

Thomas Dorney

Chemical Engineer -Tonnage Supply Chain

Philadelphia, PA - Email me on Indeed: indeed.com/r/Thomas-Dorney/6df507769cc521c9

Candidate for Masters in Biochemical Engineering (Aug 2015) interested in drug and medical device development for the treatment or diagnosis of disease. Skilled in experimental research of drugs/devices for biomedical applications. Previous work experience includes highly impactful performance in data analysis, project management, and work process development for a Fortune 500 company.

WORK EXPERIENCE

Chemical Engineer -Tonnage Supply Chain

AIR PRODUCTS AND CHEMICALS, INC - Allentown, PA - July 2013 to August 2014

Analyzed existing customer contracts and real-time plant data to determine cost saving strategies

- * Managed Government Modifications Rebilling project, generating more than \$4 million in annual profits
- * Facilitated plant assessment process to streamline decision making between commercial and operations entities

Process Controls Engineer

HYCO Process Controls - June 2012 to July 2013

Programmed Siemens controllers for start-up and commissioning of CO2 capture plant

- * Maintained computer functionality and network communication for CO2 plant
- * Ensured billing data was being generated and made available for customer invoicing

Chemical Engineer

GEO Process Technology - June 2011 to June 2012

Developed work processes to upgrade pipeline RTUs to minimize data loss over wireless transmission

- * Validated functionality of newly installed RTU equipment throughout testing and deployment
- * Led the installation of antivirus software on over 1000 plant machines

Senior Research

Thin Film Drug Delivery - August 2010 to May 2011

Created PVA/PVP hydrogels to be utilized on post-op patients to secrete anti-inflammatory enzymes and antibiotics

- * Investigated cross-linking agents used to improve structural integrity of gels while maintaining efficacy of drug release

Chemical Engineer - Intern

GEO Process Technology - May 2010 to August 2010

Implemented Harvester program to ensure the integrity of data acquisition on Gulf Coast pipeline network

- * Interfaced with pipeline engineers to improve functionality of Harvester program

Master Thesis Research: Antibody-Targeted Drug Delivery May 2014 - August 2015

- * Researched novel drug-polymer-targeting mechanism used to treat HER2-Positive Breast Cancer and Ewing's Sarcoma
- * Conducted experiments to improve delivery profile of the drug, minimize size of the mechanism, and determine necessary release concentration to target and eliminate cancer cells

EDUCATION

Master of Biochemical Engineering in research on Antibody-Targeted Drug Delivery

VILLANOVA UNIVERSITY - Villanova, PA

August 2013

Bachelor of Science in Chemical Engineering

VILLANOVA UNIVERSITY - Villanova, PA

August 2007 to May 2011

ADDITIONAL INFORMATION

TECHNICAL SKILLS

* Laboratory experience with: Cell Culture, BCA Protein Assay, MTT Assay, Shimadzu HPLC, Centrifuge, and Homogenizer

* Lean Six Sigma Yellow Belt Certified

* Additional experience with: APACS ACMx/CCMx's Controllers, Process Suite 4Mation and Vision, Process Explorer, OpenBSI Harvester, SQL Server, AutoCAD, Mathcad 14, Visual Basic, Microsoft Word, Excel, Power Point.