# Deirdre M. Gormley, PhD.

# **Overview**

- 4 20+ years Consumer Products; Personal Care, Home Care, Pet Care, Air Care.
- 🖊 🛛 R&D Technical Leader, Innovator, Formula development, Team Builder
- Global Product development for over 100 companies.
- Scale up to manufacturing expert.

# **Technical Skills**

- Problem Solving Expert in most areas of skincare and haircare manufacturing and development
- Recruiting and training talent
- Personal Care/OTC, Home Care, Air Care formula 4 development
- Product Development
- Technical Transfer and Manufacturing

# **Professional Experience**

#### Dr Dee & Co. – President – Yorba Linda, CA – Jan. 2022 - Current

Consulting services including but not limited to: Formulation, Manufacturing, Problem Solving, Product Development, Technical Expert.

#### Developlus – Splat, Satin, Color OOPS – Director, R&D, Corona CA – Full time Jan 2022-Jul. 2022

- Created 26 new formulas launched in Target and Walmart Jan 2023.
- Optimized powder bleach formula and found a CM for manufacturing in US due to shipping and supply chain issues from overseas.
- Hired a process engineer for scale up to manufacturing support a new role in the organization.
- Implemented existing equipment for making oxide via automated system building efficiencies in manufacturing.

#### RAD2 Consultants & Innovation, LLC – CEO, Tustin CA – Full time Jan 2018-Nov. 2021

- CEO for \$1MM+ operation – started company from R&D lab in garage to full scale manufacturing.
- Create and manufacture marketed formulas for various personal care products including skincare, haircare, perfume, CBD products, Kids, and OTC products.
- Hired all personnel, ran operations, managed sales, R&D lab and formula development, designed website, • developed pricing model, created brand recognition platform for R&D and manufacturing business.
- Create quotes and invoices for manufacturing and R&D services.
- Assisted customers with sourcing challenges.

#### PakLab, Director - R&D, March 2014-Jan 2017, Chino, CA

- Responsible for PakLab proprietary formula development;
- Responsible for customer supplied formula tech transfer;

- Sales
- **Community Outreach** 4
- **Cleaning/Process Validation** 4
- 4 Quality systems (Non-conformance, Change Control, Corrective and Preventative Action)
- 4 FDA Compliance/Regulatory Analysis



- Support ~200+ projects ongoing per week;
- Leader of R&D product development team from concept to launch in 6-24 months;
- Implement new processes for internal documentation, new R&D software, new R&D process workflows to streamline formula development focusing on R&D, regulatory, and scale up excellence and efficiency;
- Hired 4 new employees in 18 months bringing unique talent to the organization and trained talent for the cosmetic formulation industry;
- Meet with customers on a regular basis and collaborate with sales Team to build the business;
- Support company growth by working trade shows, building relationships, and utilizing connections from the industry;
- Champion for You be the Chemist Program supporting chemistry in middle schools. Honored to be a judge for the State of California challenge.

## Mattel, Staff Engineer, February 2013-February 2014, El Segundo, CA

- Global Chemical Regulations technical expert at Mattel Headquarters
  - Work with global team (EU, Asia, Australia, South America, North America) to ensure regulatory compliance of manufactured product.
  - Responsible for developing a standardized regulatory implementation process by coordinating with cross-functional leaders at the Director and VP level.
  - Responsible for predicting upcoming chemical bans based on NGO activity, recent toxicological data and global media attention.
- Editor for Quality and Regulatory internal newsletter keeping global team up to date on recent department activities and news.

