

José María Barbeito

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EDUCATION

North Carolina State University, *Raleigh, NC*

- **B.S.E:** Chemical Engineering; **Minor:** Material Science Engineering *Expected May 2025*
- **Masters:** Material Science Engineering *Expected May 2027*
- **Current Cumulative GPA:** 3.7/4.0

WORK EXPERIENCE

Process Engineering Intern, Wolfspeed, *Durham, NC* *Summer 2023, 2024, Academic Year 2023-2024, 2024-2025*

- Utilized statistical process control (SPC) and new experimental designs to fine tune machines and eliminate inefficiencies in the Silicon Carbide (SiC) Wafering Division, including software analysis, Design of Experiment (DOE) testing methods, and mechanical trials
- Worked closely with engineers on specific cutting edge processes required in the manufacturing of SiC wafers
- Designed and tested new proprietary systems to enhance yield, lower operating costs, and increase efficiency using LEAN system, MSA, and SPC
- Trained in operation and maintenance of Chemical Vapor Deposition (CVD) tool designed to grow doped SiC layer
- Worked closely with engineers to design and plan new factory floors, ensuring proper tool environments and safety requirements
- Facilitated installation and qualification of Fourier Transform Infrared Spectrometer metrology tools in the SiC Epitaxial Division
- Currently engaged in Process Change Review Boards (PCRB's) and designing of Gauge Repeatability and Reproducibility (GR&R's) for recipe qualification for tools within class 100 cleanrooms

Doble W Servicios, *Buenos Aires, Argentina*

February 2021 – March 2021

- Independently-arranged work abroad experience at an armoring company. I disassembled and reassembled various cars and trucks to install bulletproof glass and kevlar plating for the Argentine Police Force, averaging ten fully outfitted cars per day
- Constructed bulletproof glass through cutting, assembling and kilning multiple layers of glass and specialty polycarbonate before sanding and installing

LEADERSHIP AND COMMUNITY EXPERIENCE

BEE Educated, Founder, *Durham, NC*

August 2014 – Dec 2020

- Founder and lead instructor of BEE Educated, a local outreach program that taught children ages 8-12 the importance of bees through an on-site program with active apiaries
- Helped local beekeepers with their own hives, teaching and assisting them in keeping healthy colonies, along with providing swarm capture services for locals

INDEPENDENT PROJECT EXPERIENCE

Liquid Bromine Distillation

December 2021

- Distilled 0.98 moles of liquid bromine from sodium bromide using a variety of acids, reagents, and reactants. Utilized proper safety procedures and PPE

TECHNICAL SKILLS: Woodworking, Metalworking, Lathe, Crystalline Structure Fabrication, Drone/Digital Cinematography

ENGINEERING SKILLS: LEAN systems, 6 Sigma, Measurement Systems Analysis, Statistical Process Control, 5S

SOFTWARE SKILLS: JMP, SPACE, SQL, Proprietary Manufacturing Systems, Microsoft Office Tools, JavaScript and JSL,

LANGUAGES: Spanish (Native), German (Beginner)

OTHER INTERESTS: Rock Climbing, Scuba Diving, Drums, Guitar, Computer Assembly, Backpacking, Crystal Growing