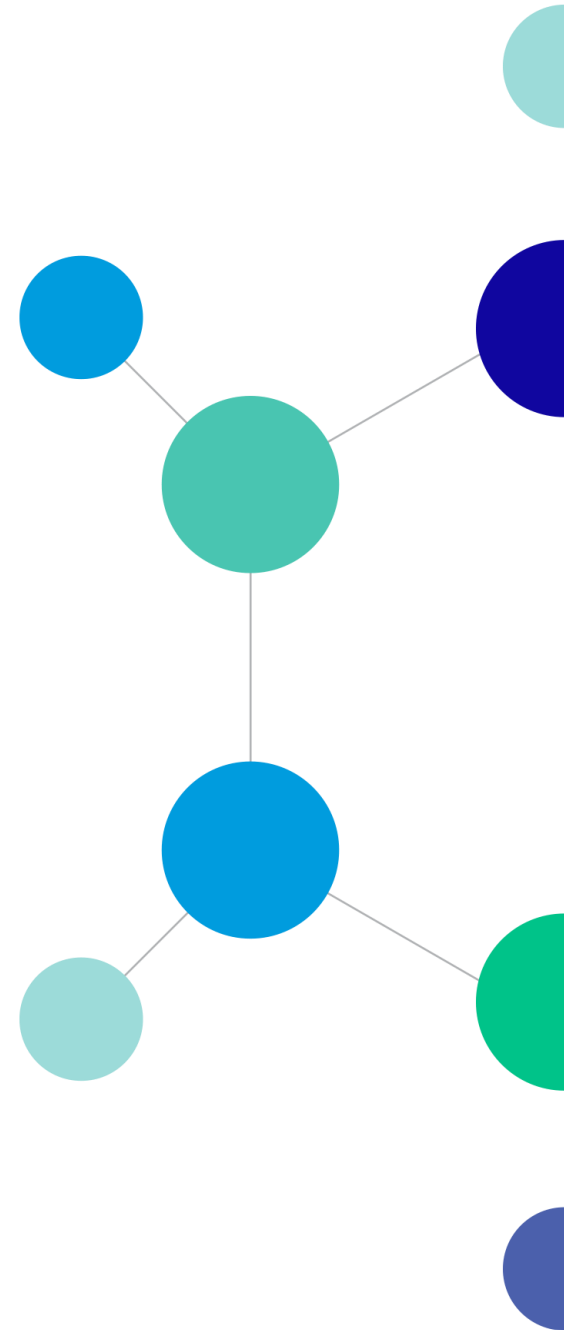
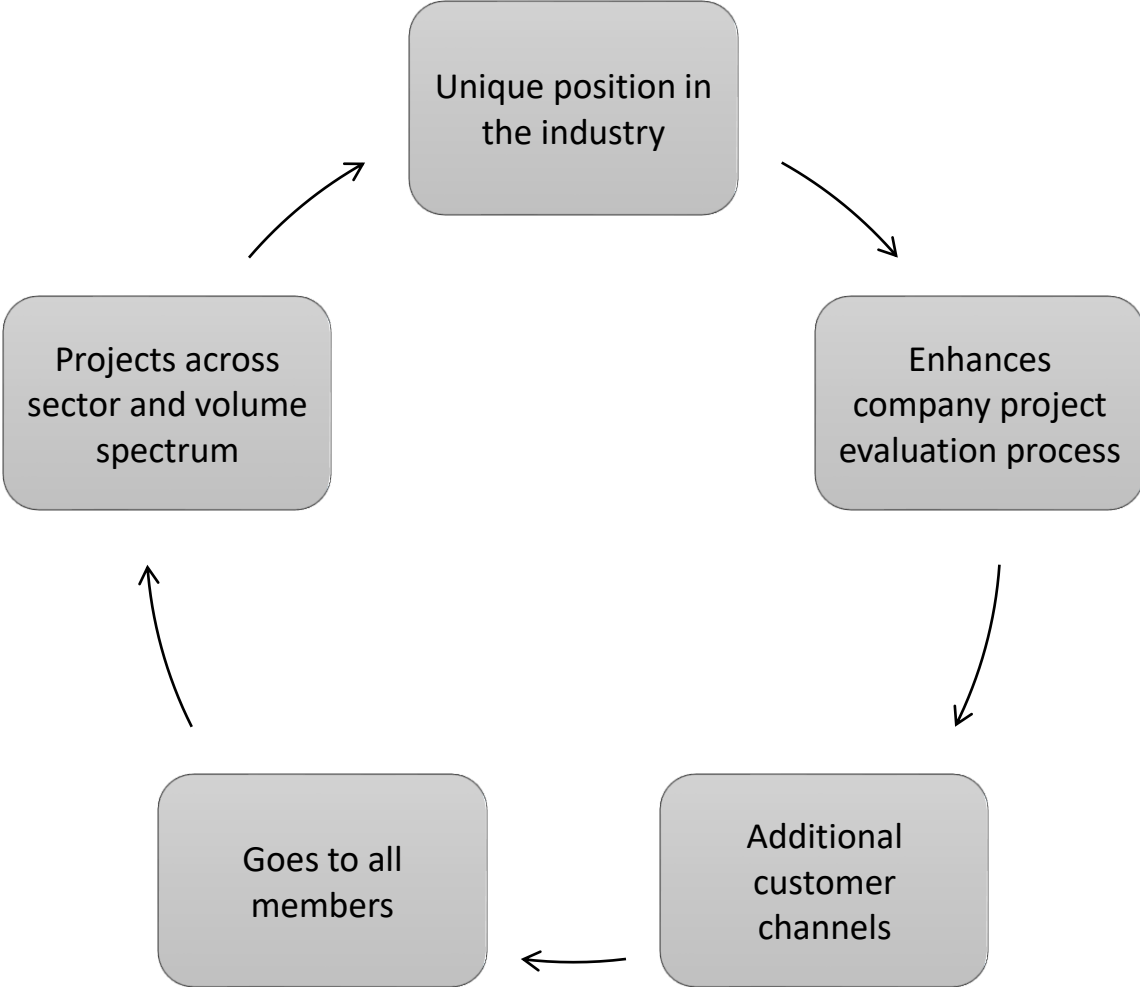


