Dear UEFA Forum Members,

We hope you are enjoying the summer time of 2017. UEFA would like to update you with our upcoming events.

2017 AIChE Annual Meeting

The 2017 AIChE Annual Meeting is approaching us. The Upstream Engineering and Flow Assurance forum will host 25 oral presentations and 14 posters on Monday and Tuesday, October 30 – October 31. All UEFA oral sessions will take place in room 200B of Minneapolis Convention Center and the poster session will be in Exhibit Hall B. The topics and time of the sessions are listed below for your convenience. You can also visit the AIChE website for more details about the UEFA sessions: https://aiche.confex.com/aiche/2017/meetingapp.cgi/Program/2289

Fundamentals and Applications of Flow Assurance	October 30, 8:00 AM -10:30 AM
Phase Behavior and Flow of Reservoir Fluids	October 30, 12:30 PM – 3:00 PM
Innovations in Production of Unconventional Reservoirs	October 31, 8:00 AM – 10:30 AM
Flow Assurance and Asset Integrity	October 31, 12:30 PM – 3:00 PM
Poster Session	October 31, 3:15 PM – 4:45 PM

On Monday evening, UEFA will also host a social event at Kieran's Irish Pub, 85 N 6th St. Please come and join us at the social event and chat with UEFA professionals over snacks and drinks. The ticket to the social event is $15 per person.

2018 AIChE Spring Meeting

We are very glad to host the 6th International Conference on Upstream Engineering and Flow Assurance at the 2018 AIChE Spring Meeting in Florida. The call for abstracts is open and we will continue to receive submissions until Monday, November 13, 2017. Follow this link to submit your abstract: https://aiche.confex.com/aiche/s18/cfp.cgi

PetroPhase 2018 – July 8-12, 2018

University of Utah will organize the 2018 International Conference on Petroleum Phase Behavior and Fouling (PetroPhase) at The Chateaux at Deer Valley, Park City, Utah. The city is famous for hosting ski and snowboarding events at the 2002 Winter Olympics and the mountain setting will be a great break from the heat next summer. Subscribe to the PetroPhase 2018 news feed at https://petrophase2018.che.utah.edu/ to receive updates about the conference.

Student Research Highlights

This episode of the student research highlights showcases the investigation on the reversibility of asphaltene aggregation from University of Utah (link to paper)

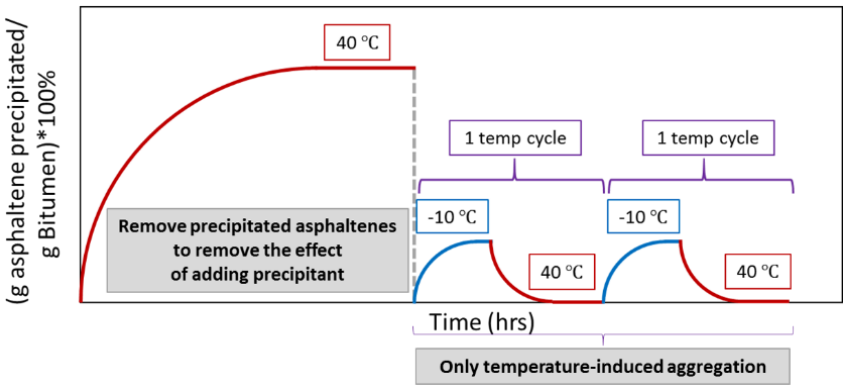
UE&FA

Networking of experts.
Promoting knowledge.
Solving Problems.

Student Research Highlights

Reversibility of Asphaltene Precipitation Using Temperature-Induced Aggregation

Wattana Chaisoontornyotin, Austin W. Bingham, and Michael P. Hoepfner



Asphaltenes are the heaviest oil fraction that can destabilize due to changes of pressure, temperature, and/or composition, causing reduction in oil production and fouling issues.

Thermodynamic models of asphaltene phase behavior generally assume that asphaltene precipitation is a reversible process. However, previous investigation has shown that temperature-induced asphaltene precipitation is a reversible process with only partial reversibility.

In this investigation, reversibility of asphaltene precipitation was revisited. A novel experiment was designed to de-convolute the kinetic effect of asphaltene precipitation due to compositional change, which was attributed as the sole cause of partial reversibility in previous investigations.

This study, when combined with previous work, reveals that asphaltene precipitation is reversible through all three common destabilizing methodologies: temperature, pressure, and composition changes. These findings suggest that a thermodynamic model is appropriate to understand and predict phase behavior of asphaltenes. However, the experimental data used to validate and benchmark these models should be allowed to reach the true equilibrium state.

If you would like your published papers to be highlighted in our newsletters, please submit a short paragraph and a graphical abstract formatted as above to sheng.m.zheng@ge.com.

Sincerely,

The UEFA Leadership Team

www.aiche.org/uefa