

GC3 Member Update Call

September 26, 2016



Agenda

1. Updates on GC3 Membership, Innovators Roundtable and other meetings
2. GC3 Advisory Committee
3. Work plan for 2016-2017

GC3 Membership

Chemicals & Materials	12	Service Providers	13
Green & Bio-based Chemical Startups	8		
		University-Based Programs	6
Personal Care & Household Products	13	Government	6
Apparel and Footwear	7	Foundations	1
Electronics	4	NGOs	13
Office, Institutional & Home Furniture	6		
Paints & Coatings	2		
Pharmaceutical	1		
Retailers	7		
Hospital/Medical	1	Total Membership	100



New Members Since May

GOJO Industries, Inc.

Center for Biorenewable Chemicals

Omni Tech International

Bemis Associates

GFBiochemicals

Pfizer

SC Johnson

Novozymes

Greening Our Children

OBIC Bioproducts Innovation Center



GC3 Innovators Roundtable

April 25-27, 2017 in Grand Rapids, Michigan

Hosted by **Steelcase**



Mon. April 24	Tues. April 25	Wed. April 26	Thurs. April 27
2 nd GC3 Green & Bio-based Chemistry Startup Event	Roundtable starts mid- day Evening Networking Reception	Roundtable - full day conference Dinner Reception	Roundtable - half day conference



The Guardian Green Chemistry Conference

November 2, 2016 in New York City



The New York Academy of Sciences
250 Greenwich Street, New York City

Supported by GC3 member SC Johnson.
GC3 is a Media Partner.

GC3 members get a 50% discount on registration.
Use discount code GC3 when registering.



GC3 Advisory Committee Members

Bob Buck, The Chemours Company

James Ewell, GreenBlue

Tess Fennelly, GFBiochemicals

John Frazier, Hohenstien

Al Iannuzzi, Johnson & Johnson

Al Innes, State of Minnesota

Bob Israel, Valspar

Rich Liroff, Investor Environmental Health Network

Roger McFadden, McFadden & Associates/Replenish

Babette Petersen, Capricorn Venture Partners

Ken Zarker, Washington State, Dept. of Ecology



Project Plan 2016/17



Raising the Profile of GC at National Level

Project Title	Project Description	Deliverables	Timeline
Federal Leadership & Policy	Federal government outreach/education to increase leadership in green chemistry policy	Agency briefings At least one Congressional Briefing GC language in COMPETES	On-going
Federal Funding	Understand and advocate for increased funding directed to Green Chemistry Research, Development, and Demonstration	Report on landscape of green chemistry funding Education/outreach briefings to federal funding agencies Initial overview of private sector funding opportunities	Report by fall 2016 Visits by 2016/17

Measuring Progress

Project Title	Project Description	Deliverables	Timeline
Measuring Progress	Convene process to establish set of measures and metrics necessary to evaluate progress towards mainstreaming green chemistry Focus on societal level	Report on measures and metrics to evaluate progress towards green chemistry Education/outreach briefings to agencies Possible factsheet/web resource built from Ann Blake's report	Report by spring 2017 Visits by spring 2017

Education/Training

Project Title	Project Description	Deliverables	Timeline
National Summit Green Chemistry Education & Innovation	Explore opportunity/develop concept and plan with other stakeholders	Plan for summit	Plan by spring 2017
GC3 Safer Chemistry Training for Business	Finishing the training materials and increasing use	Finished curriculum Plan & executing strategies to increase use	By spring 2017

Collaborations: Supply Chain, Innovation

Project Title	Project Description	Deliverables	Timeline
Preservatives Competition	<p>Collaborative crowdsource competition on preservatives for PC & HH products</p> <p>GC3 & InnoCentive managing</p> <p>Sponsors are suppliers, CPG and retail</p>	<p>Recruit sponsors, signed agreements, collect \$\$</p> <p>Design & launch competition</p> <p>Evaluate submissions & select winners</p> <p>Event for finalists</p> <p>Follow-up - partnering, etc.</p>	<p>Now</p> <p>Oct</p> <p>Spring, 2017</p> <p>June/July</p> <p>Q3/Q4</p>
Innovation Portal	<p>Survey to evaluate utility of Portal and develop plan going forward</p>	<p>Survey</p> <p>Plan</p>	<p>Decisions by fall 2017</p>

Collaborations: Supply Chain, Innovation (cont.)

Project Title	Project Description	Deliverables	Timeline
Start-up Network	A new initiative aimed at supporting the growth of green and bio-based startup companies	<p>Convene Steering Committee</p> <p>Webpages on GC3 site</p> <p>Recruit min. 20 start-ups</p> <p>Workshop on increasing effectiveness of start-up/large company engagements</p> <p>Pre-meeting at 2017 RT</p> <p>Webinars, articles, social media</p>	<p>Done, first meeting 9/13</p> <p>Sept</p> <p>Sept - Jan</p> <p>Jan/Feb</p> <p>April</p> <p>Oct onward</p>

Collaborations: Supply Chain, Innovation (cont.)

