

ETHYLENE PRODUCERS' TECHNICAL SUBCOMMITTEE MEETING

Date: Thursday, Oct 27, 2016

Time: 4:30 to 5:30 PM CDT

Final

Location: Doubletree by Hilton Hotel Houston, TX

Members: VK Arora, Jack Buehler, Alain Chepda, Heath Chisholm, Bala Devakottai, Rob Fox, Sanjeev Kapur, Robert Krinock, Aivars Krumins, Ravi Lal, Darren Le Geyt, Krishna Merchant , Alberto Morales, Humera Rafique , Mike Tallman, Mark Whitney, Greg Yeo, Tim Zygula,

Present: VK Arora, Bala Devakottai, Rob Fox, Sanjeev Kapur, Robert Krinock, Aivars Krumins, Ravi Lal, Krishna Merchant , Humera Rafique (call-in), Mike Tallman, Mark Whitney, Greg Yeo, Tim Zygula,

Absent: Jack Buehler, Alain Chepda, Heath Chisholm, Darren Le Geyt, Alberto Morales,

Distr: Above + ethyleneproducerscommittee@gmail.com

AGENDA

- I. Reading of the Anti-Trust Statement
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.
- II. Five Minutes on Safety (5 mins)
- III. Approval of Sept 15 minutes....
- IV. 2017 EPC Conference Planning
 - a. Fundamentals - **Jack B / Bob K:** 1st discussion of paper abstracts. Actual voting spreadsheet& final voting dates to be determined
 - b. **"Large Capacity Plants & Their Constraints"- Sanjeev K, Krishna M and Mark W**
 - c. Environmental /Flare Regulations - **Aivars, Greg and Mike**
- I. TSC – Other New Business?

Future Planning Sessions...

* June 9, 2016

* August 4, 2016

* Sept 15, 2016

* Oct 27, 2016

* Dec 1, 2016

* **Jan 26, 2017**

AIChE EPC

March 26 to 30, 2017

Oct 24 is the abstract submittal closing date..., per Jeff Edward schedule

Sessions entered into Confex: May 2, 2016

Call for abstracts: May 23, 2016

Site visit planned Aug 18-19, 2016

Call for abstracts closes: Oct 24, 2016

Papers Accepted/Rejected: Nov 21, 2016

Draft Schedule ready: Dec 7, 2016

Online registration begins: Dec 14, 2016

AICHE draft paper due: Feb 22, 2017

AICHE final papers due: Mar 1, 2017

AICHE draft slides due: Mar 13, 2017

Conference: Mar 26, 2017

Actual Oct 27 Mtg

1. Reading of the Anti-Trust Statement

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2. Five Minutes on Safety

Discussion on CSB release of Williams Olefins incident report that describes a blocked in HX w/o adequate overpressure protection. QW heated C3s in a HX and caused a overpressure, that split the HX shell. Incidents like this have happened in the past, i.e. Enichem.

3. Approval of Sept 15 minutes.... The Sept 15 minutes were approved without any changes

4. 2017 EPC Conference Planning

A – Fundamentals

Bob reviewed the 10 abstracts that we had as of Oct 26. AIChE has extended the abstract submittal deadline to Oct 31, so we expect to get a few more papers. With only being able to accept 6-7 papers for the Tech Session, we will have 4+ papers that can probably be released to other sessions. Tentative: Plan to get voting spreadsheets out on Nov 1, as soon as abstract submittal deadline is closed, and complete final vote tally by Nov 8. Jack will send out current abstract summary & voting spreadsheet. Additional logistic details will be included with the voting spreadsheet email. Plan to have a phone call-in on Nov 8, in the afternoon.

B - Large Capacity Plants

Sanjeev/Mark W/Krishna – These sessions are in good order. Krishna included a complete session summary email.

C - Environmental /Flare Regulations

Aivars/Greg

Attached is a summary of the program and abstracts for the subject session. We are all set with abstracts for the session. I can note that for the TO paper, that the Olin Rep is no confirmed from an operations perspective. The only co-presenter that is still being worked is from Indorama for the Spent Caustic Paper by KBR.

This session is currently planned as the Thursday morning session. Also, we have 7 abstracts so the SC decided that since we are running unopposed and have a lot of good topics, we plan to keep all 7 (instead of 6) and then run the session through to 11:30 instead of 11:00 am. The date and the extended time will be confirmed at this evenings Main Committee meeting.