### Neutrogena/Johnson & Johnson, Principal Scientist, November 2010-February 2013, Los Angeles, CA

- Support of Marketed Products (Los Angeles Plant), Cosmetics and OTC products
  - Lead non-conformance investigations and write investigation reports auditable by the FDA for compounding related manufacturing challenges.
  - Lead Corrective Action Preventative Action (CAPA) investigations.
  - Lead formulation and process improvement projects.
  - Lead change control activities working closely with quality assurance and production to ensure changes are carried out in a compliant and efficient manner.
  - Technical writing coach for Neutrogena responsible for reviewing documents, leading training, and coaching colleagues.
- Team leader of the Cleaning Optimization Team (Cleaning validation at Los Angeles Plant)
  - Lead team of contractors and employees to improve current procedures.
  - Lead development and screening of new detergents.
  - Optimize cleaning procedures to maximize efficiency and efficacy.
  - Develop lab test method to assess "cleanability" of new products.
- Relevant training: Process Validation, Cleaning Validation, CAPA training, FDA/GMP Compliance, Writing Technical Justifications for FDA

#### Melaleuca Inc, Senior Scientist/Technical Manager, June 2008-October 2010, Idaho Falls, ID.

 Responsible for multiple R&D launches, including Hand Dish wash, Auto-dish wash, Pet shampoo, Household Cleaning products, Candles, Air Fresheners and Furniture Polish

- Product development and formulation of new and existing products in the Home Care, Air Care and Personal Care categories.
- Developed a new line of dish care products as a renovation of the current line-up with cost savings.
- Developed a new version of a top selling Melaleuca product as a limited time offer. This product became the #1 most requested product in 2009.
- Developed and established new test methods for Hard Surface cleaners performance testing.
- Successfully scaled up 7 new products for the contract manufacturing business in multiple manufacturing facilities across the country.
- Responsible for the promotion and technical development of a lab technician to a junior chemist position.
- **Relevant training**: Essentials of Management, GLP training, Safety training.
- Cross training experience in Marketing building candle line up by 100% in total sales by renovating the Air Care line-up.
- Leader in establishing new internal Kosher program.

# The Dial Corporation, Senior Scientist, April 2005-March 2008, Scottsdale, AZ.

- Responsible for establishing and maintaining a relationship with Arizona State University (Platinum Membership) at the Center for Solid State Science (CSSS). Ongoing work included investigative research studies for all franchises, focused on the study of hard surfaces using specialized analytical techniques including Scanning Electron Microscopy (SEM) and solid-state x-ray diffraction (XRD) bringing \$40k/year to ASU.
- Product development leader of "New Technologies" in household cleaners focused on long term, "new to the market" products for the Soft Scrub team.
- Green Chemistry Formulation leader for the Technology Sustainability Team within R&D.
- Significant contributions to 3 high volume (Walmart/Grocery) National product launches.
- Committees: University Intern Recruiting efforts, Culture Innovations Team (CIT), Vision and Values Squad (V&V squad), Coordinator for Outreach events including National Chemistry Week.
- Relevant training: Essentials of Leadership (Management training course), Basic GLP training, GLP Product Chemistry Training, GMP Training, Short Course in Applied Surfactant Science and Technology, Project Leader Training, Solid Edge Training.

# ASU, Graduate Research Assistant in advanced computer modeling, 2001-Feb 2005, Tempe, AZ.

- Working to understand carbonation reactions with olivine and serpentine.
- Calculated materials properties using ab initio first principles, quantum physics approach.
- Performed X-ray diffraction experiments in-situ with a patented mini-reactor at the Advanced Photon Source within Argonne National Labs (Chicago).
- Used solid state <sup>29</sup>Si NMR results to investigate the role of silicon in the reaction mechanism of the dehydroxylation of lizardite.

# Sheritt International, Research Chemist, Fort Saskatchewan, AB, Canada, Summer 2001.

- Designed experiments in Process Technology laboratory to improve upon current plant conditions in the cobalt and nickel refinery.
- Compiled and analyzed experimental results using Excel and statistical methods and submitted final reports of all completed projects.

#### University of Alberta, Physical Chemistry Researcher, Edmonton, AB, Canada, 1999-2000

- Worked on an undergraduate research project in Raman Spectroscopy.
- Used Argon and Krypton lasers and a CCD detector to analyze amino acid derivatives.
- Used UV/Vis Absorption Spectroscopy as an additional characterization tool.
- Prepared an undergraduate research project for two semesters and presented results to the Department of Chemistry for evaluation.

