Daniel K. Moscaritolo
Chief Executive Officer
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EXECUTIVE PROFILE

More than 20 years of broad leadership, management and organizational experience in the engineering, marketing, sales, design, and fabrication of complex "high-dollar-value" technology based products. Strong technical and entrepreneurial business experience within the wastewater and alternative energy sectors, including the thermo-chemical conversion of waste materials into syngas for the generation of electrical power and/or the production of H_2 gas, ethanol, biobutanol, DME and transportation grade biodiesel, as well as carbon black, biochar and activated carbon.
Possess strong systems experience, including automated back-flushable filtration systems, flow control systems (flow meters & patented sensors) and activated carbon beds, and advanced catalytic oxidation purification systems for wastewater and potable water- with the addition of ultrafiltration and/or reverse osmosis modules. Senior executive with a unique combination of strong technical (advanced engineering degree-MSME), marketing and business development skills. Managed company-wide New Product Development ("NPD") programs, bringing new products to market on time and within budget. Extremely strong problem solving capabilities. Exceptionally creative and innovative. Managed cross-functional groups including marketing, sales, engineering, program management, fabrication partners, and procurement.
Superior sales and marketing capabilities with an uncanny ability to "strategize the sale" by analyzing customer needs and exploiting competitor weaknesses. Exceptional technical presentation skills. Consistently won large multimillion-dollar contracts against major (billion dollar) competitors in "head to head" completion. Established and managed international agent network for selling advanced systems in Europe, Asia, South America and the Middle East.
Motivated and inspired subordinates to succeed by developing a strong *esprit de corps*. Unwavering advocate of continuous improvement; constantly strived to develop subordinates' skills by mentoring teams to meet challenging yet achievable goals.

KEY STRENGTHS

- Selecting Strategic Technology Initiatives
- Has "Pulse" on Emerging Technologies
- Accurate Market Development & Product Introduction Assessments
- Advanced Team Building
- Executive Leadership
- Strategic Corporate Planning
- New Product Development
- Cross-Organization Collaboration
- Strong Technology Transfer Experience & Success
- Multicultural Accessibility & Sensitivity
- Simple & Creative Solutions to Complex Problems

PROFESSIONAL EXPERIENCE

REMEDIATION EARTH, INC. ("REI"), Westlake Village**,** CA --- 2007 to present
President and CEO, Chairman, and Founder

Founded REI in June 2007, a private startup company specializing in development projects related to thermo-chemical conversion (pyrolysis and gasification) of petroleum based waste materials such as medical waste, mixed plastics waste (separated from MSW), e-Waste, waste oil and used tires into #2 fuel oil, synthetic diesel, H_2 gas, electric power, and carbon black. Well versed in all management, technical and business development issues related to the thermo-conversion of "green" feedstocks such as biomass, woodwaste, agricultural waste, and microalgae into syngas or H_2 gas for the generation of electric power (via specially modified gas engines, microturbines and fuel cells) and/or the production of biobutanol, DME, transportation grade biofuels, biochar and activated carbon.

CONVERGENCE ETHANOL INC. (PREVIOUSLY MEMS USA, INC.), Westlake Village**,** CA --- 2004–2006
Chief Technology Officer (CTO), Chief Operating Officer (COO), Chief Ethics Officer, Ombudsman, Director and Co-Founder

Co-founded Convergence Ethanol Inc., which went public February 18th 2004. Experienced with all business development and logistics issues related to taking a private company public, including SEC and SOX related issues. Led the technical development and operations for corporate headquarters and two subsidiaries, while at the same time raising money through venture capital and PIPE's, hiring and managing senior and junior team members, overseeing and evaluating service providers, and ensuring coordination and collaboration across all corporate sectors.
Experienced in the alternative energy market place, including the technical and business development issues related to the gasification of biomass to syngas for power generation and/or the production of ethanol, biobutanol and synthetic diesel.

PTI TECHNOLOGIES INC. (Div of ESCO), Newbury Park**,** CA --- 1994–2004
Vice President, Engineering, (2001–2004)
Director, New Product Development & Technology (1999–2001)

PTI designs, manufactures, markets and sells filtration systems and micro-electro-mechanical-systems (MEMS) based sensors and fluid flow devices used in the aerospace, oil & gas, space, automotive and defense industries.

- Transformed engineering group into a "synergistic technical force". Reduced engineering headcount 19% while increasing the number of major technical proposals by more than 300% per year. Patents applied for increased over 1000% during a 2-year period.

- Raised the "Engineering Bar" by eliminating non-degreed engineers and technical "dead-wood". Substantially increased number of advanced engineering degrees (MSME and MSEE) via selective hiring practices.

- First Director to start CO-OP program with domestic and international universities.

- Implemented PRO/E 3D-CAD System with FEA, and CFD software capabilities. Used rapid prototyping to win major proposals.

- Managed annual engineering budget of $3 to $3.5 Million to within +/- 3% each year.

- Developed and implemented New Product Development Process (NPD) that reduced lead times for new product development by 40%. Used a hybrid NPD Process rather than the less efficient serially based phased–gate NPD approach.

- Reorganized staff of 29 compromised of design, project and sustaining engineering, manufacturing engineers (ME's), logistics and procurement.

- Personally submitted six (6) MEMS and PIEZO sensor based patents since November 2000 which were approved. Three additional patents pending related to specialized piezo flowmeters and related instrumentation for use in advanced system control.

PTI TECHNOLOGIES INC. (Div. of ESCO), Newbury Park, CA --- 1996–1999
Business Unit Director, Industrial Filtration Systems (IFS) Group

The IFS Group custom designed, engineered and fabricated large automatic back-flushable filtration systems for industrial applications in oil & gas, petrochemical, potable water, waste water, produced water, and nuclear waste remediation.

