

Frank A. Kvietok

24965 E. Roxbury Pl.
Aurora, CO 80016
(303) 627-1785 (h), (303) 907-7035 (m)
e-mail: fkvietok@comcast.net

Education

- Ph.D. in Inorganic Chemistry, University of Colorado, Boulder (9/93).
- B.A. in Chemistry, Cornell University, Ithaca, NY (5/88).

Experience

- **Director of Application Development**, Tersus Solutions, Littleton, CO (11/15 – current).

Portfolio Management: As a new platform technology using liquid carbon dioxide for textile processing, Tersus enjoys significant technical, economic, and environmental advantages versus incumbent water-based systems. Instituted and manages a comprehensive opportunity portfolio. Markets currently being explored and/or deployed include: fiber processing (wool, down), denim colorization, textile treatments (water repellent, fire retardants), professional/military apparel reconditioning, industrial laundry, and art restoration.

Opportunity Creation/Assessment: Leads identification of new market opportunities and rigorous assessment of previously identified projects. Blends technical knowledge and readiness understanding with market size and viability studies to rapidly establish appropriate category of interest. Works closely with external client partners to define value proposition and manage development/deployment efforts during both pre- and post- contract phases.

Chemical/Application-Specific Technology: Leads definition of system operation and chemical formulation across all applications. Given the novelty of liquid carbon dioxide as a medium for textile processing, leads significant outreach programs in parallel chemical industries and supply bases to access appropriate technologies.

Intellectual Property: To best position Tersus for market strength and potential licensing opportunities, manages the intellectual property assets and the on-going development of new content. Created comprehensive patent landscape map to identify related technical and/or competitive activity to inform business and technical development efforts.

- **Director of Advanced Development**, American Recreation Products, LLC, Boulder, CO (12/10 – 10/15).

Position/Function Establishment: Following a two month consultancy focused on learning business operations and development processes utilized at AmericanRec, proposed creation of Advanced Development Center (ADC) to drive innovation and spearhead introduction of market-impactful products and technologies.

Areas of Responsibility: Working across all AmericanRec brands (Kelty, Sierra Designs, Slumberjack, Ultimate Direction, Wenzel, Ridgeway by Kelty, Tailgaterz, InstaBed, Mountain Trails), the ADC develops business opportunities through technology exploration/development, novel product design, rapid prototyping capability, test method development, partnership formation, intellectual property strategy, new market exploration and deep consumer understanding. On all projects, the ADC strives to identify and implement equity building initiatives that provide immediate and sustained value creation.

Key Approaches: Actively populate and manage a portfolio of projects that extend from next season launches to 5+ year development horizons. Work closely with Brand Managers to align portfolio with brand visions. Unstoppably curious about virtually anything 'new' - how it works and what it is capable of – Advanced Development functions at the nexus of all business development functions where new ideas are identified. Collaborate closely with all from individual inventors to multi-national technology corporations. Initiated and lead multiple on-going academic collaborations ranging from new material development to student design challenges. Instituted and moderate weekly consumer group sessions where the full range of development opportunities are vetted and refined from initial new idea/needs exploration to final, pre-launch marketing collateral review. Maintain strong connections and awareness of developments in adjacent industries.

Business Accomplishments: Opportunity identification and overall development leadership on numerous technology and product design launches across brand portfolio. Highlights include: DriDown, Kelty AirPitch, Wenzel Light Reflect, Wenzel Insect Armor, SD Backcountry Bed, SD Mobile Mummy, Wenzel Magnetic Shelters, Kelty ThermaDRI insulation, SD apparel venting designs and hands-free hood/cuff closure systems, UD vest and water vessel designs.

Future Prospects: In addition to maintaining robust awareness/next-gen development programs to support all launches, the ADC has led the development of a process that is well-poised to provide an on-going, sustainable source of innovation for the entire AmericanRec brand portfolio. Exceptional launches can be anticipated in the following areas: environmentally-responsive insulation; air bed material cost-saving (25%)/cloth-like experience/non-PVC; hydration systems; 'instant' tent design; improved DriDown technology; active dynamic load pack suspensions; truly waterproof synthetic insulation; non-PU/FR-compliant tent fabric coatings; novel SI pad designs and construction techniques.

Exxel Outdoors Acquisition: Following the successful sale of AmericanRec, redefined development organization and process while consolidating capabilities to align with Exxel Outdoors focus on mass market opportunities. With greater need for ready-to-execute innovation and reduced cost, transitioned ADC role to primarily technology application and production liaison.

- **Co-Founder, Chief Innovation Officer**, Launch Pad, LLC, Greenwood Village, CO (4/06 – 8/10).

