Ashish Shah
Process Engineer - GlaxoSmithKline

Swedesboro, NJ - Email me on Indeed: indeed.com/r/Ashish-Shah/beac239b37633c2b

Willing to relocate: Anywhere
Authorized to work in the US for any employer

WORK EXPERIENCE

Process Engineer
GlaxoSmithKline - July 2015 to Present

• Work on process definition and delivery of active pharmaceutical ingredients or composite materials with properties that enable robust simplified formulations.
• Perform hands-on optimization and scale-up of the chemical unit operations to deliver robust manufacturing processes.
• Participate in technical process reviews and identify critical process characteristics and requirements as well as existing plant capabilities and limitations by gathering and interpreting suitable experimental data.
• Perform laboratory scale studies with organic chemists, formulators and plant engineers
• Identify and effectively communicate the best scale-up strategy for processes including recommendations for the application of processing technologies.
• Develop semi-batch crystallization process for a continuous process - Generate solubility curve, phase diagram, model crystallization path, range finding studies, impurity spiking studies and scoping work
• Identify the key components in the process using analytical chemistry techniques such as HPLC, DSC, GC.

Associate Engineer
Merck - July 2014 to July 2015

• Perform research goals related to process development, technology development, and production of active pharmaceutical ingredients (API)
• Perform hands-on process development and scale-up work considering scales ranging from laboratory to commercial
• Perform material balance for various separation processes to determine the yield after each step in the process scheme
• Analyze the key components in the process using analytical chemistry techniques such HPLC, DSC, SEM

Research at Rutgers University - October 2013 to December 2013

On-going
• A hybrid MPC-PID control system design and optimization for the continuous purification and processing of the active pharmaceutical ingredients. - Research with Dr. Ravendra Singh and Dr. Rohit Ramanchandran.
Research at Rutgers University, NSF October 2013 - December 2013
• Study the effects of various surfactants on the morphology of the Janus particles for drug delivery purposes.
- Research with Dr. Silvina Tomassone and Jennifer Winkler (Ph.D candidate)

Projects
Logistic Network Design for Duram Pharmachem Pvt. Ltd.
• Use of integer programming models to improve the supply chain of Pharmaceutical industry.
• Analyze the distribution network of the company, identify the issue in the sup, ly chain, create an improved supply chain model and provide suggestion.

Application of Statistical Analysis in Sensory Testing

• Implementation of fractional factorial design and blocking design to study the application of statistical design in sensory testing

• Analyze the quantitative responses obtained on a subjective scale by means of ANOVA and Response Surface design

• Performed cost analysis and process robustness study

LEADERSHIP EXPERIENCE

New Social Engine, Treasurer and Secretary

Drew University - January 2011 to March 2013

Secretary, Drew University

Society of Physics Students - January 2011 to March 2013

Present Student Government (Senior Senator)

Drew University - August 2009 to March 2013

Drew University Spring 2013

EDUCATION

Masters of Science in Chemical and Biochemical Engineering

Rutgers University - New Brunswick, NJ

May 2015

Bachelors of Arts in Mathematics and Chemistry

Drew University - Madison, NJ

May 2013

ADDITIONAL INFORMATION

SKILLS

• Process development, laboratory procedure, experimental design and data analysis, statistical methods, Design of Experiments (DOE)

• Separation Methods (Chromatography - Low pressure, Preparative, column, distillation, Liquid-Liquid Extraction), Purification methods (chromatography, Filtration, Crystallization), Analytical methods (chromatography - LC, HPLC, Raman, NIR, FTIR, NMR, FBRM, DSC, TGA)

• Software - graphical analysis, Labview, Minitab and Matlab, Thermosolver

• Proficient in speaking and understanding English, Gujarati and Hindi