

Feedstock Contaminants Subcommittee – October 21st, 2021 Meeting Minutes

Team Members

Mark Davis	X	Yong Wang	X	Robert Alvers	X
David Smith		Joe Lally		David Hood	
Sherri Elder	X	Andre Bernard	X	Ross Perchuk	
Mark Whitney	X	Ali Abbaspour			
Dwight Hines		Jennifer Nill			

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. AIChE Confex

2 abstracts have been uploaded in confex:

- Paper on Plastic Waste by University of Ghent
- Paper on NORM by NOVA

3. Updates from Main EPC Committee

AIChE is Still planning a face-to-face conference. There is no plan for a hybrid conference.

Currently, only 6 abstracts have been uploaded for the EPC.

There is a possibility to extend the Call for Abstracts deadline by 1 week.

4. Key Dates

Current focus is on:

Call for Abstracts, which closes November 1st, 2021

Other key dates below:

Accept/ Rejects Abstracts: December 6th, 2021
Preliminary Acceptance Notices Sent: December 20th, 2021
Final Acceptance/ Rejection Notices Sent: January 24th, 2022
2022 AIChE Spring Meeting: April 10 to 14th, 2022

We will be planning a dry run 2 to 3 weeks prior to the conference.

5. Review Paper Ideas

- **Dihydrodicyclopentadiene found in C9-200/ Wash oil recovery** – A draft abstract is currently circulating for preliminary approval. Andre to monitor progress and ensure upload in confex.
- **CS₂ rise from H₂S scavenger on shale** – Sherri has been requesting upload of the abstract and offer help for uploading it if necessary. She hasn't got any replied from Dorf Ketal and will keep following up with them
- **Pipeline Contaminants (glycol, drag reducer)**. Given the timeline and difficulties in getting response from targeted companies we will move the idea to the standby list for future consideration.
- **Plastic Waste:**
Contaminant Treatment – University Ghent. The abstract has been uploaded in confex.

LyondellBasell Experience – LyondellBasell is currently not in a position to share information that would meet the requirement of a paper.
- **CO₂ Capture vs Amine Technologies** – Unsuccessful in getting commitments from technology providers. The idea will be move to the standby list for future considerations.
- **Lanzatech -> CO₂ to ethanol**. Lanzatech indicated that they would submit an abstract. Yong to follow up and offer help for uploading the abstract if necessary. Andre to help with upload if necessary.
- **Oxydative coupling of methane to ethylene** – Siluria – Dave S. made a contact at Siluria but has not get any response from multiple requests. The idea will be move to the standby list.

- **Radon.** NOVA Industrial Hygiene – Abstract has been uploaded in confex.
- **Inhibitor residual/ measuring methods.** Debby Rossana currently working on an abstract. Andre to follow up with Debby and Dave S. to ensure abstract gets uploaded.
- **Membrane to cleanup Natural gas** – A group reached out to Sherri and express interest in submitting an abstract to our session. Sherri will follow up.
- **Feedstock Contaminant Database.** Idea of doing a subcommittee paper using the Feedstock Contaminant Database and selected contaminants. Andre to coordinate the effort and upload an abstract in confex. This idea is to be used as contingency in case of papers dropping out. If the idea is not used for the 2022 EPC, we will defer it to 2023.

Other Business

- Nothing to report

6. Technical Discussion

Discussion on improving the contaminants database. Allocation of contaminants by process area needs improvement. Certain areas have no contaminant associated with them (ex. Feed System). Other areas might not be complete. Suggest having the team member to review so that we could improve the 2022 version of the database.

The team suggest working by contaminant rather than by area. By taking a specific contaminant and allocating it to the different process areas. This also illustrates the path that a contaminant is following through the process.

Below is a distribution of contaminant per team member.

Ross -> Arsine & Phosphene, NH₃

Robert A -> Hg, MeOH

Sherri -> Cl, F

Mark Davis -> NaCl, Si

Andre -> NO_x, Glycol or Aldehyde

Note – CO₂ High Ranking contaminant for Ethane, E/P in 2017 Survey. Rank 5th for Propane & other NGL and 15th for Naphtha

Ross indicated that ethanol is not in the database. Limited information is available on it as a contaminant to the ethylene unit.

Mark suggested to add acetaldehyde (key contaminant in Caustic Tower). Note that Aldehyde was not included in the 2017 survey.

Note that the database enhancement is volunteer work, and we are not under a timeline constraint. We should look at it as continuous improvement.

7. Schedule Next Meeting

- Next meeting schedule for December 2nd, 15h00 (CT)