Inception/Concept: Founded with former Orange Glo International (OGI) President, Launch Pad was created to identify and develop new consumer business opportunities with strong potential for high value brand creation. Based on a direct response launch model leading into retail/international channels and fed by a dynamic portfolio, '09 revenue exceeded \$25M. Current efforts are focused on driving the success of two businesses which have demonstrated exceptional potential.

Development Model: Front-end project definition was very flexible. While some opportunities were based on products fully developed and already in retail, others were simply 'paper inventions' requiring significant development. Projects were structured and laser-focused on understanding true consumer interest (will they buy?) as early as possible. Following this initial face-to-face consumer work and after product/marketing refinements, businesses would launch via direct response where additional, more quantitative consumer metrics were developed and a revenue stream was established.

Capability Creation: Run in true start-up fashion, people were brought into Launch Pad based on the strength of the portfolio and concrete opportunity development needs. Individuals with solid core expertise in established areas (Marketing, Operations, Finance, Sales, etc.) along with a strong entrepreneurial streak were added to run new projects or to complement growing businesses. Currently, Launch Pad has 15 FT employees.

Portfolio Overview: The Launch Pad team has evaluated over 500 opportunities since April '06 with 9 having entered into the direct response stage. From these efforts, two have emerged and been developed into strong growth opportunities: Fullbar (fullbar.com) and Brainetics (brainetics.com).

Fullbar, a weight-loss system, is currently in wide US retail distribution (mass, grocery, drug, specialty) with a product portfolio of over 5 forms and multiple flavors. It has demonstrated exceptionally fast growth and has brought significant incremental growth to the category being recognized by consumers as healthy and effective. Brainetics, an educational 'math & memory' system, is currently largely a DR business with monthly revenues of \$1.5M+. Domestic retail/catalog distribution is off to a strong start as of June '10, while international sales are also growing strongly and poised to overtake US revenue by mid '11.

- **New Product Explorer**, Orange Glo International, Greenwood Village, CO (2/04 – 12/05).

Role/Team Creation: During pre-hire discussions with Orange Glo International (OGI) President, shared vision for the creation of a team focused on new category creation and category re-invention. The proposal was to restore much of the entrepreneurial environment and success that OGI enjoyed during its formative years. During '02-'03, OGI's sales had declined significantly faced with stiff competition and a dearth of new product innovations. Accepted position to build and lead this team.

Approach Definition: Adopted a portfolio approach to capture and prioritize all ideas from 'Seeds' to 'Launch Priority'. Portfolio includes ideas that span from fully-developed, yet under-marketed products to organically invented ideas. Portfolio used as innovation tool as well as communication tool. In all cases, heavy external (vendor, consultant, and/or potential partner) resources were essential. After demonstrating in-market success via the 'Direct Model', projects transitioned to conventional marketing team for mass retail execution.

Team Development: Have grown the team to six dedicated members including individuals with experience in Marketing, Packaging, Formulation, Sales, and Consumer Understanding. However, rather than building a 'cross-functional team', 'cross-functional' individuals were sought. Team operates with a partner environment, as in a law firm, with all members expected to identify opportunities, lead projects, and seek/provide functional expertise as consultants.

Business Accomplishments: The NPE team has been responsible for the vast majority of new product launches from OGI in its last 2.5 years. Notably, most of these launches brought OGI into new categories. Among these launches, note the following: Orange Glo Hardware Floor System, OxiClean Miracle Foam, Clear Elements liquid laundry detergent, OxiClean laundry detergent, Kaboom Ultra Scrub, Kaboom Never Scrub, OxiClean SmartClean, Voila stain repellent, and OxiClean Carpet Revitalizer. Further, a development pipeline of opportunities for '07, '08, and beyond is well-established and on-track for delivery.

Infomercial Re-Invention: In addition to product-focused initiatives, also initiated and leading the 'Infomercial Re-Invention' project for OGI. Recognized that while still an effective and equity-building advertising vehicle, the infomercial does not have the same level of uniqueness for OGI as it did during '97-'03. Project is focusing on collecting, creating, and evaluating new consumer communication vehicles ranging from various on-line approaches to in-home shopping parties.

Additional Cultural Contributions: Led conversion of traditional project teams into 'Strategic Business Units' to promote cross-functional ownership and innovation. Instituted 'NPE Sabbatical' program allowing other employees to work in the NPE group for a three month period. Established and leads 'Creative Consumer Board' which brings consumers into the OGI offices on a weekly basis to review new product concepts, marketing approaches, and category benefit investigations. Career and Technical Mentor to several staff-level employees.

Church & Dwight Acquisition: Involved in potential buyer meetings as leader of NPE team. Significant level of interest displayed by Church & Dwight with respect to leveraging NPE's Innovation and Launch models across all categories. Acquisition of OGI for \$325 million publicly announced July 17th,

2006. Closing effective as of August 7th, 2006. Led transition of NPE approach and portfolio from closing through 12/06.

- **Product Designer & Technologist**, The Procter & Gamble Company, Cincinnati, OH (3/95 – 1/04).

