ETHYLENE PRODUCERS' TECHNOLOGY SUBCOMMITTEE (TSC) MEETING

Date:Thursday: Jan 26, 2023Time:4:30 to 5:30 PM CDTLocation:DoubleTree by Hilton at Greenway Plaza, Houston.Hilton Honors Meeting PW:hougwstandard

#### Attendance:

Last Name	First Name	Company	1/26/2023
Arora	VK	Kinetics Process Improvements	Х
Buehler	Jack	Shell- Retired	Business Trip
Charlton	Bill	Compact Membrane Systems	Х
de Barros	Jose	Lummus	Х
Devakottai	Bala	Chevron Phillips Chem	Х
Fox	Rob	LyondellBasell	Х
Hamilton	Jason	Dow Chemical	Business Trip
Imran	Muhammad	Technip	х
Kapur	Sanjeev	Арех	Х
Kehrier	Greg	Shell	Х
Krinock	Robert	Dow Retired	Х
Krumins	Aivars	McDermott	Late & reported status
Kruse	Ryan	Ineos	Х
Le Geyt	Darren	KBR	No
Polito	Charles	Chevron Phillips Chem	Х
Rafique	Humera	Siluria Technologies	No
Rollins	Kaleb	Dow	Out-Turn Around
Spicer	David	ExxonMobil	Х
Tallman	Michael	KBR	х
Ting	Tiong-Ee	Westlake Chemical	No
Whitney	Mark	Linde	No
Zygula	Timothy	BASF	Late
Total Members	22	Total Attendance	15
		Member Participation	68.2%

#### Agenda:

1) Anti-Trust Statement Read - RJ Krinock

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 - RJ Krinock

Discussed recent Houston area "wild weather" incidents: freezing temperatures right before Christmas and tornados this past Tuesday. Luckily no one was directly affected by the tornadoes. Need to have a plan for "sheltering in place". Interior rooms are said to be the safest place during a tornado. Review your safe room to be sure it doesn't have also large glass doors, i.e. shower stalls or bath tubs, or large mirrors that can fall and break.

- 3) Approval of Dec 8, 2022 Minutes The Dec 8 MOM were accepted.
- 4) Session Updates:

# Overall EPC Agenda

# 2023 EPC Spring Conference Program - Final

The 35 <sup>th</sup> Ethylene Producers' Conference			
Conference Day	Morning 8:00 – 11:00 AM (unless otherwise noted)	Afternoon 2:00 – 5:00 PM (unless otherwise noted)	
Monday March 13	Industry 4.0 <b>2 hour session - 9:30–11:30 AM – due to AGILE keynote</b> Unopposed/No session	EPC Keynote – 1:30 – 2:30 PM Ethylene Maintenance & Reliability <b>3 hour session w/EPC keynote - 2:30-5:30 PM</b> Heaters/H2 Firing – Decarbonization Options	
Tuesday March 14	Technology Fundamentals Contaminants and Impurities in C2= Plants	Caustic System Tutorial Ethylene Rotating Equip	
Wednesday March 15	Ethylene Environmental Ethylene Operations	Ethylene Plant Safety	
Thursday March 16	Circular Economy / Decarbonization		

# o Ethylene Plant Technology Fundamentals Session

- Chair: Jack Buehler
- Co-chair: Bob Krinock
- Mentee: David Spicer
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- Email with dates sent to authors originally on Dec 13, 2022 and then again on Jan 18, 2023:

\* ~ 1st draft of paper –January 30 with approved paper by February 20, 2023
\* ~ draft of power points by February 20, 2023 with the Approved power points – March 3, 2023.

# Updated - Author Reply Status

- 61a) Development of Rotating Olefins Cracker: Silvano Sareto (Technip/FMC) et al working on
- 61b) Electrosynthesis of C2H4 from CO2 and H2O: Meenish Singh (Univ of Illinois) working on
- 61c) Intensified Plasma Driven Methane Coupling to C2H4: Fabio Camilia (Ghent)– working on
- 61d) Catalytic Plastic Pyrolysis and Steam Cracking: Leslaw Mieczko (Anellotech)– working on.
- On a sadder note, Dr. Dennis McCullough a consultant to Annelotech Inc. & a coauthor of their paper, has recently passed away. Leslaw Mieczko has said they plan to dedicate their session to him.
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- 61e) Thermal Crude to Chemicals: K.M.Sundaram (Lummus Technology) working on from Feb 17 schedule, which was given by another sub-committee. They were told that is not our schedule
- 61f) Challenges of Integrating Plastic Waste within Steam Crackers: Véronique Reich (Technip Energies) – working on
  - o <u>Circular Economy/Decarbonization Session</u>
    - Chair: Jose de Barros
    - Co-Chair: Bill Charlton
    - Mentee: Aivars Krumins
  - All authors working on papers.
  - Heaters & H2 Firing
    - Chair: Aivars Krmins
    - Co-chair: Chuck Polito
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  - All authors working on papers

### 5) Review Status of Caustic System Tutorial:

- Chair: Bala Devakottai
- Co-Chair: Muhammad Imran
- Mentee: Jason Hamilton
- All authors working on papers.

General: All sessions seem in relatively good shape, with authors working on papers. Some authors have said they will be somewhat late, per our original dates.... not unusual.

## Key Dates for the 2023 Ethylene Producers' Conference in Houston.

• March 12-18, 2023 Spring Meeting – Houston, TX

### Update on 2023 – 2024 EPC Planning Meeting cycle, from Mike Tallman

- Dates for meetings for the 2023 2024 EPC planning cycle:
  - o 15 June 2023
  - o 10 August 2023
  - o 12 October 2023
  - o 7 December 2023
  - o 1 February 2024
  - o 2024 EPC Conference is 24-28 March, 2024, in New Orleans

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- Early bird registration for the 2023 conference ends 6 February 2023 (you can save \$50 by registering early)
- Tickets for the Ethylene Networking Luncheon are not yet available on the site...should be added soon to meeting on-line registration page
- AIChE app for the 2023 conference should go live next week some time, perhaps the week after