JOHN M. KAISER

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PROCESS TECHNOLOGY

Globally recognized subject matter expert in cocoa, chocolate and moulding with over 30 years' experience in process development, start-up of new processes, products and plants, intellectual property management, rheology and powder technology. Accomplished leader adept at developing and guiding multi-cultural teams. As a leader, I bring a high level of energy, collaboration and expertise to problem-solving, quality decision making, and drive for results and doing so with the highest level of integrity.

CAREER ACCOMPLISHMENTS

Mars Chocolate - Technology Fellow

2016 - 2018

- Served as global technical subject matter expert in cocoa and chocolate manufacturing providing guidance both tactical and strategic to ensure Mars future leadership in chocolate.
- Responsible for cross-functional project with expected impact of \$500M pa. leveraging heavy use of external collaboration. Led effort to design, propose and secure \$3M for facilities in LATAM and SE Asia.

Mars Chocolate - Global Director Cocoa & Chocolate Process Technology

2013 - 2016

- Responsible for cross-functional global project with target value of \$170M pa, cocoa sustainability and nutritional benefits.
- > Identify, create, align and communicate best practices and asset standards for chocolate manufacturing.
- > Sr. leader responsible for next generation chocolate making meeting energy, CAPX and quality.
- Accountable for R&D team for chocolate capacity projects exceeding \$300M spend from project development through on-site technical validation of assets around the Mars supply network.

Mars Chocolate - Sr. Mgr. Cocoa & Chocolate Process Technology

2008 - 2013

- Recognized subject matter expert spanning all unit operations from raw material handling through finished chocolate. Included the on-boarding, on-going training and succession planning of future Mars leaders.
- Led team responsible for specifying and commissioning \$100M in assets for cocoa to chocolate mfg.
- Maintained high levels of team engagement at 75% or better Gallup grand mean.
- Accountable for site R&D facility, safety, GMP, maintenance including five year capital planning.
- Led global community of practice for chocolate making.

Mars Chocolate North America - Director Chocolate Raw Materials

2005 - 2008

- Cross-functional lead for raw material COGS initiatives resulting in on-going annual savings of \$5-10M
- Staff Development develop and direct 17 associates to ensure technical competence, creativity, teamwork and business knowledge leading to continued managerial and technical leadership for R&D. Staff includes manager of managers, scientists, interns, and technicians.
- Mars University Program Manager R&D College, School of Technology. Mars Chocolate School Instructor and content owner. Three day in-house course offered bi-annually to Sales, Commercial, Supply, R&D associates.

Masterfoods, USA – Group Leader Product & Process Development

1995 – 2005

- > Delivered annual project reviews to the owners of Mars, a multi-billion dollar business.
- Co-managed NBC Apprentice Challenge M-azing® Bar for Episode 10 at Masterfoods, USA, 17 June 2004, entailing media training, interactions with the production team and delivery of an entertaining product placement.
- Managed a group of 16 students and two advisors for MIT Chemical Engineering Practice School session Spring 2002. Project netted a model document on Process Simplification that continues to be referenced today.
- Team leader for COGS initiative that required a technical solution. Collaborated with vendor and provided technical solution which was implemented on manufacturing scale enabling an estimated \$8MM annual savings and the use of commodity ingredients.
- Responsible for design, formulation, scale-up and manufacture of chocolate for several products (M-azing Bar, Dove® Cookies, Dove® Ganache). Product responsibility for Dove® products including Dove® Milk

- Chocolate with Caramel, Dove® organic chocolate, M-azing® bar, Chocolate BDT and Developing Snack Food BDT chocolate needs
- Responsible for Chocolate Global Technology Platform for long term research projects conducted in US & Europe.
- Managed team who implemented trans-fat removal from all MFUSA confectionary products. Involved the transition of nearly 500 SKUs across 5 plants. Largest formulation change in MFUSA history. Completed on schedule and within budget.
- > Led the introduction and implementation of new processes in our supply sites for new and existing products resulting in better utilization of assets and incremental GSV of \$10MM.
- Particle Technology Platform Manager championed implementation of >\$1MM for a state-of-the-art pilot plant capable of milling, classification and compaction of powdered food materials.