Home Care: Overall new product design development responsibilities in a category new to P&G (Air Care), including: product concept creation, consumer needs research, prototype development, technology development/acquisition, patent strategy, product line-up strategy, and future initiative pipeline development. Project management responsibilities involve extensive external resource coordination (supplier, academic, design firm, consultant), as well as leadership of internal efforts.

Co-leader, with Marketing Director, of Home Care New Business Development team chartered with identifying new category opportunities and re-inventing categories in which P&G is already represented. Task involves creation of a portfolio of product ideas across a range of risk/reward ratios. Products ideas include those requiring significant technology development to those involving minor re-application development to those involving acquisition/licensing of existing products. Portfolio content provides a full assessment of each proposition and is used to establish dedicated project teams.

Laundry Care: New technology development for laundry products including surfactant, perfume delivery, polymer, and solubility-enhancing strategies. Comprehensive laundry product formulation and qualification including current in-market Tide, Tide HE, and Tide Tablets. Creation of new laundry product physical form and marketing ventures.

Cultural Contributions: 'Soapbox' seminar series founder: researchers from all areas of the company are brought together monthly to talk about the successes, failures, and approaches of their work. Acknowledged as 'Technology Entrepreneur' linking both internally- and externally-developed technologies to business needs across the company. Career and Technical Mentor to several junior staff members.

- **Founder/Principal**, KV-Design, (7/01 – present).

Actively involved in independent product concept and technology invention with a business model based on intellectual property licensing.

Portfolio spans a broad range of forms including internet advertising, sustainable/transformable architectural structures, toys, furniture, lighting, energy storage, encryption protocols, personal electronics, nutrition delivery systems and exercise equipment.

- **Post-Doctoral Researcher**, The Ohio State University, Columbus (11/93 - 2/95).

Advisor: Professor Bruce E. Bursten

Previously the Bursten group had focused entirely on computational studies. In bringing experimental expertise into the group, through lab facility development and graduate student training, this approach has been sustained as a core element of the group's research focus. Identified novel ligand-loss, metal-metal bond formation chemistry using exploratory matrix photochemistry, fast and ultrafast spectroscopy. Complemented experimental studies with parallel computational studies linking structure and reactivity. Conducted electronic structure studies (local-density-functional and *ab initio* methods) of actinide-containing molecules.

- **Research Assistant**, University of Colorado, Boulder (6/89 - 9/93).

Advisor: Professor Mary Rakowski DuBois

Developed synthetic and reactive characterization of a new class of ruthenium and osmium pyrrole complexes in order to probe catalytic hydrodenitrogenation. This was a new area of research for the Dubois group and has since become a major area of focus for them.

Conducted novel synthesis and molecular orbital calculations (extended Hückel) of molybdenum sulfur systems that serve as models for catalytic systems. These studies explained previously identified reactivity, rationalized structures of newly identified complexes, and predicted reactive pathways more recently explored experimentally.

- **Peace Corps Volunteer Trainer**, Kathmandu, Nepal (7/88 - 12/88).
Following a two-week language and culture immersion training, traveled extensively throughout Nepal in order to provide coaching and teaching techniques to volunteers in science and mathematics teaching positions (32).

Developed and implemented a program of experiments for elementary through high school students that was flexible enough to account for conditions of limited and varying resources, yet addressed required curricula.

Honors

- Edward L. King Scholarship, University of Colorado, Boulder (1993).
- Colorado Doctoral Fellowship, University of Colorado, Boulder (1989-90).
- Departmental Honors in Chemistry (*Cum Laude*), Cornell University (1988).
- National Science Foundation Undergraduate Research Award, Cornell University (1987).

Patents

- Inventor/co-inventor on **twenty-five** granted and **nineteen** pending US and International patents (AmericanRec, OGI, or P&G owned) covering fields including surfactant molecular design, laundry product formulation, novel zeolite structures, carbohydrate processing, air filtration media/device design, hard surface cleaning product formulation, cleaning implements and delivery systems, apparel design, non-wovens, air-pump design, tent design, insulation systems, and backpack design
- Inventor on **six** pending US patents, independently developed and owned.

Publications/Presentations

- Author/co-author on **fourteen** academic publications and numerous presentations
- Guest lecturer at Denver University MBA program in *Entrepreneurship*, Colorado State University in *Product Design/Development*, and University of Colorado, Boulder MBA and Product Design programs in *Design Thinking*

Hobbies/Volunteer Activities

- Skiing, camping, biking, found-art creation, gardening, triathlons, sailing, adventures with my family
- Science fair tutoring and judging, Outdoor Program Director for Boy Scout troop
- Institute for Environmental Solutions, 10th Mountain Hut, and CO Fourteeners Institute board member

References available upon request