#### University of Saskatchewan, Bio-Inorganic Synthetic Chemist, Saskatoon, SK, Canada, Summer 1999

- Synthesized amino acid derivatives, working particularly with Lysine.
- Fully purified and characterized all products using techniques such as liquid chromatography, nuclear magnetic resonance (NMR) including TOCSY & COSY, mass spectroscopy, and elemental analysis.
- Performed electrochemistry on amino acid chains.

#### Biomira Inc., Synthetic Carbohydrate Chemist, Edmonton, AB, Canada, Summer 1997.

- Synthesized organic compounds in R&D laboratory specializing in breast cancer research.
- Purified carbohydrate chemistry reaction products via column chromatography in both large and small scale and characterized chemical structures by NMR and Mass Spectrometry.
- Assisted two senior PhD Scientists.

# **Education**

PhD, Science and Engineering of Materials, Arizona State University, December 2004.

Dissertation: An integrated experimental and first-principles computational study of CO<sub>2</sub> mineral carbonation reactions in olivine and serpentine

Bachelor of Science, Specialization Chemistry, University of Alberta, May 2001.

# **Conference and Presentations**

- Member of Society for Cosmetic Chemists.
- Member of International Society of Female Professionals.

# **Publications**

Article: "The Way Fragrances Link to our Emotions", Intermountain West Society of Cosmetic Chemists, Winter 2010.

US Pat 7833918 – Filed Jan 14, 2009 - "Water-activated, disposable two-sided cleaning article", The Dial Corporation, Scottsdale, AZ

US Pat D579613 - Filed Sept 7, 2007 - "Cleaning Device", The Dial Corporation, Scottsdale, AZ

US Pat. D557134 - Filed Jan 26, 2007 - The Dial Corporation, Scottsdale, AZ

Deirdre Gormley, CV Sales@drdeeco.com c: (949) 205-6205

McKelvy, Michael J.; Chizmeshya, Andrew V.G.; Diefenbacher, Jason; Bearat, Hamdallah; Carpenter, R.W.; Wolf, G.; Gormley, Deirdre. **Developing an atomic-level understanding of the mechanisms that govern CO<sub>2</sub> sequestration mineral carbonation reaction processes.** Proceedings of the 2005 TMS Annual Meeting & Exhibition, San Francisco, CA, February 13-15 (2005).

Chizmeshya, Andrew V.G.; McKelvy, Michael J.; Gormley, Deirdre; Nunez, Ryan; Kim, Youngchul; and Carpenter, Ray **CO<sub>2</sub> Mineral Carbonation Processes in Olivine Feedstock: Insights from the Atomic Scale Simulation.** The proceedings of the 29<sup>th</sup> International Technical Conference on Coal Utilizations and Fuel Systems. Clearwater, FL, USA, April 18-22 (2004). *ISBN No. 0-932066-29-54*.

Chizmeshya, Andrew V. G.; McKelvy, Michael J.; Wolf, George H.; Kocher, Michael; Gormley, Deirdre. **Quantum** simulation studies of olivine mineral carbonation. Proceedings of the International Technical Conference on Coal Utilization & Fuel Systems (2003), 28th(Vol. 1), 319-330. CODEN: PTCSFT CAN 139:249283 AN 2003:552959 CAPLUS

Loppnow, Glen R.; Shoute, Lian C. T.; Kraatz, H.-B.; Galka, P.; Zavodni, A.; Gormley, D.. **Resonance Raman** spectroscopy of a proline-linked benzyl ferrocene supermolecule: Towards a fundamental understanding of protein dynamics. Abstracts of Papers, 223rd ACS National Meeting, Orlando, FL, United States, April 7-11, 2002 (2002), PHYS-368. CODEN: 69CKQP AN 2002:191429 CAPLUS