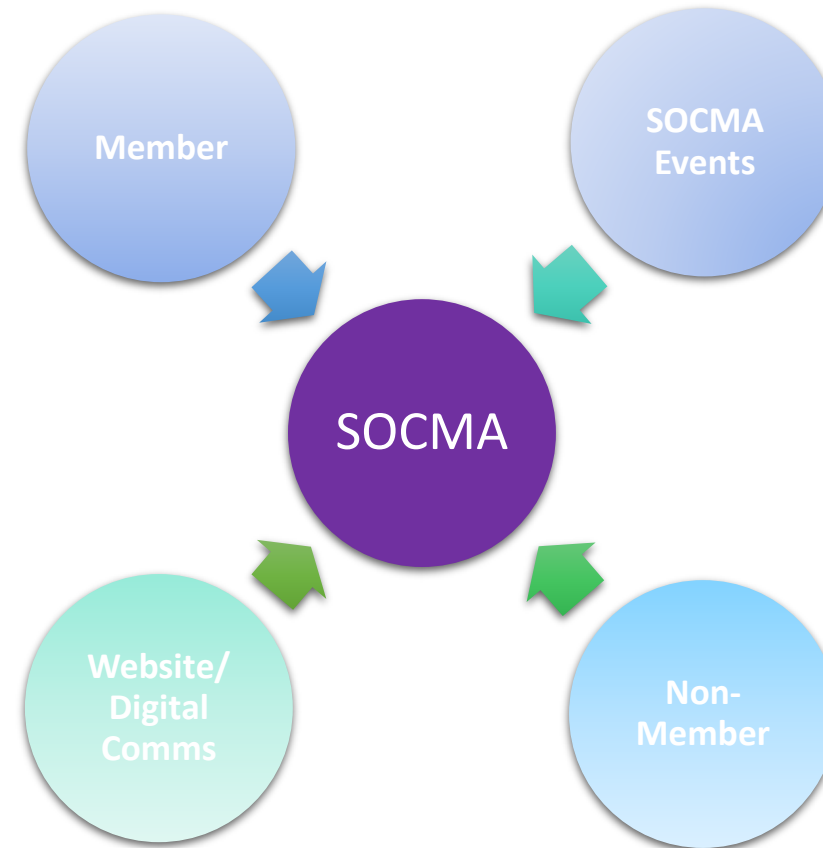
Enhancing Your
Company's Project
Evaluation Process



