

# FORCON INTERNATIONAL

**CHARLES A. DANIELS, Ph D**

## **SUMMARY:**

Accomplished Technology Leader with Plastics/Polymers Expertise: Broad scientific and technical skills, proven critical thinker and excellent communicator. Strong track record of identifying process and performance issues and implementing standards and solutions to meet customer needs.

## **EDUCATION:**

Case Western Reserve University, Cleveland, OH, Ph. D. Chemistry and Polymer Science  
Case Western Reserve University, Cleveland, OH, M. S. Chemistry and Polymer Science  
Utica College of Syracuse University, Utica, NY, B.A. Chemistry

## **ACTIVITIES, MEMBERSHIPS:**

**Professional:** Current member of AAMI and CFA; Past member of SPE and ACS; Member of the Board of Trustees, Miami University Paper Committee (1985-1987).

**Community:** Vice President, Neighborhood House Association, 2001-present; Co-Chairman of the Avon Lake Board of Education Levy Committee (2001); Chairman, Avon Lake Board of Education Bond Committee (1999); Chairman of the Geon Company United Way Campaign Committee, 1998; Chairman of the Board of Trustees of the Lorain County Access to Education Organization, 1996-present; founder of BF Goodrich/Geon Company/PDI Outstanding Science Scholar Internship Award for top science and math student in Avon Lake and Lorain, Ohio high schools.

## **CAREER HISTORY:**

**Materials Performance Consulting, LLC:** President – Consulting services to the materials industry, specializing in polymer materials. Product and process diagnosis and resolution, structure property relationships. ISO 17025 laboratory auditing services, expert witness testimony.

**Polymer Diagnostics, Inc.** (a PolyOne Company): Comprehensive research and testing facility, providing consultative services in the fields of polymer materials and their applications in areas such as automotive, medical, construction, packaging, electronics and consumer items.

**President** - Responsible for establishing Polymer Diagnostics, Inc. as a leading international R&D and consulting company through exploration of new, more profitable markets, technologies and applications.

- Led corporate formation, including development of business model and strategic plan.
- Grew revenues by 10% year over year, and staff by 50% over 4-year period.
- Developed a client base of over 400 companies, including every major global polymer producer.

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- Achieved a customer satisfaction index of over 95% from 1997 to the present.

**Geon Company:** The world's largest producer of Vinyl Compounds with sales of over \$1.8 billion.

**Director of Technology** - Responsible for reorganizing and staffing polymer analytical organizations to ensure successful formation of the new Geon company upon its separation from the BFGoodrich Company. Selected key staff and facilities to support organizational and customer needs.

- Led organization in achieving national accreditation and ISO registration.
- Standardized all manufacturing QC laboratory procedures.
- Successfully resolved key environmental hazard assessment issues.
- Recruited and hired world-class key scientific assets that broadened the organization's skill sets.

**B.F. Goodrich Company:** One of the world's largest tire, rubber, plastics, specialty chemicals and aerospace companies.

**Director of R&D** - Reported directly to the Division President, leading R&D programs for the Specialty Elastomers and Latex Division from 1985-1989, and BFG's largest operating unit, the Geon Vinyl Division, from 1989 to 1993. Responsible for the design and execution of all Research and Development programs, including the Vinyl Division's new product programs and the Elastomers and Latex R&D and technical service programs. Recruited, hired and developed key technical resources to support divisions' sales, marketing and manufacturing initiatives.

- Achieved two US patents for new products.
- Increased product revenues 25% in the first year, representing 130% of target.
- Developed several new vinyl products, resulting in the commercialization of the industry's first heat resistant vinyl compounds.
- Responsible for \$20M research budget.

**Manager, R&D** - Led four key research groups in plastics characterization, general purpose and specialty elastomers and PVC resin technology that developed and introduced new vinyl resins for the film, automotive and construction markets.

- Improved reproducibility of elastomer manufacturing process from 40% to over 95% in two years.
- Restructured research efforts in each area; streamlined project management by instituting rigorous accountability procedures and project teams focused on well-defined objectives.
- Drove new efficiencies and quality measures, resulting in significant product uniformity, and more rapid development of new products by forming cross-functional teams with clear division objectives.

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**R&D Scientist** - Responsible for supporting company wide R&D efforts by utilizing modern polymer analytical methods to solve customer problems.

- Developed new polymer characterization methods for key BFG products.
- Led key technical initiatives on two company-wide strategic programs in developing technology to remove vinyl chloride from process streams and to solve critical performance issues delaying the transfer of new resin technology from R&D.
- Developed methods for prediction of process behavior of vinyl resins, a key component leading to BFG's worldwide licensing of monomer removal technology.
- Developed lab-scale methods and computer models to predict behavior of post polymerization behavior of vinyl resins in world-scale manufacturing plants.
- Granted two US patents on new products and process technology

## **TEACHING EXPERIENCE:**

- Instructor, Lorain County Community College, 1985-87; Developmental Education
- Adjunct Professor CSU, 1972-3, Polymer Science
- Adjunct Professor, John Carroll University, 1970-1; Polymer Science

## **PUBLICATIONS:**

- 25 technical publications on Polymer Solution Thermodynamics, Characterization and Rheology
- Chapters in 3 texts on Polymer Materials