

ETHYLENE PRODUCERS' TECHNICAL SUBCOMMITTEE MEETING

Date: Thursday: December 9, 2021

Time: 4:30 to 5:30 PM CDT

Attendance:

Last Name	First Name	12/9/2021
Arora	VK	
Buehler	Jack	X
Charlton	Bill	X
de Barros	Jose	X
Devakottai	Bala	X
Elam	Jeff	
Fox	Rob	X
Hamilton	Jason	X
Imran	Muhammad	X
Kapur	Sanjeev	X
Krinock	Robert	X
Krumins	Aivars	X
Lal	Ravi	X
Le Geyt	Darren	
Lee	Deborah	X
Polito	Charles	X
Rafique	Humera	X
Spicer	David	
Tallman	Michael	X
Ting	Tiong-Ee	X
Whitney	Mark	X
Zygula	Timothy	X

Agenda:

- 1) Anti-Trust Statement Read by Jason Hamilton  
No activity of the Committee shall involve the exchange, collection or dissemination among competitors of information, or be used for the purpose of bringing about or attempting to bring about any understanding or agreement, written or oral, formal or informal, express or implied, among competitors with regard to costs, prices or pricing methods, terms or conditions of sale, distribution, production quotas or other limitations, on either the timing, or volume of production, or sales, or allocation of territories or customers.
- 2) Five Minutes on Safety – Talked about Winter weather precautions and upcoming Holiday Season!
- 3) **Vote Results: Fundamentals Session: Jack and Bob**
  - a. **Papers Selected:**
    1. **Reforming of Cracker Fuel Gas (generate Blue H2 to fuel furn - capture CO2)**  
[Technip]

2. **NOVEL Low-Emission Ethylene Plant** (renewable power to green H2 for fueling furnace- use ethylene plant / FG storage to remove fluctuations in renewable energy) [Technip]
3. **From Steel to Ethylene: Super Dry Reforming of CO2** [U Gent]
4. **Novel Catalyst for Single Step Conversion of Plastic Waste with 85% Olefin Yield** [U Gent]
5. **New Process Technology Development for the Sustainable Production of Olefins** [DOW]
6. **Processing of Renewable Gasoil in a Steamcracker** [Lyondell-Bassell]

Papers not making the cut will be offered a poster session or placed in the deferment pool for next year.

#### 4) **Vote Results**

##### a. **Circular/Decarburization: Aivars (Co-Chair Humara)**

###### **Papers Selected:**

1. **Green Ethylene By Steam Cracking of Renewable Feedstock** (Worley)
2. **Efficient Steps for Meeting Ethylene Process Sustainability Goals** (Ingenero)
3. **A Practical Approach to Near-Term Decarbonization of the Ethylene Plant** (Technip MHI)
4. **Circular Economy with Plastics Pyrolysis and Purification** (Technip)
5. **Hydro-PRT – The Differentiated Plastic Waste Recycling Technology from KBR** (KBR)
6. **Propane Dehydrogenation and Steam Cracking: Heuristic Approaches to Plant Integration** (Linde)

Papers not making the cut will be offered a poster session or placed in the deferment pool for next year.

#### 5) **Panel Session – Energy Transition & Decarbonization = “Big Picture View” (Sanjeev)**

This session will focus on the big picture issues and strategies to address Energy Transition & Decarbonization within the heavy industries, especially petrochemical industry. Petrochemical industry will play a significant role and contribute towards global efforts in addressing climate change and sustainability.

Our panelists are experts in policy matters, energy studies and bridging the science and policy to develop solutions for a sustainable future. We intend to focus on the following key issues with our panel members:

Three papers to be presented before coffee break:

- Tackling industrial emissions through climate policy initiatives and multilevel engagement
  - Discuss the key policy and governance considerations for achieving decarbonization
- Energy Transition & Geopolitics
- The Path to Sustainability & Circular Economy

Panel discussion with Panelist after coffee break from:

1. **Big Picture of Emission Policies, e.g. Paris Agreement. Panelist from SEI**
2. **Energy Transition and Geopolitics: Panelist from Rice Univ**
3. **Path Sustainability and circular economy: Panelist from Rice Univ**
4. **Key note speaker may also be invited as panelist.**

#### 6) **Ethylene Plant Distillation Tutorial: Bala and Mohamad**

**Papers:**

1. **Column Fundamentals in Olefins Plants (Sulzer)**
2. **Gamma Scanning in Ethylene Plants (Quantum)**
3. **Expanding the Capacity of Ethylene Plant Distillation Towers (Koch-Glitsch)**
4. **Liquid Cracker Quench Water Tower Choice of Internals and Operation (Sulzer)**
5. **Distillation in Ethylene Plants – An Operators’ Overview (NOVA)**
6. **Systematic Approach to Tower internals in Olefins Plants (UOP)**

Time:

Duration: 160 minutes + 20 mts break (8am to 11am)

Paper 1 – Sulzer – 30 mts

Paper 2 – Quantum Scanning – 25

Paper 3 – Koch-Glitsch 25

Break – 20 mts

Paper 4 – Nova – 20 mts

Paper 5 – SCG/Sulzer – 20 mts

Paper 6 - UOP - 20 mts

7) **Open Discussion**

AiChE is still planning for an in person conference at the moment. There may be some protocols enforced. To be updated later.

Deborah will stepping down as Shell Rep. She will send bio of proposed member so we can have a vote. No objections to voting by email once the bio is sent out.

**Deadlines:**

**Friday, December 10, 2021** – Chairs Accept/Reject Abstracts & Order Sessions

**Monday, January 3, 2022** – Draft Program Available for Review

**Monday, January 10, 2022** – Comments from Chairs Due

**Monday, January 10, 2022** – All info in Confex for Invited Sessions & Keynotes

**Monday, January 17, 2022** – Final Program Posted

**ACCEPTING/REJECTING ABSTRACTS**

**Deadline: Friday, December 10, 2021**

**Future Meeting Dates**

- a. February 10, 2022 (Virtual)



DEC 2: Attendance

JH	Jason Hamilton	Host, me, internal	
JB	Jack Buehler		
	+15127****44		
	+18625****78		
A	Aivars		👤
B	Bala		❌
BC	Bill Charlton		
CP	Charles Polito		❌
DS	David Spicer		
DL	Deborah Lee		❌
MW	Mark Whitney		❌
MT	MIchael Tallman		❌
MI	MUHAMMAD IMRAN		❌
RF	Rob Fox		👤
R	Robert		

SK	Sanjeev Kapur		❌
T	ting		❌
VA	VK Arora		❌

Dec 9 Attendance: z(18)



Rob Fox 19