

Helen M. Schuster

PROFILE

I am a dedicated, creative and technically skilled business professional with the ability to think strategically and excel in resolving challenges. I find satisfaction in an innovative career that leverages my strengths in technical development and customer relationship building as well as staying focused on identifying customer needs and creating mutually beneficial solutions.

EXPERIENCE

HMS TECHNICAL DEVELOPMENT, BRADFORD PA

MARCH 2019 - PRESENT

Owner/President

Work with customers in the Oil & Gas, Construction and mining industries to develop specific, innovative technologies to meet customer needs. Current projects include:

Purification of Quartz for use in the silicone chip market

Development of hydrocarbon emulsion for use as a corrosion control agent

Upgrading of rice hull ash as fly ash replacement

Development of reactive capping material to address construction waste and mine tailings

Development of novel technique for removal of Chlorides and Sulfates from mining process water

Development of Bio-degradable/USDA Bio-preferred silica dust suppressant

CARUS CORPORATION, PERU IL

OCTOBER 2015 - FEBRUARY 2019

Business Development Director, Commercial Project Manager

Lead Business Development & Marketing teams to develop new products and markets in support of Carus strategic plan. Optimized StageGate and EHSS accountability system to move products from conception to commercialization smoothly while incorporating necessary elements from StageGate, EHSS, plant scale-up and planning. Organized Business Development team into optimal structure for rapid results, collaboration within the group and with internal & external customers to obtain our strategic goals. Responsible for budgeting & forecasting ROI for BD and associated sales. Create and maintain a customer-centric culture and support strategic growth of the company. The focus of my development work was in the Air Purification & catalysis markets.

Launched July, 2017 - Carus core product formulated and condensed into a slow release delivery form, providing protection from pressure due to commodity nature of Potassium Permanganate. Forecast revenue \$20M - \$30M/yr and exclusive contract in the mining space for Sulfate, Manganese and Iron control in effluent water.

Developed relationship with Evoqua Water Technologies, leading to co-development of product focused on removing Arsenic in the Municipal Water space.

AMERICAN REFINING GROUP, INC., BRADFORD PA — 2002 - 2015

Business Development Manager, Product Development Manager, R&D Chemist

Responsible for new product, new market and new business development to ensure the continued growth and profitability of the company. This included working from a R&D and Marketing perspective to analyze new business opportunities and examine specialty applications for existing products. In addition to acting as Manager of New Business Development and of the New Product Development laboratory, I meet with customers, partners, suppliers and researchers to problem solve and develop niche products that support ARG strategic goals. I managed Industry and University partnerships and also worked in collaboration with Sales, Marketing, Finance and Operations to ensure that customer and business needs were met.

Successful projects include:

- Dust suppressant for silica sand that minimizes the respirable fraction of silica dust. This work will help the hydraulic fracturing industry protect worker health and meet OSHA mandates. This new business was possible due to building solid relationships with customers, and establishing trust through collaboration. This business has the potential to grow worldwide with NA revenues exceeding \$100 million/year.
- Product developed in collaboration with WVU that extends coal binder pitch for use in the aluminum smelting industry utilizing a low value stock. This process also creates a clean coal product with low VOC emissions and negligible mercury content.
- An up cycled oilfield waste product for use as a high value chemical additive.
- Working in cooperation with Universities to develop non-traditional technologies and partnerships, including acting as project manager for technology demonstrations, scale up and field testing. I have developed detailed proposals and project analysis for use during bidding and management review. I have authored white papers for publication and presentation during technical meetings and international conferences.
- Petroleum laboratory experience includes blending, formulation and optimization of base stocks/lubricants and related analytical procedures including FTIR, UV, X-ray, GC and multiple wet chemistry methods.

Regulatory experience includes the completion and submission of license agreements and ensuring the consistency of the design and development process as mandated by ISO standards, SAE, JASO, the American Chemical Society and the Nuclear Regulatory Commission.

BRADFORD REGIONAL MEDICAL CENTER, BRADFORD PA — 2001- 2002

Medical Laboratory Technician

Responsible for collection and testing of specimens in a clinical/hospital setting. Demonstrated proficiency in independently running chemistry, hematology, serology, blood bank and microbiology laboratory modules.

Worked as shift manager, performed equipment maintenance and prioritized work to optimize efficiency.

CRADLE OF FORESTRY, BREVARD NC — 1999 - 2001

Environmental Educator

Worked independently to prepare, advertise and present environmental education programs for campers & visitors of the Allegheny National Forest. The above included the development of program curriculum, purchase and management of supplies, working within a specified budget and communicating the importance of the forest in a fun way. Reports and proposals were completed and submitted to upper management.

ZIPPO MANUFACTURING, BRADFORD PA — 1994 - 1998

Transportation Analyst

Effectively arranged transportation of Zippo products via truck, rail, air & sea domestically and internationally. Developed relationships with customers, customs agents and freight forwarding companies to efficiently move material to over 90 countries.

EDUCATION

University of Pittsburgh, Bradford PA - B.S. Biology - 2001

St. Bonaventure University, Allegany NY - MBA - 2015

ADDITIONAL ACTIVITIES

Radiation Safety Officer – Nuclear Regulatory Commission

Chemical Hygiene Officer – American Chemical Society

Certification in Effective Technical Writing – American Chemical Society

American Chemical Society - Section Chair-Elect

ISO 9001:2000 System Auditor – ASQ Chemical and Process Division
Leadership McKean–Leadership Training in McKean County PA
American Academy for the Advancement of Science Member
Member of St. Bonaventure panel dedicated to advancement of STEM education
Leadership Flight School Leadership Training - Bartell & Bartell
Bradford Area Chamber of Commerce – Past Board Member, KOTS chair
Bradford Area School District – School Director
ASTM Committee D02 and D27 Past Member
International Erosion Control Association Member, Presenter and Technical Contact
Certification program at Loyola University, Chicago - Project Management Professional