M&M/Mars - Process Development Engineer

1989 - 1994

- R&D team leader responsible for design and commissioning of first Mars, Inc. chocolate production in China while meeting quality standards of current offerings. Business commands majority market share in chocolate.
- Technology Steward responsible for monitoring global Intellectual Property for Chocolate Products and Processing. Contributed expert witness testimony at EOP proceedings for patent opposition, submitted patents that have been granted and assisted in freedom to operate documents. Vigilant in maintaining Mars, Inc. freedom to operate throughout the world.

Kraft Foods, Inc. – Glenview, IL R&D Engineer II

1987 - 1989

- Engineering leader for four new process initiatives. Assessed the technical and economic feasibility of scaleup for newly developed products. Monitored work of outside research contractors. Scaled up bench top enzymatic reactor to pilot scale continuous process.
- Designed state-of-the-art pilot plant including specification, procurement and management of equipment, utilities and controls installation. Responsible for hiring and training twelve technicians on operation of pilot facilities.

EDUCATION and TRAINING

M.S. Chemical Engineering, Iowa State University, Ames, IA, Aug. 1985 – May 1987 Thesis: Improved recovery of whey protein by sequential flocculation and ultrafiltration.

B.S. Chemical Engineering, Purdue University, West Lafayette, IN, Sept. 1981 – May 1985

Manchester, Inc. Executive Leadership training and assigned personal coach during 2004.

Cradlerock, Inc. Leadership Directions training for Manager of Managers, March 2008.

PATENTS, APPLICATIONS, PUBLICATIONS

- o WO2018125963A1 Systems and methods for reducing refining during cocoa liquor processing, Mars, Inc.
- o US D593276, US D556426, US D584877, US D556427 (Design Patents) Mars, Inc.
- o Particle Size Distributions. Mars, Inc.
- o US 7819053 Method and System for Moulding Chocolate Utilizing an Air Knife and Products Made. Mars Inc.
- o US 2008/0317891A1 Improved Tasting chocolate containing Cocoa Flavanols. Mars, Inc.
- US 7727566 Improved Tasting Energy Bar. Mars, Inc.
- US 6521278, 6761924, Food Materials with Improved Flavor and Functionality Due to Size Reduction in a Modified Atmosphere. Mars, Inc.
- o US 6391373 Rheologically Modified Confectioneries Produced by Employing Particular
- EP 1069831 Reduced Fat Confectioneries Comprising Emulsifying Agent Combinations, and Preparation Thereof, Mars, Inc.
- o US 20050084603 filed 8/04 Multi-layered Confection. Mars, Inc.
- Kaiser, J. M. and C. E. Glatz <u>Limiting Resistances in Ultrafiltration of Soluble and Precipitated Whey Protein</u>
 Paper presented at National Meeting of AICHE, Aug. 17, 1987
- Kaiser J. M. and C. E. Glatz <u>Use of Precipitation to Alter Flux and Fouling Performance in Cheese Whey Ultrafiltration</u> Biotechnology Progress (Vol. 4, No. 4) 242 Dec. 1988
- Reviewer of <u>Handbook of Industrial Mixing Science and Practice</u> publication 2014

PROFESSIONAL AFFILIATIONS & RECOGNITION

American Institute of Chemical Engineers, Institute of Food Technology - Professional Member, Penn State Univ. Center for Food Manufacturing representative, Certified Organic Processor, Tau Beta Pi, Engr. Honor Society, Omega Chi Epsilon, ChE Honor Society, VP R&D 1998, 2001, 2002 Award for Applied Innovation, Teamwork, 2011 Finalist Make The Difference Award – Innovation, 2008 Mars Choco. President recognition Team Engagement, PA Alumni rep. for ISU Visions Across America alumni magazine special edition. ISU Professional Achievement Citation in Engineering award, ISU Advisory Council chair and member