ETHYLENE PRODUCERS' TECHNOLOGY SUBCOMMITTEE (TSC) MEETING

Date: Thursday: Aug 11, 2022 Time: 4:30 to 5:30 PM CDT

Location: DoubleTree by Hilton at Greenway Plaza, Houston.

Attendance:

Last Name	First Name	Company	8/11/2022
		Kinetics Process	
Arora	VK	Improvements	X
Buehler	Jack	Shell- Retired	X
		Compact Membrane	
Charlton	Bill	Systems	X
de Barros	Jose	Lummus	X
Devakottai	Bala	Chevron Phillips Chem	N/A
Elam	Jeff	Ineos	
Fox	Rob	LyondellBasell	Х
Hamilton	Jason	Dow Chemical	Х
Imran	Muhammad	Technip	Х
Kapur	Sanjeev	Apex	
Kehrier	Greg	Shell	
Krinock	Robert	Dow Retired	
Krumins	Aivars	McDermott	Х
Le Geyt	Darren	KBR	N/A
Polito	Charles	Chevron Phillips Chem	Х
Rafique	Humera	Siluria Technologies	Х
Rollins	Kaleb	Dow	Х
Spicer	David	ExxonMobil	Х
Tallman	Michael	KBR	
Ting	Tiong-Ee	Westlake Chemical	Х
Whitney	Mark	Linde	Х
Zygula	Timothy	BASF	Х
		Participation	68.2%

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 Discussed precautions for hot summer days.
- 3) Welcome New Members:

3.1 Kaleb Rollins

Kaleb was elected as a member of the Technology Sub-Committee. Following is his bio:

Kaleb Rollins EPC BIO

I am currently a Senior Production Engineer with 6 years of experience in the Hydrocarbons business working within Ethylene and Propylene facilities. 5 years of process automation experience and now broadening my knowledge working within the Production engineering space. I am excited to utilize new technologies to achieve superior safety, reliability, and profitability. I aspire to have a longechnical career within hydrocarbonsand would like to join the technology team at EPC to help broaden my knowledge base and connections within the industry.

4) Vote for New Member (Ryan Kruse to replace Jeff Elam for INEOS)

a. Ryan Kruse Bio

I am currently the Process Technology Manager at Ineos' Chocolate Bayou Works facility in Alvin TX (took over the role from Jeff). I wear a couple of hats, and am also the Electrical and Instrument Engineering Authority for Ineos O&P USA supporting all manufacturing sites. I've been in this role almost 1 year, and have been with Ineos O&P USA for a little over 8 years in various roles including project lead Engineer, commissioning manager and Engineering team leader. My current team is comprised of various disciplines (I&E, mechanical, process and process control) in the support of capital project execution (FEL and detailed Engineering) as well as providing technical support for the operating assets at CBW including Olefins, Polymer and Utilities production units. Prior to Ineos, I worked in the Nuclear power industry in the Engineering and Maintenance organizations for a power generating station (5 years) and spent the early part of my career in the EPC world working for a couple of Engineering firms on the east coast (8 years).

5) Discussion of Shadow's: Chair and Co-Chair and Session Chairs/ Co-chairs

- a. How will future Chairs and Co-chairs be selected from the pool? Say if 3 people shadow group, how do we select chair and co-chair
- b. How do we keep continuity?
- c. Do we need more by-laws?

6) Finalize 2023 Session Planning Discussion, Session Chairs/Co-chairs volunteers/ assignments.

- a. Following sessions were planned in 2023. Further discussions will be in next meeting:
 - Typically there are three sessions organized by Technology Sub Committee i.e. Fundamentals, Tutorial and any other subject of high interest.
 - Decarbonization, circular economy and energy transition are areas of high interest and most likely Technology Sub Committee will continue to organize sessions in these areas for next couple of year.
 - A decarbonization session was planned on Thursday. This is an area of interest and will result in high attendance on Thursday (the last day of the EPC).
 - A Tutorial session for caustic wash and including spent caustic treatment is long due and will be a good fit for 2023 session.
 - Nominations of Sessions chairs and co chairs will be discussed in next meeting.

Minute of Meeting

- Group welcomed Kaleb Rollins as new member and he introduced himself.
- Ryan Kruse to replace Jeff Elam for INEOS. Vote was taken to confirm Jeff Elam. All votes were affirmative. Ryan will be invited to the next meeting.
- Discussed shadowing suggestion from last meeting. Overall, the group wants to provide each
 Topical Session and Tutorial with an additional person to follow the process to provide future
 continuity. This is intended to provide continuity not necessarily replacement of individuals. No
 need of additional bylaws were established or viewed to be necessary. Shadows volunteered
 for each session and are noted below.
- Discussed EPC TSC Topics to be included for 2023. The following 2 topics and tutorial were decided upon.

Fundamentals

Chair: Jack BuehlerCo-chair: Bob KrinockShadow: Jose de Barros

Circular Economy/Decarbonization

Chair: Jose de BarrosCo-Chair: Bill CharltonShadow: Aivars Krumins

 Need to manage decarbonization limits. Papers may overlap with other sessions. Group will coordinate with other sessions to insure there is no overlap.

Caustic System (title to be finalized) Tutorial

Chair: Bala Devakottai

Co-Chair: Muhammad Imran

Shadow: Jason Hamilton

- Is this going to be caustics systems only or do we want to rename acid gas removal and include alternative chemistries such as MEA systems? This will be discussed with Bala.
- Attached below are the key dates. Please start soliciting for papers!

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

- June 20, 2022 Call for abstracts opens
- October 25, 2022 Call for abstracts closes
- December 9, 2022 Papers accepted or rejected
- January 6. 2023 Draft schedule ready
- January 13, 2023 Program goes live
- March ??, 2023 Paper submission closes
- March 12-18, 2023 Spring Meeting Houston, TX

Future Meeting Dates

Aug 11, 2022 Oct 13, 2022 Dec 8, 2022 Jan 26, 2023

March 12-16, 2023 EPC Conference is in Houston, TX