

Marc Privitera

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California Registered Professional Engineer: Chemical CH6543 and Control Systems CS7166

PreProcess, Inc. 2010 – Present

Principal Engineer and Co-Founder

- Built and led the team delivering the development, engineering and pilot operations for a \$400MM lithium hydroxide plant
- Planned, executed and completed multiple turnaround maintenance and new equipment installations for various operating company clients
- Reporting to the client CTO, led multiple multifunctional teams, delivered the engineering, construction and start up of a \$1B minerals process systems mining project
- As the lead process engineer on multiple projects, defined and drove the technical development and project application for process unit operations including: reaction, separations and utilities
- Developed and designed water and brine mass balances leading the design and installation of brine reclaim, salt recovery and water treatment systems on multiple projects in various industries
- Mentored and guided designed experiment application for scale up of various reaction, extraction, distillation and filtration technologies. Led identification, definition and coordination of definition critical factors, levels, and responses through implementation of rigorous sampling and analytical methodology.
- Developed financial and technical feasibility analysis for waste to product projects.
- Technical lead for supercritical patent art improvement effort with Idaho National Labs.
- Created safety training programs, instructing classes as needed, leading outside resources as needed, for safety topics including: HAZWOPPER, Hazardous Materials Communications, Electrical Classification, MSHA part 48, Spill Prevention, Control and Countermeasures, and Equipment Safety.

San Jose State University 2010 - Present

Industry Based Professor

- Created and delivered Chemical Engineering 199 – Biofuels Process Engineering, an upper division elective course, attended by an average of 25 seniors and masters students

BioFuelBox 2008 - 2010

Vice President and Principal Engineer

- Delivered the world's first supercritical biodiesel demonstration production facility, operating it for one year producing \$1MM in revenue. 2010 World Economic Forum Technology Pioneer Award.
- Reporting to the Board of Directors, developed and executed strategic plans, budgets and technology development roadmaps for building a venture capital funded start up company delivering scale up from test tube to full scale plant.
- Recruited, built and led a multi-functional R&D and Engineering team of engineers and scientists.
- Led the design and build team hands-on, inventing, applying and integrating the high temperature, high pressure reaction and separation components into three different scale systems producing ASTM 6751 spec biodiesel fuel from waste trap grease, chicken dissolved air flotation (DAF) skimmings, and wastewater treatment plant fats, oils and grease (FOG).
- Defined safety practices, test methods, standard operating procedures and data validation processes to establish operational and analytical foundations at both research and manufacturing scale.
- Led the start up and on-site operations team for the prototype system which was delivered to a customer site successfully producing fuel and establishing the technical credibility of the company.
- Designed, scaled-up, and built processes for multiphase oil/aqueous systems utilizing mechanical and chemical separation unit operations including centrifuges, short path evaporators, coalescers, solid/liquid column techniques, single stage flash and multistage distillation.
- Applied designed experiments using GC FID, GC MS, KF titration, NIR and wet chemistry techniques.

The Clorox Company 1988 – 2008

2001 – 2008: Research Fellow, Research and Development

- Sold-in the vision, designed the processes, and executed the project for entry into nonwovens technology enabling the commercialization of four \$100MM product lines.
- Partnered with Legal Services to craft and protect intellectual property created through complex organizational partnerships and hands-on research.
- Expanded role as the “go to” person for complex fluids blending, hazardous materials, solid particle, nonwoven converting, process control, and automation applications.
- Defined the need and created the current R&D work processes using Six Sigma tools: flow mapping, cause and effect diagrams, gauge R&R, DOE, FMEA, and SPC increasing the organization’s data-based technical decision-making.
- Adopted and applied TQM, QFD, “lean”, and GMP methodologies to equipment and automation design; and system operations delivering sustainable cost savings.
- Led the on-campus and on-site recruiting and interview processes hiring 20 ChEs and MEs.
- Created the Chemical Engineering Boot Camp intern program.

1995 – 2001: Engineering Associate, Process Development Pilot Plant Services

- Led the Process Development Group: responsibilities included developing and delivering chemical and mechanical process systems design, construction, programming, installation and commissioning. Deliverables included: PFDs, P&IDs, PHAs, electrical single lines and schematics, equipment and component specifications, loop diagrams, control functional requirement documents, ladder logic, construction work packages, project management reporting, SOPs, and training manuals.
- Sold in and built the flexible “plug and play” pilot plant enabling multiple unit operation interchangeability for increased speed to market development asset utilization.
- Developed the control system technology partnership with Rockwell Automation resulting in the installation and hands-on programming of the SCADA networks and platforms
- Delivered equipment and procedures for temporary system installations supporting commercial shoots, large customer product demos, and multi-faceted consumer events.
- Converted food pilot plant to GMP compliant automated clean-in-place system.
- Founded, recruited, and established practices and procedures for the Clorox R&D Hazardous Materials Response Team focusing on: chlorine, hydrogen peroxide, sodium hydroxide, hydrochloric acid, isopropyl alcohol, ethanol, and flammable aerosol gases.

1992 – 1995: Fairfield Plant Engineer

1988 – 1992: Senior Engineer, Factory Services

- Led project teams that engineered and managed construction for the installation of six new processing and packaging systems worth over \$150MM of sales production.
- Collaboratively drove plant’s maintenance programs setting the stage for the plant’s adoption of the then emerging “lean” manufacturing system techniques and practices.
- Utilized used equipment from plant shutdowns to optimize the plant’s capital expenditures. Met system needs and drove high ROI for process and packaging systems.

The Proctor and Gamble Company: 1986 – 1988

Unocal Corporation: Summer 1985: Intern – San Francisco Refinery

Dow Chemical: 1982 – 1984: Concurrent College Co-op

University of California at Santa Barbara, BS ChE 1986