

Leveraging Partnerships to Accelerate Green & Bio-based Chemistry Innovation

Hosted by: **LEVI STRAUSS & CO.**

February 1, 2017 Levi Strauss & Co. Headquarters San Francisco, CA



Meeting Overview

Partnerships between innovative startups and larger, more established companies are essential to enable the commercialization and successful market adoption of new green and bio-based chemistry technologies. In this workshop, we are bringing together startups and established chemical and material suppliers; consumer product companies and brands; retailers; and investors to:

- Discuss and identify best practices for creating successful partnerships between startups and large companies
- Learn about innovative new green and bio-based chemicals, materials and products
- Provide insights on strategic needs, interests, and directions of larger companies to inform startups' R&D and applications priorities

LEVI STRAUSS & CO.

Levi Strauss & Co. is very pleased to host the GC3's workshop on Leveraging Partnerships to Accelerate Green & Bio-based Chemistry Innovation and to support the GC3 in their mission to mainstream green chemistry. LS&Co. has long been committed to responsible chemicals management and to driving sustainable progress within the apparel industry. In 2000, it was one of the first companies to establish a Restricted Substances List. LS&Co. was also the first company to set EPA-level standards for the wastewater leaving its supplier factories. Today, the company is an active member of the ZDHC and has introduced its pioneering Screened Chemistry program, which takes a hazard-based approach to chemicals in the supply chain.

About the GC3

The <u>Green Chemistry & Commerce Council</u> is a cross sectoral, business-to-business network of companies and other organizations working collaboratively to accelerate green chemistry across sectors and supply chains. Started in 2005, the GC3 has over 100 <u>members</u> from leading companies and other organizations.

Agenda

Schedule & Panelists		1:30 pm	Panel — Successes and Challenges of Partnering: Perspectives from Startups		
8:00 am	Breakfast and Registration		Christian Schimper, Managing Director, Research, Acticell Tim Staub, Global VP Business Development, Green Biologics Rey Banatao, CEO, Connora Technologies Tom Boussie, Co-Founder & VP Corporate Development, Rennovia Moderator: Peter Matlock, Director, Technology Commercialization, Joint BioEnergy Institute		
8:30 am	Welcome from the GC3 & Overview of the Day Monica Becker, Co-Director				
	Welcome from Levi Strauss & Co. Michael Kobori, Vice President, Sustainability				
9:00 am	Discussion & networking at your table	2:30 pm	Small Group Discussions & Networking – What makes partnerships work?		
9:30 am	Panel — Partnering, Investing & Strategic Technology Needs: Insights from Along the Value Chain Steve Hahn, Research Fellow, Dow Chemical Dale McIntyre, VP Innovation and New Product Development, Behr Paints/Masco Coatings Chris Uecker, Sr. Scientist, Product Design and Development, Target				
			2:30 – 3:30	Group discussions on types of partnerships	
			3:30 – 4:30 Discussion leader panel – report back and Q&A		
			Group Discussion	n Topic	<u>Discussion Leaders</u>
			Joint Development		Brendan Boyd Director, Additives, External Innovation, Eastman Chemical Co.
	Moderator: Ann Blake , Founder & Principal, Environmental & Public Health Consulting				
10:30 am	Networking Coffee Break				Matt Dwyer Director of Materials Innovation &
11:00 am	Panel – Lessons Learned from Real Partnerships Kaj Johnson, Sr. Director, Product Development, Method Tess Fennelly, Global Business Development, GFBiochemicals Una Murphy, Sr. Designer, Product Innovation, Levi Strauss & Co. Stacy Flynn, CEO & Co-Founder, Evrnu			Development, Patagonia	
			Venture Capital Funding		Doug Cameron Research Leader and Innovator, First Green Partners
		4:20 pm	Wrap-up and Next Steps for the GC3 Green & Biobased Chemistry Startup Network		
	Moderator: Marty Mulvihill, Co-Founder & Partner, Safer Made	4:30 pm	Networking Rec	eption	
12:00 pm	Networking Lunch	6:30 pm	Workshop ends		

About the GC3 Startup Network

The GC3 Green & Bio-based Chemistry Startup Network is dedicated to accelerating the development and market adoption of green chemistry technologies by supporting the growth of green and bio-based startup companies. Leveraging the diversity of the GC3 membership, we are connecting startups and small companies with established chemical suppliers, brands, retailers, and investors who can serve as strategic partners to accelerate the development and growth of promising green and bio-based chemistry technologies. Established companies can tap into the startup network to identify new, strategic technologies, potential partners and investments.

