**Intern – Interfacial Characterization**

**Description**
Cabot Microelectronics Corporation is the world’s leading supplier of chemical mechanical planarization (CMP) slurries and a growing CMP pad supplier to the semiconductor industry. Our products are used to level, smooth and remove excess material from the multiple layers deposited upon silicon wafers in the production of semiconductor devices.

**Summer@CMC** is a paid internship program at Cabot Microelectronics Corporation that provides qualified students with a real world, hands-on learning experience designed to develop skills transferable to full-time positions in industry. In addition to gaining valuable experience and skills working by working with mentors who are experts in their respective fields, you will learn all about CMP, the semiconductor industry, and participate in activities planned just for interns such as educational lunch and learn sessions and an intern-only lunch with our senior leadership team. The internship program lasts approximately 12 weeks and is hosted at our global headquarters in suburban Chicago (Aurora).

The **Intern – Interfacial Characterization** position will provide strong technical support within R&D at Cabot Microelectronics Corporation and play an integral role in working with development scientists to identify key interactions involved with CMP slurry performance. Through a combination of external collaborations and internal development, they will utilize state-of-the-art tools to develop methodologies to predict and measure slurry component interactions, and correlate them to performance.

**Position Requirements**

**Key Results and Responsibilities:**
- Collaborate with analytical and product development teams to identify chemical interactions that drive performance.
- Prioritize and develop characterization methods to develop a mechanistic understanding of how key chemical interactions impact performance.
- Grow in-house characterization capabilities and collaborate with external laboratories/universities/instrument vendors to identify new characterization techniques.

To be considered for the internship program, candidates should possess the following:

- Experience and demonstrable knowledge in routine, and non-routine, analytical methods used to characterize molecular interactions on surfaces.
- General understanding of colloidal science, preferably in an aqueous environment.
- Demonstrated strong problem-solving skills and the ability to develop novel analytical methodology and techniques for complex, multi-dimensional problems.
- Results-oriented self-starter capable of setting goals, planning, and executing complex research projects.
- Flexible, highly creative, innovative, and committed to continuous learning.

**Applicable education and experience:**
- Graduate student or recently graduated Ph.D. in Chemistry, Chemical Engineering, Materials Science, or related degree/discipline preferred.

To apply, submit your application online at [www.cabotcmp.com](http://www.cabotcmp.com). Candidates selected for consideration will be contacted beginning in February 2018. We employ a “rolling” application process and new candidates will continue to be reviewed and contacted until all internship opportunities have been filled.

**About the Organization**
Cabot Microelectronics Corporation, headquartered in Aurora, Illinois, is the world’s leading supplier of CMP polishing slurries and a growing CMP pad supplier to the semiconductor industry. The company’s products play a critical role in the production of advanced semiconductor devices, enabling the manufacture of smaller, faster and more complex devices by its customers. The company’s mission is to create value by developing reliable and innovative solutions, through close customer collaboration, that solve today’s challenges and help enable tomorrow’s technology. Please visit [Cabot Microelectronics](http://www.cabotmicroelectronics.com) for more information on our company.