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Title: Behind the Consumer Experience: Innovation and Sustainability at Colgate-Palmolive

ABSTRACT:

At Colgate-Palmolive, global R&D serves as the engine for science-driven innovation, merging multidisciplinary competencies—from chemistry, microbiology, and pharmacology to sensory science, data analytics, and packaging—to deliver safe, sustainable, and high-performing products that elevate the consumer experience and build long-term trust. This presentation provides a look behind the consumer experience, highlighting how Cross Category Research & Innovation (CCR&I) bridges surface chemistry, rheology, and predictive analytics to solve complex formulation challenges and protect key intellectual property.

In this talk, you will learn how Colgate leads pioneering technologies to evaluate and optimize superior reactive active ingredients—such as stannous fluoride and advanced sensory flavor systems—in toothpaste, how the company formulates superior-efficacy whitening toothpastes while delivering an exceptional mouthfeel and texture, and how Colgate implemented open-source sustainable engineering by sharing its recyclable toothpaste tube royalty-free to transform industry-wide packaging standards and divert billions of tubes from landfills. Additionally, Dr. Pan will share the company's talent structures and opportunities for those passionate about reimagining a healthier future for all people, their pets, and our planet.

BIOGRAPHY:



Currently, Dr. Pan leads the Cross-Category Research and Innovation team at Colgate-Palmolive, where he is responsible for solving business challenges, developing breakthrough innovations, and securing intellectual property. He holds over 120 patent applications covering consumer products in oral, personal, and home care (with over 100 granted). At Colgate, Dr. Pan has received numerous honors, including two Global Chairman's "You Can Make a Difference" (YCMAD) awards—the highest honor at the company—in 2013 and 2019, as well as the Global Excellence in Technology Award in 2016. In addition to his industrial inventions, he has published more than 100 peer-reviewed papers in J. Am. Chem. Soc., Angew. Chem., Nat. Commun., Sci. Adv., and other prestigious journals, with his work on novel porous materials cited thousands of times. An alumnus of Harvard Business School, Dr. Pan serves on the Harvard Business Review Advisory Council, chairs the Colgate-Rutgers Alliance, and serves on several university industrial advisory boards, where he actively mentors student researchers and bridges the gap between academic discovery and commercial innovation.