ALAN S. WOODMAN

20 BONNIE'S WAY HAMPSTEAD, NH 03841 603-329-4922 (H) 603-421-4473 (M) aswoodman@comcast.net

SUMMARY

Results oriented, metrics driven Quality professional with a demonstrated ability to lead and influence people and improve customer and supplier relationships through teamwork and effective communication. Diverse background includes strong technical, analytical, and leadership skills. More than 25 years of technical and management experience – over 15 years as a hands-on Quality management professional.

EDUCATION

- B.S. Applied Mathematics/Physics, University of New Hampshire, 1989
- M.B.A., New Hampshire College (Southern New Hampshire University), 2000

EXPERIENCE

- <u>Director, Quality and Continuous Improvement</u>, 2005 present Aspen Aerogels, Inc, Northborough, MA
 - Direct all aspects of Quality and continuous improvement activities for high-tech, high-volume manufacturer; Complete responsibility for team development, establishment of policy and QMS from startup through post-IPO. Overall responsibilities include technical leadership, global quality compliance, change management, MRB, supplier/product/customer quality, internal audit, and CAPA system. Collaborate with internal organizations to ensure total satisfaction, value, and compliance. Major accomplishments include:
 - Built a world-class Quality organization from the ground up during a period of significant growth
 - Led ISO 9001 certification process and sustainability over 10-year period
 - Implemented document management system
 - Established and staffed Quality Control laboratory
 - Led development, documentation, and implementation of manufacturing control plan
 - Established supplier quality function to improve capability and consistency of key raw materials
 - Improved and maintained satisfaction and relationships with top-10 global customers
 - Established continuous improvement teams to increase manufacturing yield from <60% to >95%
 - Developed quality roadmap to resource and focus cross-functional continuous improvements
 - Developed global compliance function to ensure products meet/exceed technical and industry standards/claims, and product markings
 - Developed and implemented corporate risk assessment policy and process for change management
 - Improved CAPA and internal audit processes
- Manager, Product Quality Engineering, 2001 2004
 - Rohm & Haas Electronic Materials (now The Dow Chemical Company), Marlboro, MA
 Lead an organization of 10 Quality engineers. Responsible for all aspects of product quality, including resolution of customer complaints, global product characterization requirements, continuous product improvements, product quality roadmap, product specifications, test validation SPC, non-salable inventory management, MRB chair, product/test capability, test efficiency improvements, management of change, and product reliability. Accomplishments included:
 - Development of global process for product disposition rules
 - Significantly improved relationship with three key customers
 - Reduced closure time for customer complaints
 - Increased manufacturing first pass yield
 - Batch cycle time reduction, to increase manufacturing capacity
 - Development of MRPII Class-A supplier quality rating system
 - Implementation of SPC for CTQ key raw materials
 - Implementation/training for SAP quality system module
 - \$2MM sustained reduction of non-salable inventory

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Product Development Engineer, 2000 – 2001

Rohm & Haas Electronic Materials (now The Dow Chemical Company.), Marlboro, MA

Managed development of lithographic and metallization chemistry products for the semiconductor industry.

Ultimate responsibility for all phases of product development, including project management, cross-functional team management, resource planning, interface with customers, Sales/Marketing, negotiation of product specs, pre-commercialization product quality resolution, and FMEA facilitation. Accomplishments included:

- Commercialization of 7 new products within 14 months
- Reduction of cycle time for new product development engineering
- Developed product development protocol; led the first products teams through the new process
- Facilitated FMEAs for several new products to ensure product robustness and failure mitigation

Principal Engineer, 1989 – 2000

Physical Sciences, Inc., Andover, MA

Increasing levels of responsibility commensurate with experience, from engineer to senior engineer, research engineer, and principal engineer. Developed new capabilities and technology innovations within electrochemical technology group, resulting in additional revenue and market opportunities. Responsible for grant and proposal writing, technical marketing, market analyses, new business development, project management, resource planning, cross-functional team leadership, product/process commercialization, and R&D prototyping/scale-up/field-testing. Accomplishments included:

- Established PEM fuel cell Scale-up/test facilities
- Development of novel packaging design for low power PEM fuel cell stack
- Development of corrosion-resistant conductive alloy coatings for lightweight fuel cell components
- Directed all aspects of electrochemical hydrogen peroxide generation system development, resulting in the award of 3 U.S. patents
- Developed low-cost, electrochemical micro sensor for detecting/identifying ultra low-level metal contaminants
- Established electrodeposition process for controlling structure and property of electrolytic thin films
- Established thin film characterization facilities
- Published 8 technical papers
- Co-inventor of 3 U.S. Patents

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