Tris Bodine

Materials Scientist

<u>tris.bodine@gmail.com</u>



123 Oak Street, St. Louis, MO 63101

Education

Master of Science in Materials Science and Engineering at Missouri University of Science and Technology, Rolla, MO

Sep 2018 - May 2022

Relevant Coursework:
Advanced Materials Science,
Nanomaterials, Materials
Characterization, Solid State
Physics, Thermodynamics,
Mechanics of Materials, Materials
Processing, Polymers, Ceramics,
Electronic and Magnetic
Materials, and Computational
Materials Science.

Links

linkedin.com/in/trisbodine

Skills

Spectroscopy

X-ray diffraction

Scanning electron microscopy

Atomic force microscopy

Thermogravimetric analysis

Differential scanning calorimetry

Rheometry

Languages

English

Profile

Materials Scientist with 1 year of experience in analyzing and developing innovative materials for various industries. Proficient in conducting research, characterizing materials, and optimizing processes to enhance product performance. Demonstrated expertise in materials testing, data analysis, and problem-solving. Highly skilled in collaborating with cross-functional teams and effectively communicating technical concepts. Adept at balancing practical applications with theoretical knowledge to support organizational goals.

Employment History

Materials Scientist at Missouri S&T Materials Research Center, MO

Feb 2023 - Present

- Developed a new high-performance composite material that led to a 15% increase in mechanical strength and a 10% reduction in weight compared to existing materials, resulting in cost savings and improved product performance for various industries.
- Conducted research on advanced materials for energy storage applications, leading to the development of a novel lithium-ion battery with a 25% higher energy density and 20% longer cycle life compared to current market-leading batteries.
- Led a team of researchers in a project that resulted in the successful patenting and commercialization of a new corrosion-resistant coating, generating over \$1 million in revenue for the Materials Research Center within two years.
- Collaborated with industry partners to design and test a new lightweight alloy for aerospace applications, contributing to a 5% reduction in overall aircraft weight and a subsequent 3% improvement in fuel efficiency.

Associate Materials Scientist at Brewer Science Inc., MO

Aug 2022 - Dec 2022

- Successfully developed and optimized 3 new advanced materials for semiconductor applications, resulting in a 25% increase in product performance and contributing to a 10% increase in annual revenue for the company.
- Led a cross-functional team of 5 scientists and engineers to implement process improvements, increasing production efficiency by 15% and reducing material waste by 8%.
- Conducted thorough research and analysis of market trends and customer needs, leading to the identification of 2 new potential high-growth product areas that are projected to generate a combined \$5 million in additional revenue over the next 3 years.
- Presented findings from collaborative research projects at 4 international conferences, enhancing the visibility and reputation of Brewer Science Inc. within the materials science community.

Certificates

Professional Engineer (PE) in Materials Science and Engineering