Draft Agenda

Biorefinery Optimization Workshop

U.S. Department of Energy, Bioenergy Technologies Office

October 5 and 6, 2016 ● Chicago ● Illinois

Wednesday, October 5, 2016

Time	Activity = auditorium = breakout rooms
7:30-8:00 am	Registration and Coffee *(Conference Center)*
8: – 8:30	**Welcome, Opening Remarks, Program Overview Bioenergy Technologies Office** ■ Jonathan Male, Director, BETO: BETO Overview ■ Borka Kostova, Technology Manager, BETO: Workshop Overview - Discussion of Structure and Goals
8:30 -9:30 am	**Overview of the Efforts in Feedstock & Materials Handling (Inside the Plant Gate) - Key Technical and Economic Challenges Identified for Different Processes** *This session will explore the movement of feedstocks from the plant gate through to the throat of the reactor, will discuss the key challenges related to commercialization of feed handling concepts and approaches on how to overcome these challenges, and distinguish DOE's role in supporting the needs of industry to overcome these challenges.*
9:30 – 9:45 am	**Networking**
9:45 – 10:45 am	**Process Scale-up, Process Intensification, and Opportunities for Reducing CapEx and OpEx** *This session will explore efforts to successfully achieve project scale up (pilot-scale to commercialization) for production of biofuels and biochemicals, the factors essential to reducing operational risks, and the key technical milestones that projects must overcome along the way. The session will also consider the innovative opportunities that exist for improving in-plant IBR operational methods, implementing processes intensification, and reducing capital expenditures.*
10:45 – 11:45 pm	**Opportunities and Strategies for Monetizing Co-Product and Waste Streams** *This session will explore the co-product and waste streams that exist in IBR operations, but are considered to be of little economic significance at this point, discuss methods for fully utilizing the potential of waste streams to produce higher value products, and how to separate valuable components. The session will also address the challenges and barriers that have thus far served as obstacles to moving these products to market.*
11:45-12:00 pm	Group Announcement
12:00-1:00 pm	Lunch (provided)

ALL TOPICS AND TIMES ARE TENTATIVE AND SUBJECT TO CHANGE

1:00 – 5:30 pm	**Breakout Session I:** **Strategies for Improving Feedstock & Materials Handling (Inside the Plant Gate to the Throat of Reactor)** *This session will explore the movement of feedstocks from the plant gate through to the throat of the reactor, discuss the key challenges related to commercialization of feed handling concepts and approaches on how to overcome these challenges, and distinguish DOE's role in supporting the needs of industry to overcome these challenges. Participants in this session will participate with others to discuss the bounds of this topic space, and will work through a series of questions and exercises designed to provoke thought and gather information relevant to the DOE mission and needs of industry. Participants will also help to identify next steps to be pursued for improving material handling in IBRs and improving efficiency and coproduct yields.*
1:00 – 5:30 pm	**Breakout Session II:** **Strategies for Scaling-up IBR Processes, and Improving IBR Operational Methods, Efficiency, and Project Financing** *This session will explore efforts to successfully achieve project scale up (pilot-scale to commercialization) for production of biofuels and biochemicals, the factors essential to reducing operational risks, and the key technical milestones that projects must overcome along the way. The session will also consider the innovative opportunities that exist for improving in-plant IBR operational methods, implementing processes intensification, and reducing capital expenditures. Participants will discuss the topics, share their opinions on process scale-up and intensification, and discuss opportunities for targeted reductions of project CapEx and OpEx. A series of questions and exercises designed specifically for this session will be used to stimulate conversation and gather information relevant to the DOE mission and needs of industry. The participants will also discuss the next steps that DOE should consider for initiating efforts in this topic space.*
1:00 – 5:30 pm	**Breakout Session III:** **Opportunities and Strategies for Monetizing Co-Product and Waste Streams** *This session will explore the co-product and waste streams that exist in IBR operations, but are considered to be of little economic significance at this point, discuss methods for fully utilizing the potential of waste streams to produce higher value products, and how to separate valuable components. The session will also address the challenges and barriers that have thus far served as obstacles to moving these products to market. Participants will participate with others to discuss the bounds of this topic space, and will work through a series of questions and exercises designed to better understand the slate of potential co-products and waste streams, how these streams can be commoditized for trade, and the roles of DOE and industry in this effort. The participants will also discuss the next steps and potential policy considerations that would help to initiate the monetization of these streams.*
5:30 pm	Adjourn Day 1

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Thursday, October 6, 2016		
Time	**Activity** = auditorium = breakout rooms	
7:15-8:15 am	Networking and Coffee	
8:15 – 8:30 am	**Welcome Back Remarks** ■ Jim Spaeth/Borka Kostova, BETO	
8:30 -10:30 am	**Breakout Session I -III: Advancement Activity Action Plans** *(same groups)*	
10:30 -11:30 am	**Breakout Session Day 2 Reports, Action Plans and Q&A**	
11:30-11:45 am	**Closing Comments and Next Steps**	
11:45 am	Lunch *(Boxed Lunch)*	
11:45 am – 5:00 pm	**Adjourn**	
	Adjourn Workshop	

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