Project Title	Project Description	Deliverables	Timeline
Retailer Leadership Council	Coordination of RLC	Case studies of examples of challenges in supply/demand signals	On-going
RLC Retail buyer/supplier education & training		Training materials and training	By spring 2017

Special Projects

Project Title	Project Description	Deliverables	Timeline
GC3 Messaging	Implement recommendations from Paula Schaper	Member recruitment email Website updates New brochure	Fall 2016 Fall 2016 Winter 2016/7
GC Communication		2 - 3 Webinars and/or Pre-Meeting - NMI - Amy Konstant - Alda Center	Throughout 2016/17
Expanding GC3 Reach into Europe	GC3 European Roundtable Planning	Meeting	Fall 2017

GC3 Federal Green Chemistry Leadership Initiative



Goals

- Green chemistry as a national environmental and innovation priority
- Accelerate implementation of the GC3 Agenda to Mainstream Green Chemistry
- Build leadership in key agencies
- Work with other organizations to achieve these goals

Build on GC3 activities

- Funding report/outreach
- Metrics discussion
- Start-up network

Activities

- Raise profile of green chemistry research/support in transition - transition memo
- Conduct agency by agency outreach on green chemistry research funding and support to:
 - Make connections/find champions
 - Lay groundwork for implementation of Coons' sustainable chemistry language
 - Create grassroots demand for federal leadership/coordination
- Keep promoting Coons' language in COMPETES and other vehicles

GC3 Green & Bio-based Startup Network



Overview of the Startup Network

Mission: To accelerate the development and market adoption of green chemistry technologies by supporting the growth of green and bio-based startup companies.

Strategic Approach:

- Leverage the GC3 membership to connect green chemistry startups with strategic partners to accelerate their development and growth
- Create opportunities for members to discover new ingredients and technologies
- Identify financial and other resources for green and bio-based start-ups
- Advance the discussion on how best to accelerate green chemistry innovation and the growth of innovative startups

Goal: Recruit at least 20 start-ups by next GC3 Roundtable in April 2017



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 & **Scott Phillips**, CEO and Founder, The SearchLite

Duncan Cross, Vice President, Corporate Development, Renmatix

Adrian Horotan & Marty Mulvihil, Partners, SaferMade



Startup Network Webpage

Green & Bio-based Chemistry Startup Network

Creating an innovation ecosystem for green and bio-based chemistry technologies

The mission of the GC3 Green & Bio-based Chemistry Startup Network is to accelerate the development and market adoption of green chemistry technologies by supporting the growth of green and bio-based startup companies.

Startups in our Network

Strategic Approach:

- Leverage the diversity of the GC3 membership to connect innovative green chemistry startups with established chemical suppliers, brands, retailers, and investors who can serve as strategic partners to accelerate their development and growth
- Increase the visibility of startup companies and create opportunities for suppliers, brands, retailers and investors to discover new ingredients and materials for their products and find new partnership and investment opportunities
- Identify financial and other strategic resources for green and bio-based start-ups
- Advance the discussion on how best to accelerate green chemistry innovation and the growth of innovative startups

Background:

Green & Bio-based
Chemistry
Start-up Event

A key strategy for advancing green chemistry in industry, as identified in the GC3's [Agenda to Mainstream Green Chemistry](#), is supporting the development and adoption of chemicals, materials, manufacturing processes and products that adhere to one or more of the [12 Principles of Green Chemistry](#). Startups are an important driver of innovation, however many lack the connections to the strategic partners that they need for

An Agenda to Mainstream Green Chemistry

Green Chemistry & Commerce Council



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Startup Network Webpage

Members of the GC3 Green & Bio-based Chemistry Startup Network

Startup companies in this network are bringing technologies and products to market that advance one or more of the [12 Principles of Green Chemistry](#).

[Please note, this list is intended for illustrative purposes only]



Amyris

No Compromise® sustainable alternatives to a broad range of petroleum-sourced products

www.amyris.com



GF Biochemicals

Bringing bio-based levulinic acid and its value-added derivatives to market

www.gfbiochemicals.com



P2 Science

High-value, specialty chemicals for flavor, fragrance and cosmetics ingredients produced from renewable feedstocks

www.p2science.com



Resinate Materials Group

Turning recycled content into greener polyol solutions for the coating, adhesive, sealant, and elastomer markets

An Agenda to Mainstream Green Chemistry

Green Chemistry & Commerce Council



LEARN MORE
DOWNLOAD REPORT / WATCH WEBINAR

Work Plan for 2016-2017

1. Build the Network

- Identify and recruit startup companies

2. Organize In-Person Events

- Jan/Feb 2017: Workshop on Effective Strategies for Leveraging Connections with Large Companies
- April 2017: Second Annual Green & Bio-based Chemistry Startup Event

3. Create an Active Network Through Ongoing Communication

- Webinars, articles/case studies, social media, etc.



Thank you for joining us!