- Personally sold $4.25 million of complex IFS systems (FY 1998) in Asia and Middle East, requiring extensive travel.

- Set strategic direction for business unit, including: 5-year bookings/sales plan, market pricing and new product development plan. Directed marketing, sales and engineering staff.

- Selected new distributors, stocking reps and international agent firms. Replaced those under-performing distribution channels that failed to meet sales forecasts in their territories.

- Managed the team responsible for the sale, design, test and market introduction of several new high performance throw-away type filter cartridges used for waste water, amine, and potable water applications.

- Created the industry's first remote on-line monitoring system that allowed trouble shooting, data trending and start-up/shutdown of complex intelligent filtration systems from anywhere in the world. This Prognostic Health Monitoring System (PHMS) would alert field service engineers of impending problems *before* they actually occurred.

- Worked extensively with various technology partners to apply patented advanced oxidation purification/disinfection technology based on dissolved air flotation (DAF), ozone injection, ultraviolet irradiation and particulate filtration patented for waste water and industrial applications.

PTI TECHNOLOGIES INC. (Div. of ESCO), Newbury Park, CA --- 1994–1996
Operations Manager, IFS

- Worked closely with Director of Marketing to Consolidate sales, marketing and engineering group from VACCO's Industrial Filtration Systems (IFS) Group into PTI's existing filtration systems group. Helped develop a modular pricing and systems engineering strategy at PTI that

led to better customer service, more sales opportunities and more program wins. Key member of "tiger team" that developed a capital equipment-leasing plan for filter systems.

- Led team that completely re-designed the "high-dollar" back-flushable filtration systems, resulting in the industry's first closed loop capability to post-process back-flush waste using the newly developed decanter technology (using advanced electronic flocculation) which enhanced the settling process, returning clarified liquid back to the process.

- Reduced vendor base by 61% after entering into strategic supplier partnering agreements that saved an additional 22%.

VACCO INDUSTRIES (Div. of ESCO), South El Monte, CA --- 1990–1994
Engineering Manager and IFS Systems Product Line Manager

VACCO specializes in the design and manufacture of commercial filtration systems for the nuclear power generation, petrochemical and refinery marketplace, as well as pneumatic and fluid flow components for aerospace, navy and industrial applications.

- Responsible for technology transfer of an entire filtration systems business from Boston to California (1990), using a staff of 8 engineers and 2 field service technicians. Increased bookings from $50 thousand in 1990 to $2.4 million in 1994, in spite of major cutbacks in the energy sector.

- Created a strong team responsible for the complete redesign of all filtration systems, resulting in units that were more modular, simpler to fabricate and service, and more robust in the field.

- Introduced and implemented Taguchi's Statistical Design of Experiments (DOE) techniques to improve the design phase of product development, greatly reducing variability.

- Taught the engineering team the importance of modeling (FEA), simulation (CFD) and analysis rather than the more costly "build one and see if it works" approach.

- Traveled extensively (domestically and internationally) with marketing and sales resulting in a substantial improvement in securing new programs.

- Set up large scale test lab to safely demonstrate back flush capabilities for wastewater, rich and lean amine, and hot oil applications (up to 600 degrees F).

CARLETON TECHNOLOGIES INC. (DIV. OF MOOG), Buffalo, NY --- 1986–1990
Lead Sr. Design Engineer

Carleton specializes in the manufacture of pneumatic and cryogenic systems and components for aerospace, including missiles, satellites and military aircraft.

- Performed thermal and stress analysis using ALGOR, a PC based finite element software.

- Implemented a research and test lab for cryogenic new product development. Extensive work

with hydrogen, helium and other exotic gas mixtures to enhance the Joules-Thompson effect of cryostats due to the rapid expansion of high pressure gasses through a micro variable orifice in combination with “dual start” micro recuperative heat exchangers.

- Total responsibility for the technology transfer of a very profitable new product line (cryogenic systems & Cryostats) licensed from Hymatic Engineering Ltd. (England). Personally improved technology so significantly that improvements were licensed back to licensor for a large fee. Fostered a very strong working relationship as a unified team.

- Worked on Strategic Defense Initiative, specifically the Space based Kinetic Energy Weapon, and other Black missile defense systems.

- Worked with Raytheon, Aerojet, Hughes, Ford Aerospace, Texas Instruments (and other Black projects) on the cryogenic cooling systems for the focal plane arrays for various missile programs such as AIM-9L, Sidewinder, Copperhead, SADARM, STAFF, Stinger, and AAWSM tank weapon systems.

UNION CARBIDE CORPORATION, Linde Division, Niagara Falls, NY --- 1976–1985
Plant Engineer

This division of Union Carbide produces purified gasses through a cryogenic air separation process.

- Broad based experience in operations of four $100 million cryogenic air separation plants

- Responsible for daily production of high purity hydrogen, oxygen, nitrogen and argon gasses

- Designed the mechanical piping and instrumentation control systems for large automated process systems that interfaced with Honeywell Distributed Control (DCS) Systems.

- Responsible for specifying, purchasing and maintaining large capital equipment such as chillers, turbo-machinery, large compressors, heat exchangers and filtration equipment.

- Designed and installed a wastewater treatment system to monitor and automatically chemically treat storm drain run-off. Also designed a novel self-cleaning filter system for large cooling water towers.

- Installed a complete water analysis and treatment program for all cooling water, and water tower applications, bringing the company into EPA compliance.

EDUCATION

State University of New York, Buffalo
MSME, 1987
BSME, 1986