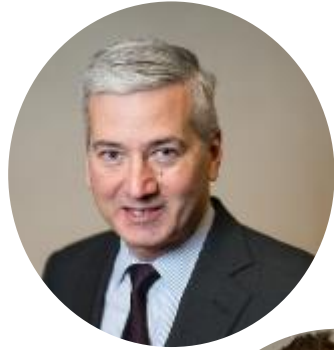
How Does It Work?



New Channels for Project Leads



SOCMA Staff Contacts



Paul Hirsh
Sr VP, Industry Development
and Strategic Partnerships
phirsh@socma.org
571.348.5102



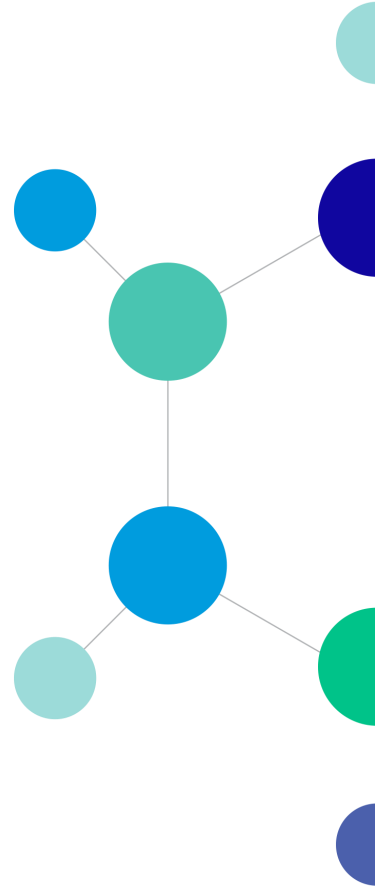
Joe Dettinger
Sr Director, Compliance
and Stewardship
jdettinger@socma.org
571.348.5111



