William de Waal

William de Waal has been focused on finding new applications for UV technologies and investigating innovative water and wastewater treatment technologies that are not based on UV. He has investigated many start-up companies and has worked to develop relationships with them which could potentially lead to a business venture.

Twelve years of experience in the environmental equipment business for water and wastewater treatment. Extensive background in the chemical industry covering approximately twenty-five years. Strong technical foundation (Ph.D. organic chemistry). Proven track record of applying technical knowledge in a business environment. Performs well in a team and goal-oriented climate.

Career path has included positions of increasingly more responsibility: research chemist, market research analyst, product manager, business director of new business development and VP for Research. This experience has been gained in an international environment with job assignments in Canada, U.S.A. and Switzerland. Fluent in English and Dutch with a limited knowledge of French and German. Able to operate competently a broad range of office software and proficient in net searching.

EDUCATION

- B.Sc. (Honours Chemistry) University of British Columbia
- Ph.D. (Organic Chemistry) University of British Columbia

PROFESSIONAL DEVELOPMENT

- Surface Chemistry, Carnegie Mellon Institute
- Latex Technology, Lehigh University
- Marketing Management, School of Business, University of Western Ontario
- Attended internal course in management, software, total quality, German language, French language, team building, sales, etc.

BILL DE WAAL

Employment History

Trojan Technologies, London, ON
Director of Innovation Management
1996- Present

Identified new technologies for water treatment, identified innovative UV technologies and initiated entry into new markets. Position held on a contract basis while employed by Hydroxyl Systems.

- New business were identified and justification for investments were prepared
- New UV technologies were identified and promising ones transferred for development
- New disinfection markets and advanced oxidation markets were identified and are in active development
- Instrumental in acquiring AUVS, an advanced oxidation technology company, which after 7 years represents 1/3 of Trojan's sales volume

Hydroxyl Systems Inc., Victoria, BC
Vice President Product Development & Research

Managed a group of 6 researchers engaged in wastewater treatability studies, biological testing and product development. Currently act in a consulting capacity only.

- Developed a 20kW UV reactor for advanced
- Prepared patent application for CleanSea non-biological treatment system
- Developed laboratory equipment and procedures for moving bed bioreactor technology
- Monitor environmental technologies under development
- Hydroxyl contracted my services to Trojan for special projects from 2000 to 2004.

Mayzo, Inc., Norcross, Georgia, U.S.A.
Director Business Development

Identified new products to complement existing product line, new applications and new suppliers.

- New product line and supplier identified to complement activity in tape industry. Negotiating supply agreement.
- Identified new products (light stabilizers & flame retardants) for the additive group. Negotiating supply and pricing.
- Generated sufficient profit in first four months to cover annual salary and expenses.

Bayer Corporation
(formerly Polysar Rubber Corporation)
Project Manager, Sarnia, Ontario, CANADA (1994-1995)

Initiated a waste reduction program for a 250KT/yr. chemical plant

- On-site incineration of spent hydrocarbons for energy resulted in savings of $1.2M/yr.
- Initiated recycling of scrap rubber, spent caustic and packaging materials resulting in reduced disposal costs and increased landfill life.

2000-2004

EPDM Business
Director, Akron, Ohio (1988-1994)
Managed the ethylene-propylene rubber business for North America and subsequently for the world with sales of $50M.

- Managed the business through two major technology changes and two expansions.
- Achieved "sold out" plant by 1994.
- Directed business and technical teams representing manufacturing (Orange, TX), technical development (Sarnia, ON) and sales (Akron, OH).

- As smallest producer in the U.S., achieved dominant position in plastics modification industry.
- Developed a new business in modification of polyethylene for packaging which became a major application.

Product Manager, Fribourg, Switzerland (1984-1988)
Managed the specialty latex product line for the European market with sales of DM 70M/yr.
- Increased profits by 9% per year from 1984-1988 inclusive.
- Involved in a broad range of applications in very dynamic markets (i.e. adhesives, tapes, papers, textiles, flooring, foam, printing, non-wovens, etc.).

Senior Market Research Analyst, Sarnia, Ontario (1981 -1984)
Responsible for strategic analysis of latex markets and competitive production technology.
- Identified new production technology that resulted in the construction of a pilot plant.

Research Chemist, Sarnia, Ontario (1978-1981)
Responsible for application development in the Latex division in water based adhesives and technical service for environmental problems.
- Penetrated pressure sensitive adhesive market with new water based technology.

Imperial Oil Ltd., Sarnia, Ontario **1974**
Research Chemist
Responsible for lube oil formulation and additive synthesis.
- Developed new generation motor oil that improved fuel efficiency.

Orchem Research, Vancouver, British Columbia **1970**
Research Chemist
Responsible for developing new processes for making specialty chemicals.
- Developed a patented process for making a drug intermediate.
- Provided the technical support for a new plant.

PATENT AND PAPERS

- Published eight academic papers
- Issued three patents:
  - Production of Alkxyphenol Compounds, U.S. Patent 3,819,179.
  - Method for the Production of Alkoxycyclohexanones, U.S. Patent 3,992,452.
  - Borated Derivatives of Oil-Soluble Mannich Bases in Combination with Coadditive Hydrocarbons as Flow Improvers for middle Distillate Fuel Oils, U.S. Patent 4,140,490.

OTHER INTERESTS

- Active in skiing, hiking and woodworking
- Enjoy performing arts
- Chaired a non-profit nursing home board for 10 years