

David Bohling



CTO and Board Member - Sunsonix
Semiconductors

<http://www.directoryinventor.com/profile/view/pSUuSa57>

Experience

CTO and Board Member

Sunsonix LTD
Semiconductors
2008 - Present

Early stage start-up in advanced consumable chemicals for surface microcontamination mitigation and control, technologies/process development, and capital equipment for accomplishing these goals. Company main focus is in novel surface cleaning chemistries and processes for PV and related fields where surface engineering is critical (e.g., post-CMP, HDD, LED, IC). Co-inventor of principal Green product line and chemistry; dramatic improvement in carrier lifetime and contamination decrease in first vertical market, Photovoltaics and second market of CMP copper post-clean. Co-inventor of new Green texturing chemistry and processes for photovoltaics.

VP Engineering

Optomec
11-50 employees; Privately Held; Nanotechnology
August 2010 - October 2011

Optomec is the world-leading provider of additive manufacturing solutions for high-performance applications in the Electronics, Solar, Medical, and Aerospace & Defense markets. These systems utilize Optomecs patented Aerosol Jet Printed Electronics technology and LENS powder-metal fabrication technology. - Provided leadership to all aspects of engineering and development for production. - Established full PDP/Stage Gate, ECR/ECO, Product Release, Specifications definition, Technology Roadmap, and Project tracking processes.

General Manager

EMCO Flow Systems
Electrical/Electronic Manufacturing
2005 - 2008

EMCO Flow Systems primary products are a diverse range of industrial flow metering instrumentation. My role encompassed all aspects of strategically running this business, with full P&L responsibilities as well as establishing PDP, Quality, IP, Marketing, Sales, and manufacturing Operations processes. - Rebuilt the business and grew sales nearly 50% in 3 years.

VP Engineering

Advanced Energy

1001-5000 employees; Public Company; Electrical/Electronic Manufacturing
2003 - 2005

My senior Engineering Management role at AE was thermal management, precision mass flow control, industrial flow metering, etc. and included product config mgmt, component eng., and F/A. Restructured electromechanical engineering side of the business and implemented strategic technology roadmaps. EMCO Flow Systems was part of AE and spun out in 2005 to Spirax Sarco. - Engineering leadership for 7 groups/businesses in 4 distinct locations, including a large engineering team in Hachioji, Japan. - Dramatically restructured and consolidated Engineering operations, - Directed Quality Department Component Engineering, Failure Analysis, and Configuration management groups. - Completed management level six-sigma courses. - Wrote and implemented NPI (PDP) process.

Senior Technology Manager

Ball Aerospace

1001-5000 employees; Public Company; Defense & Space
2002 - 2003

I ran the Defense Systems Group internal R&D (IRAD) programs, collaborating with the Defense Operations CTO. - All 17 distinct projects/programs brought in on-time and on-budget.

Vice President - Engineering

Veeco Instruments - Ion Tech

Semiconductors
2001 - 2002

As Vice President, directed all Engineering and Technology development work for large precision optics capital equipment and ion gun components. Implemented PDP process and developed strategic technology roadmaps.

Director - Thin Films Engineering

Sola Optical

1001-5000 employees; Public Company; Medical Devices
1997 - 2001

As Director - Thin Films, managed and/or influenced global thin films/coatings product strategies and technology development worldwide (Australia, Ireland, and Italy). - Restructured and rebuilt Thin Films Engineering competency for US Operations. - Brought \$3M in non-functional capital assets (two large production plasma assisted PVD coaters) up and functioning in Operations.

Research Associate and R&D Mgr

Air Products

Public Company; Chemicals
1984 - 1997

As R&D Manager, managed research staff performing product support and applied/fundamental research in microcontamination control, new chemical vapor deposition and compound semiconductor source product development, gas handling equipment engineering, plasma physics

research, interfacial engineering and nanotechnology, corrosive/reactive materials compatibility. Group defined current plasma discharge physics as applied to fluorinated gases used in semiconductor industry. Pioneered ultra-low carbon and oxygen sources for high brightness LEDs and laser diodes MOVPE, MOMBPE. Pioneered precursor chemistry for high-K dielectric CVD/PECVD/ALD; performed original deposition work. Group invented modern corrosive gas cabinet design and released to production. Now used universally by all manufacturers. Cumulative revenue from products developed in my group is approaching \$1B (2011).

Education

University of Minnesota-Twin Cities

Physical Inorganic Chemistry

1979 - 1984

Patents (1)

[Gas phase removal of SiO₂ /metals from silicon \(4 worldwide citation\)](#)

Eric Anthony Robertson III, David Arthur Bohling, Mark Allen George, Scott Edward Beck

December 12, 2000: 06159859

[View all \(1\)](#)