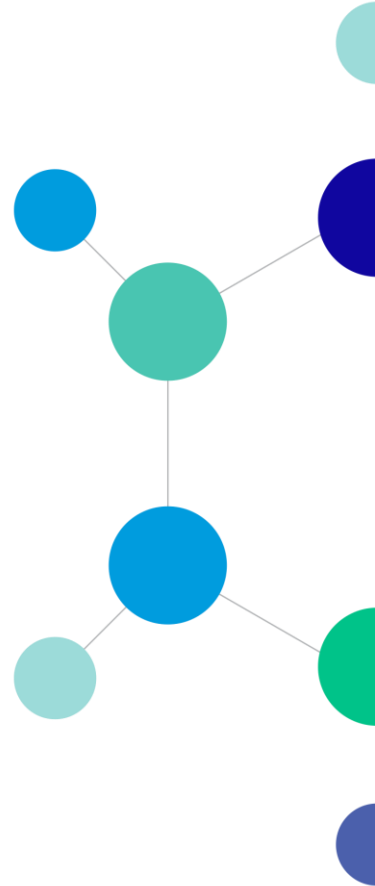
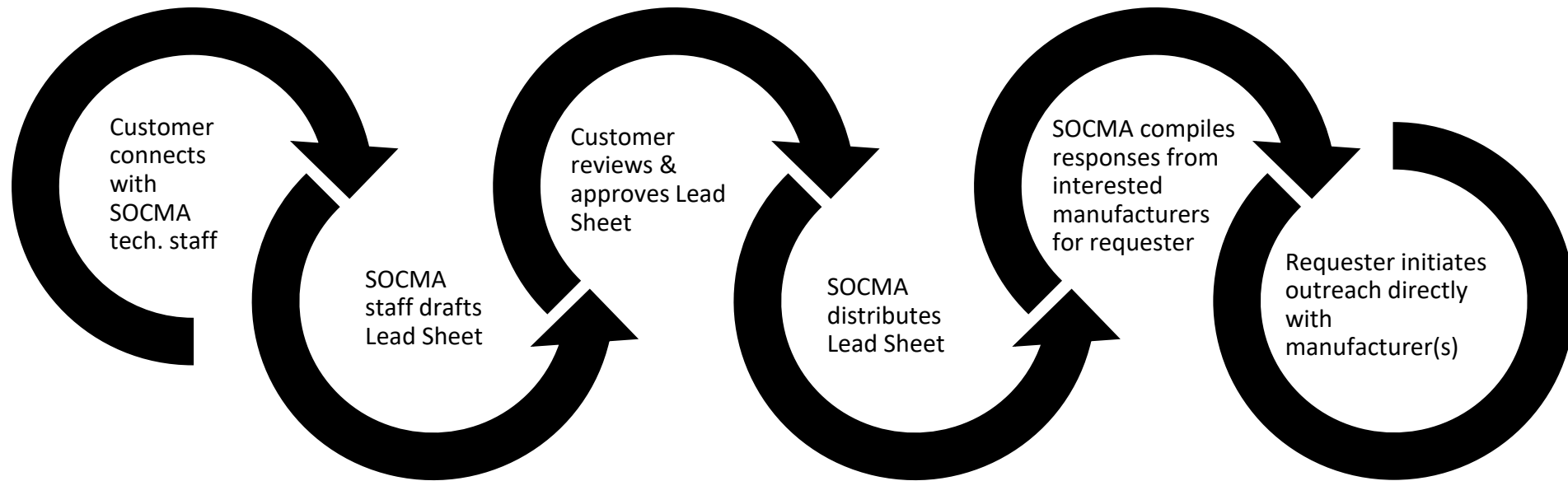
Owen Jappen
Sr Manager, Industry Relations
and Strategic Partnerships
ojappen@socma.org
571.348.5105



Emylyn Noma
Manager, Compliance &
Stewardship
enoma@socma.org
571.348.5119



SOCMA's Referral Process



A Case Study:

Project Type:

- | | |
|---|---|
| <input type="checkbox"/> Process Verification | <input type="checkbox"/> Piloting |
| <input type="checkbox"/> Process Optimization | <input checked="" type="checkbox"/> Contract / Toll Manufacturing |
| <input checked="" type="checkbox"/> Scale Up | <input checked="" type="checkbox"/> Product Manufacturing |
| <input type="checkbox"/> Basic Research | <input type="checkbox"/> Engineering |

Process Type (Rxn type, Distillation, etc.):

2 Step Process
- Acetoxylation Rxn
- Simple Distillation/Dehydration

Operating Conditions/Controls (Temperature, Pressure, Vacuum, etc.):

Max Temp: 200C
Max Pressure: 8 - 10 atm
pH: Neutral
N2 gas

Raw Materials Used:

Ethylene
Acetic Acid
O2
Pd/Au Catalyst

Equipment Needed (Stainless, Glass, Hastelloy, etc.):

- 304 or 316 SS jacketed reactor
- 10:1 Reflux
- Packed Column
Decanter (150F and 1 atm)
Dehydration Column