Start	Stop	Presentation	Presenter
8:00	8:10	Introductions	Richard Beleutz
8:10	8:35	Overview of Current and Future Environmental Challenges	Amy Marshall (AECOM)
8:35	9:00	Environmental Challenges in Meeting Ambient Air Quality Standards	Arijit Pakrasi (CB&I)
9:00	9:25	Flare Emissions Regulatory Update	Kevin Leary (JohnZink)
9:25	9:40	Break	
9:40	10:05	Challenges in SCR Operation	Robert Alvers (LYB) Klavs Beldring (Haldor Topsoe)
10:05	10:30	Flameless Thermal Oxidizer Operating Experience	Gene Irrgang (Linde) Potential Olin rep
10:30	10:55	Impact of Discharge Criteria on Spent Caustic Treatment Plants	Bill Celenza (KBR) Potential Indorama rep
10:55	11:20	Scarcity of Emission Reduction Credits (ERCs) and Potential Effects on Expansions in Petrochemical and Refinery Sector	Mike Taylor (Emission Advisors, Inc.)
11:20	11:30	Close	Richard Beleutz

Additional details are in the complete session description from Aivars.

5. TSC – Other New Business?

1. What is status of Darren LeGeyt? Bala, Mike Tallman will look into.

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Nov 8 Voting & Voting Results (4-5 PM CT)

Call-in attendance:

Present: VK Arora, Jack Buehler, Bala Devakottai, Sanjeev Kapur, Robert Krinock, Aivars Krumins, Ravi Lal, Mike Tallman, Mark Whitney, Greg Yeo, Tim Zygula,

Absent: Alain Chepda, Heath Chisholm, Rob Fox, Darren Le Geyt, Alberto Morales, Humera Rafique

Jack Buehler sent out voting Spreadsheet on Nov 1, with instructions to please return individual spreadsheets by noon Monday Nov 7 to Jack B & Bob K. Voting results are as follows, from my Nov 9, 2016 summary email.

We met yesterday & discussed the top 7 most preferred papers. We had 15 of the 18 members turn in vote spreadsheets.

We are planning to go with 7 papers this year, which we have done occasionally before.

Our session is scheduled for Tuesday March 28, 2017 in the afternoon: 2 to 5 PM, so a slight run over really isn't a problem.

The top 3-4 papers, were highly preferred papers with many folks.

Slots 5, 6, 7 papers were only separated by 1 vote each.

With slot 8 to 11 papers, there was more of a spread in votes.

Papers 8 through 11 will be made available for other EPC/AIChE sessions.

Jack Buehler is contacting all paper submitter/authors, about decisions.

Kevin Van Geem has agreed that UGent will have two presenters.

Jack contacted Humera Rafique about, the need for some technical info in the Siluria paper.

Papers Fundamentals Session		Totals	Ave Vote
11/7/16-End of day			
Voting Order			
1	Building on Natural Gas - OCM	69	4.60
2	T4 479960: Olefin-Paraffin Separation with Customized Amorphous Fluoropolymer (CAF) Facilitated Transport Membranes	71	4.73
3	T4 479642: Improof: Integrated Model Guided Process Optimization of Steam Cracking Furnaces	76	5.07
4	Impact of impurities on carbon molecular sieve membranes for applications in olefins units . Membrane separation	76	5.07
5	T4 479756: Kinetic Study of Thermal Decomposition of N,N-Diethylhydroxylamine (DEHA) in Steam Crackers	84	5.60
6	T4 479650: Computational Fluid Dynamics Based Design of a Novel Reactor Technology for the Oxidative Coupling of Methane	85	5.67
7	T4 479731: Molecular Simulations for Developing New Ethane/Ethylene Separation Processes	86	5.73
8	Optimal Design of Mixed Refrigerant System in Ethylene Plants for Maximum Energy Savings	98	6.53
9	The Evolution of Light Ends Fractionation Fouling Control: From Mechanism to Mitigation, Three Decades of Dramatic Improvement	109	7.17
10	T4 478785: Cracker Energy Efficiency Improvements - Sitewide Holistic Approach	113	7.53
11	PARTIAL DECOKING AND PARTIAL CRACKING IN A TWIN CELL FURNACE – DESIGN AND OPERATIONAL CONSIDERATIONS	127	8.47

Minutes: RJKrinock Nov 14, 2016

RJK

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