Startup Network Steering Committee Members

Derek McPhee, Senior Director, Technology Strategy, Amyris
Sandy Marshall, Executive Director, Bio-industrial Innovation Canada
Rey Banatao, CEO & Ian Legaspi, Director of Operations, Connora
Joel Stone, President, ConVergInce Advisers
Doug Cameron, Co-President & Director, First Green Partners
Molly Morse, CEO & Anne Schauer-Gimenez, VP of Customer Engagement,
Mango Materials

Lee Walko, Biobased Business Development Manager, Omnitech International **Duncan Cross**, Vice President, Corporate Development, Renmatix **Adrian Horotan & Marty Mulvihil**, Partners, Safer Made

GC3 Startup Network Staff

Monica Becker, Co-Director & Innovation Group Lead **Laura Hoch**, Technical Fellow **Joel Tickner**, Director

For more information about the GC3 Startup Network, please visit our website at: www.greenchemistryandcommerce.org/projects/startup-network

Startup Companies



Acticell

Christian Schimper, CEO **Juergen Jelly**, Partner, Strategy & Finance

Acticell is an innovative research company which develops environmentally friendly chemicals for the textile industry. www.acticell.at



Aequor

Cynthia Burzell, Founder, CSO Marilyn Bruno, CEO

Aequor's library of green chemicals control bacteria by preventing biofilm formation, removing existing biofilm, and/or killing the target pathogen.

www.aequorinc.com



Amyris

Corbin Johnson, Business Development Manager **Derek McPhee**, Senior Technical Director

Amyris develops and manufactures a wide variety of renewable chemicals using low-cost fermentation technology. www.amyris.com

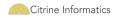


AOBiome, LLC.

Larry Weiss, Chief Medical Officer

Transforming human health through the restoration of Ammonia Oxidizing Bacteria.

aobiome.com



Citrine Informatics

Gregory Mulholland, CEO

Citrine Informatics is the information platform for materials and chemicals development, manufacturing, and design.

www.citrine.io



Connora Technologies

Rey Banatao, CEO

Connora provides proprietary functional materials that improve cost, performance, and sustainability for our customers' manufacturing processes and products. www.connoratech.com



Elevance Renewable Sciences

Rusty Pittman, VP, Business Development & Marketing **Steve Cohen**, Director, Synthesis & Catalysis

Elevance Renewable Sciences, Inc. creates novel, high-performing specialty chemicals from renewable feedstocks using a proprietary Nobel Prize-winning technology called olefin metathesis.

www.elevance.com



Evrnu

Brian Howe, VP Strategic Partnerships Cheri Buell, VP Product Creation Stacy Flynn, CEO & Co-Founder

Evrnu, a textile technology company and custom R&D lab that creates regenerative fiber from waste.

www.evrnu.com



GFBiochemicals

Tess Fennelly, Global Business Development

GF Biochemicals is the first company to produce levulinic acid and its derivatives directly from biomass at commercial scale.

www.gfbiochemicals.com



Green Biologics

Tim Staub, Global VP Business Development

Green Biologics is a renewable specialty chemicals company focused on producing high performance green chemicals used in myraid consumer and industrial formulated products.

www.greenbiologics.com



Grow Bioplastics

Tony Bova, CEO and Co-Founder

At Grow Bioplastics, our vision is to dream, design, and deliver biodegradable, biobased plastics from plants and agricultural waste materials.

www.growbioplastics.co



Grow Plastics

Mike Waggoner, Founder

Grow Plastics makes lightweight, green, low cost materials for packaging and high tech applications.

www.growplastics.com

KALION. INC.

Kalion, Inc.

Darcy Prather, President

Kalion provides access to high purity glucaric acid from renewable resources for a wide range of applications. www.kalioninc.com



Lygos

Eric Steen, CEO Matt Tobin, VP, Program Development

Lygos creates biotechnology solutions for microbial engineering, fermentation, and process development for cost-advantaged production of high value industrial chemicals.

www.lygos.com



Mango Materials

Anne Schauer-Gimenez, VP of Customer Engagement Molly Morse, CEO

Mango Materials produces affordable, biodegradable materials from the greenhouse gas, methane. www.mangomaterials.com



Mimikai

Stephanie Watson, Founder

Mimikai is building a brand of innovative, effective, non-toxic insect repellents. Inspired by nature's genius, designed for you.

www.mimikai.com



Mother Dirt

Nyree Bekarian Mack, Product Safety Manager

Mother Dirt is a company whose mission is to restore good bacteria to the skin and rebalance the skin microbiome with simple plant-derived products, containing 10 ingredients or less.