Processing & Packaging Volumes:

- 5000 lb batches
- 15 Mtonne/year

Timing, Delivery and Transportation Mode Requirements (for ALL Materials):

- Full scale production to begin Q3
- Standard DOT - Truck

Storage Conditions (Warm, Cold, N2 blanketing, etc.):

- N2 blanket required to prevent hydrolysis of VAM to acetic acid and acetaldehyde
- Max temp: 30C

Certifications Preferred:

- | | | |
|---|---|--------------------------------|
| <input checked="" type="checkbox"/> ChemStewards® | <input checked="" type="checkbox"/> ISO 9001 | <input type="checkbox"/> cGMP |
| <input type="checkbox"/> Responsible Care® | <input checked="" type="checkbox"/> ISO 14001 | <input type="checkbox"/> Other |

How Do We Communicate

Thank you for participating in SOCMA's pilot lead sheets service. Your project request was sent to all SOCMA member companies. Below is a list of companies that responded to us with interest in your project.

Contact	Company	Email Address	Office Phone
John Smith	ACME Chemicals	John.smith@acme.biz	(555) 555-1234
June Jones	Global Specialties	jjones@globalspecialties.biz	(444) 555-4321
Dave York	York Chemistry	dave@yorkchemistry.biz	(321) 555-9876

At this point in the process as the requesting company, you should contact the companies listed above directly for further discussion. SOCMA will send you contact information from additional companies as they come in on a rolling basis, or until you communicate to me that the project review period is closed.

Since its launch, the lead sheets service has been received enthusiastically by SOCMA members. Feel free to forward additional projects to SOCMA in the future. Should your company receive project requests that do not fit your business objectives or manufacturing capabilities, you can use SOCMA as an outlet for these projects.

Mapping Facility Capabilities

Whether your company is a batch, custom or specialty manufacturer understanding your facility's capabilities helps us connect you to customers.

- Why collect information on company manufacturing capabilities?
- How will this information be used?
- What type of information is being collected?

Manufacturing Capability Mapping

MANUFACTURING TYPE

	COMPANY A	COMPANY B	COMPANY C
Toll Manufacturer			
Contract Manufacturer			
Custom Manufacturer			
Batch Process			
Continuous Process			
Distributor/Supplier			
Service Provider			
Others			

MANUFACTURING EQUIPMENT

	COMPANY A	COMPANY B	COMPANY C
Batch Reactors			
Continuous Reactors			
Centrifuge			
Filters			
Distillation Column			
Storage Tanks			
Dryers			

EQUIPMENT MATERIAL OF CONSTRUCTION

	COMPANY A	COMPANY B	COMPANY C
304 SS			
316 SS			
Glass Lined			
Glass			
Hastelloy			

CHEMICAL RXN DIRECTORY

	COMPANY A	COMPANY B	COMPANY C
Acetoacetylation			
Acetylation			
Acyl Chlorination			
Alkylation			
Birch Reduction			
Bromination			
Carboxylation			
Chloromethylation			
Continuous Reaction			
Distillation			
Esterification			
Friedel-Crafts Reaction			
Gabriel Synthesis			
Hydroxylation			
Polymerization			

OPERATION CAPABILITY

		COMPANY A	COMPANY B	COMPANY C
Pressure	≤ 100 PSI			
	≥ 100 PSI			
Vacuum Range (mmHg)	< 1 mmHg			
	< 10 mmHg			
	< 100 mmHg			
Temperature Range (°C)	Range 1 (°C)			
	Range 2 (°C)			
	Range 3 (°C)			
Heating Medium	Transfer Fluid			
	Water			
	Steam			

Manufacturing Capability Mapping

STORAGE REQUIREMENT

	COMPANY A	COMPANY B	COMPANY C
Ambient Only			
Temperature Range 1 (°C)			
Temperature Range 2 (°C)			
Temperature Range 3 (°C)			
Temperature Range 4 (°C)			

