

Contaminants & Impurities in Ethylene Plants Subcommittee – September 21st, 2023, Meeting Minutes

Team Members

Robert Alvers	X	Scott Hailey	X	Ross Perchuk	X
Andre Bernard	X	Omar Hamid	X	Matt Pretz	
Joice G. Boll	X	Dwight Hines		Debby Rossana	X
Jessica Burgin	X	David Hood		Yong Wang	X
Mark Davis	X	Joe Lally		Mark Whitney	
Sherri Elder	X	Vinay Naik	X	Lisheng Xu	
Alex Fritz	X	Jennifer Nill		Sai Reddy Pinappu	X

1. 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.”

2. Updates from Main EPC Committee & AIChE

- 2 abstracts have been uploaded in confex.
- Next Main committee meeting schedule for October 12th.

3. Key Dates

- Call for abstract is currently open.
- Call for abstracts closes on October 25th, 2023.
- Paper acceptance/rejection -> 2nd week of December
- Draft Program available for review 1st week of January
- The Program goes live 2nd week of January.
- Paper submission Close/ Presentation -> 1st week of March
- Virtual Dry Run -> 2 to 3 weeks prior to the conference
- The Conference will be between March 24th to 28th 2024, in New Orleans
- T4060 Contaminants and Impurities in Ethylene Plants: Tuesday March 26, 2024, 8:00 AM – 11:00 AM.
- T4095 Contaminants Tutorial: Tuesday March 26, 2024, 13:00 to 17:30

4. Tutorial on contaminants (Debby)

- Debby developed a draft table of content for the chemistry section. After further discussion and due to time limitation (90 minutes) for this topic, it was decided to focus on the fundamentals coupled with high level examples.
- Need to get short abstracts in confex before the closing date.
- Consider a presentation/ slide review in January.
- The tutorial has 3 topics.
 - Adsorbents
 - Filtration
 - Chemistry

5. Review Submitted abstracts.

- Renewable Feedstocks: Challenge & Solutions (Baker Hughes)
 - Various feedstock (pyoil, vegetable oil) fits well with the idea around non-conventional feedstocks.
 - Ask to have a draft paper by January to avoid repetition and ensure alignment with tutorial.
- Fouling assessment via Detailed Characterization of Plastic Pyrolysis Oils and Their Contaminants by FT-ICR MS and GCxGC (University of Ghent)

6. Ideas for 2024

Advances in Purification of Monomers for Petrochemical and Polymerization Applications

- Honeywell – UOP Abstract submitted to the 2023 session but rejected due to a filled-up session. Honeywell - UOP will re-submit an abstract (Scott to monitor progress)

Pipeline Contaminants (glycol, drag reducer etc.)

- Not successful in findings potential authors, we'll put the idea on the standby list.

Impact of higher volume of ethane cracking on Primary Fractionator - Industry Experience/ Impact on CGC.

- No prospect of having the involvement of a producer for 2024. Joice believe she can put something together if we run short of paper. Will be re-evaluate next meeting.

MEA & NH3 issues

- David Hood could put a paper together but cannot guarantee to secure co-authorship. (Andre to follow up with David)

Contaminants Associated with Unusual Feedstock (ex. Ethanol, waste coal, etc.)

- Omar and Ross are still working on the idea. We'll re-evaluate next meeting.
- Joice will try to reach out to Braskem vs ethanol process and contaminants.

Pye Oil from Plastic Waste

- Paper from University of Ghent. Abstract uploaded in confex.
- Potential Paper on Silicon Removal. Silicon as a contaminant in plastic waste recycling. As communicated by Jennifer by email, CPChem is actively working with vendors to write this paper and are enthusiastic about it. (Andre will check status with Jennifer)
- Naphtha blending with Pyoil from plastic waste – any issues. Joe indicated that the catalyst group at Evonik has done some work, which could be a potential paper with focus on chlorides removal when blending with naphtha. (Andre will follow up with Joe on status)

7. Technical Discussion

Contaminants Database Procedure (Ensure Continuity)

- A rough draft procedure has been shared with Alex & Ross.
- Changes in the EPC website have caused the database hyperlink to no longer works. Will work on updating the hyperlink.

8. Other Business

None

9. Schedule Next Meeting

Next Meeting October 19th, 2023, at 15h00 CST