www.motherdirt.com



P2 Science

Neil Burns, CEO

P2 is a renewable specialty chemical company with proprietary process, product and applications technology. www.p2science.com



Amit Paul, Managing Director



Paxymer is a novel, green, halogen-free flame retardant system for polyolefin plastic designed for both environment and industry.

www.paxymer.se

Renmatix



Jeremy Austin, Director, Business Development

Leading converter of 2nd generation biomass to cellulosic sugars and bio-building blocks for chemicals, materials, and food applications.

www.renmatix.com



Rennovia

Tom Boussie, Co-Founder & VP Corporate Development

Rennovia focuses on development of novel catalytic processes for the production of cost-advantaged bio-based chemicals.

www.rennovia.com



Resinate Materials Group

Brian Chermside, CEO & President Kris Weigal, Chief Commercial Officer

Resinate is committed to pioneering the use of recycled content to create high-performance polyol solutions. www.resinateinc.com



Stony Creek Colors

Sarah Bellos, CEO

Plant-derived colorant solutions for the textile industry. Bringing high performance color to fashion brands with authenticity and transparency.

www.stonycreekcolors.com



SusTerea Bio LLC

Robert Johnson, Senior Scientist

Sustainable biobased aromatics for greener preservatives and antimicrobials.

www.susterea.com



Zymergen

Hubert Chaperon, Director of Materials Strategy **John McNamara**, Technical Project Manager Nicole Ricapito, Scientist **Richard Pieters**, President, Products

Zymergen is a technology company engineering biology predictably, reliably, and to a level of performance previously unattainable.

www.zymergen.com

Large Companies



3M

Maureen Kavanagh, Technical Manager, Corporate Research Materials Laboratory



Apple

Rob Guzzo, Senior Manager, Environmental Technologies **Mike Werner**, Manager, Environmental Technologies



Babyganics

Robin Forbes, VP, Product Development



Beautycounter, LLC

Nicole Acevedo, Ph.D., Science Director



Covestro

Bob Saunders, Head of Textile Coatings, NAFTA



DSM

Greg McParland, Investment Manager, DSM Venturing



The Dow Chemical Company

Steve Hahn, Research Fellow, Ventures & Business Development



Eastman Chemical Company

Brendan W. Boyd, Director, External Innovation, Coatings and Specialty Fluids

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Jean Arquines, Innovation Projects, Eureka Innovation Lab

Jennifer Benefiel, Technical Lead, Chemical R&D

Linda Gallegos, Eureka Innovation R&D

Michael Kobori, VP, Sustainability

Josef Lukan, Senior Manager, Global Policy &

Advocacy

Una Murphy, Sr. Designer, Product Innovation

Lucy Shertz, Project Coordinator **Megan Wood**, Innovation Developer



Masco Coatings Group

Dale C. McIntyre, VP, Innovation and New Product Development **John Gilbert**, Chief R&D Officer



Mrs. Meyer's Clean Day

Allyce Gilligan, Sr. Associate, Chemistry



Patagonia

Matt Dwyer, Director, Materials Innovation & Development



People Against Dirty

Kaj Johnson, Green Chef



Schülke & Mayr GmbH

Linda Sedlewicz, Country Manager



Seventh Generation

Clement Choy, Sr. Director R&D



Target

Chris Uecker, Sr. Scientist, Product Design & Development



VFC

Abolfazi Aghanouri, Material Researcher, Global Innovation Center

Investors



ecosVC, Inc.

Judy Giordan, VP, Managing Director



Ecosystem Integrity Fund

Geoff Eisenberg, Principal



First Green Partners

Doug Cameron, Managing Director



Safer Made

Adrian Horotan, General Partner **Marty Mulvihill**, Co-Founder & Partner

Other Organizations



Bioindustrial Innovation Canada

A.J. (Sandy) Marshall, Executive Director

C&A Foundation

C&A Foundation

Amanda Cattermole, Environmental

Consultant

ANN BLAKE, Ph.D.

Environmental & Public Health Consulting

Ann Blake, Founder & Principal



Iowa State University

Peter Keeling, Innovation Director, Center For Biorenewable Chemicals (CBiRC)



Joint BioEnergy Institute

Peter Matlock, Director, Technology, Commercialization **Aindrila Mukhopadhyay**, VP, Fuels Synthesis



Newman Anouvair LLC

Ron Newman, President



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If you have any questions, please contact **Monica Becker** (monica@monicabecker.com) or **Laura Hoch** (laura_hoch@uml.edu)

For more information about the GC3, please visit our website at www.greenchemistryandcommerce.org