TRANSPORTATION MODE

	COMPANY A	COMPANY B	COMPANY C
Truck			
IMDG			
IATA			
Rail			

APPLICABLE REGULATIONS

	COMPANY A	COMPANY B	COMPANY C
PMP			
PSM			
DHS/CFATS			
cGMP			
Ag			
FIFRA			

CERTIFICATION

	COMPANY A	COMPANY B	COMPANY C
ChemStewards (SOCMA)			
Responsible Care (ACC)			
ISO (9001, 14001, 45001)			
Responsible Distribution (NACD)			
Responsible Ag (TFI)			
FIFRA			

Questions and Answers

This program is provided by the SOCIETY OF CHEMICAL MANUFACTURERS AND AFFILIATES (SOCMA) for informational purposes only. Determination of whether and/or how to use all or any portion of this program or the information provided in connection with it is to be made in your sole and absolute discretion. Use of this program is voluntary. SOCMA does not make any representations or warranties with respect to this program, its contents or information provided. SOCMA does not make any representations, warranties or promises regarding any company or its capabilities or performance.



Q&A Archive

Q1) Does the lead sheet provide annual production volume?

A1) We work with the requester to compile as much information as possible; Any additional information will be provided upon request.

Q2) Will there be a fee as we move forward from the pilot phase?

A2) This service is a member only benefit that has no fee attached for either the requesting company nor the inquiring party.

Q3) Will the member companies receive the asking company's contact information?

A3) No, this is confidential information. If the requesting company decides to move forward with any of the interested parties, they will contact you directly.

Q4) Can the lead sheet clarify if the company looking for support has technical knowhow or not?

A4) We work with the requester to generate a lead sheet to be as complete as possible; all applicable information and details will be added.

Q&A Archive

Q5) *Where do I submit my company's manufacturing capability?*

A5) *Please submit to Joe Dettinger:
jdettinger@socma.org
571.348.5111*

Q6) *On the average, How many lead sheet does SOCMA get per month? How many are currently in the pipeline?*

A6) *This is a new program launched in November. We continue to build awareness and [currently have three active opportunities available](#); we are working with companies on additional sheets for the pipeline.*

Q7) *Will this presentation be made available to the attendees? Specifically the manufacturing capability chart?*

A7) *As we continue to build out the program and database, we will continue to post information as it becomes available and developed.*

Q&A Archive

Q8) We think it's important to get expected volumes, frequency of volumes – batch size. Also storage requirement like dedicated tanks, etc.

Q9) Is there an opportunity to expand the tool to include non-manufacturing requirement such as compliance/regulatory?

Q10) Can the lead sheet program include packaging services?

A8) We work with the requester to generate a lead sheet to be as complete as possible; all applicable information and details will be added, including but not limited to volume, frequency, batch size and tank hygiene.

A9) The service is flexible to accommodate non-manufacturing requests. SOCMA affiliate member companies provide a wide range of products and services and can also benefit from this service. When we receive product and service requests they circulated in the same manner as manufacturing opportunities.

A10) Yes. The service is flexible to accommodate including packaging/repacking services, and other non-manufacturing processes.

Q&A Archive

Q11) Are there thoughts to reopen SOCMA marketplace webpage that used to connect leads customers to SOCMA member companies

A11) As part of our commercial services refresh, the lead sheet service, and mapping manufacturing capabilities project, we intend to bring back those connections SOCMA was able to facilitate through its marketplace webpage. Further expansion of this service will be evaluated based on member input and interest.

Q12) How do you maintain confidentiality of the business relationship that will result?

A12) SOCMA considers requester contacts and self-identified respondents to be confidential.

Q13) Consider adding a box for special analytical requirements.

A13) Through member input, we continue to evaluate and update the lead sheet. This information as well as others are being considered moving forward.



socma
SOLUTIONS FOR SPECIALTIES

ChemSectors Program

