials challenges relevant to the fields of soft photonics, phononics, and solid-state lighting among others.

Prior to his Ph.D. work, Michael worked on various projects in the fields of traditional light-emitting diode based solid-state lighting, novel Ohmic contact materials in such devices, and semiconductor processing in the lab of Professor Robert Davis at Carnegie Mellon.

Focus Areas

Intellectual Property

IP Counseling
Post Grant
Proceedings

Private Equity and M&A

Life Sciences and
Technology

Admissions

- Massachusetts
- U.S. Patent & Trademark Office