

Christina M. Borgese

(949) 201-6041

San Ramon, CA

christina@preprocessinc.com

PreProcess, Inc.

Director of Engineering and Development; Co-Founder: 2010-Present

- Led process development, operations implementation and engineering development to support a \$400MM lithium hydroxide pilot system and commercialization effort
- Led planning and on the ground effort in foods plant process system turnaround effort
- Led forensic engineering in proprietary technology for the entrepreneurial energy storage industry
- Owner's rep for technology development, system design, construction, testing and balancing, and operationalization phases in \$1 billion mining and minerals processing project.
- Created designed experiments for scale up and commissioning of various reaction, extraction, distillation and filtration technologies. Lead cross-functional development and startup team. Defined and identified critical factors, levels, and responses while implementing rigorous analytical methodology.
- Analyzed financial and technical feasibility for various waste to product projects. Created process improvement strategy through development and implementation of systems while staying on budget.
- Project manager for supercritical patent art improvement effort with Idaho National Labs.
- Guided front end engineering and operations through hands-on application of process development methods to existing biofuels systems. Increased yield and improved quality of a 3MM gpy traditional biodiesel facility resulting in \$1.5 MM/year profit increase.
- Focused on safety. Actively involved in and lead various training programs including HAZMAT, MSDS, Electrical Classification, MSHA, SPCC, Emergency Response, and Equipment Safety.

BioFuelBox

Senior Process Engineer: 2008-2010

- Designed, commissioned, and operated a 1MM gpy high FFA feedstock supercritical alcohol transesterification biodiesel plant. 2010 World Economic Forum Technology Pioneer award.
- Plant engineer responsible for supervising external contractors and training operators in safety, process operations, and test methods during plant build and commissioning. Introduced improvements to reduce methanol consumption by 13% saving \$200M/year.
- Led equipment selection specifically focused on feedstock preprocessing, reactor design, wiped film evaporation, finishing processes, pumps, and utilities.
- Lead engineer for supercritical pilot scale design, operation, and successful conversion of poultry, municipal, and food processing wastes into biodiesel. Managed and tracked against a \$1.5 MM budget for pilot plant system design and fabrication build.
- Defined six distinct research projects, provided daily direction to interns in summer program, and implemented laboratory findings into pilot and plant scale systems.

The Clorox Company

Process Engineer: 2005-2008

- Established and applied technical rigor to pilot scale agglomeration process. Scaled a 10 lb/hr bench agglomeration system to a 1,000 lb/hr pilot scale process. Led a team of nine technicians providing training and daily direction.
- Co-inventor on four patents and applications. Contributions include novel applications of low cost waste materials and broad functionality of solids agglomeration. .
- Drove partnership with international consulting team assessing capabilities both in-house and abroad to establish strategy and tactical deliverables.

Washington Internships for Students of Engineering (WISE) Program Fellow 2004

Raytheon Visions Systems Engineering Co-op 2002-2003

University of California at Santa Barbara, BS Chemical Engineering and Regents Scholar 2005

- University Award of Distinction and Student Council President
- Technology Management Program Graduate and Leadership Certificate Award