

## Information

**Conference Venue:**  
Novotel Aachen City  
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# TMFB

Tailor-Made Fuels from Biomass

## Program

### 1. International Conference and 6. International Workshop

of the  
**Cluster of Excellence**  
**“Tailor-Made Fuels from Biomass”**

June 18<sup>th</sup> - 20<sup>th</sup>, 2013  
Novotel Aachen City, Aachen, Germany

**RWTHAACHEN**  
UNIVERSITY

Tuesday, 18.06.2013			Wednesday, 19.06.2013			Thursday, 20.06.2013				
09:00	E. Schmachtenberg	Welcome Words	C. Westbrook <i>Lawrence Livermore National Labs</i>		<i>Invited Lecture: "Kinetic Modeling of Biofuels Combustion"</i>		U. Kramer <i>Ford</i>		<i>Invited Lecture: "Prospects for Alternative Fuel Vehicles: Consumer Preferences"</i>	
09:15	S. Pischinger	Welcome and Introduction to TMFB								
09:30										
09:45	T. Welton <i>Imperial College London</i>	<i>Invited Lecture: "Ionic Liquids for Biomass Fractionation"</i>	I. Borodina <i>Chalmers University of Technology</i>		<i>Invited Lecture: "Yeast as a Platform Cell Factory in Biorefineries"</i>		J. Zimmerman <i>Yale University</i>		<i>Invited Lecture: "Extraction, Fractionation, and Transformation of Algal Biomass in Mixed High-Pressure CO<sub>2</sub>/methanol Systems"</i>	
10:00										
10:15										
10:30 – 11:00	Coffeebreak									
	<b>Invited Lectures</b>		<b>Biomass Pre-Treatment</b>		<i>Parallel Sessions</i>		<b>Combustion Kinetics</b>		<b>Biofuel Application Examples &amp; Supplementary Cluster Activities</b>	
11:00	P. De Goey <i>University of Eindhoven</i>	<i>Invited Lecture: "Cyclohexane and other Future Fuels: Possible Production Routes and Ultra-clean Combustion Concepts"</i>	H. Wulfhorst <i>TU KL</i>	"[...] Near- and Mid-Infrared Spectroscopy [] Biomass Composition"	J. Dec <i>SANDIA</i>	"Bio-Ketones: Autoignition Characteristics [...]"	S. Schröder <i>TMFB</i>	"Supplementary Cluster Activities: Performance Measurements and Indicators"		
11:15										
11:30			J. Viell <i>TMFB/AVT.PT</i>	"Biomass decrystallization – [...]the cation's role in dissolution"	A. Sudholt <i>TMFB/ITV</i>	"Combustion Kinetics of Di-n-butylether as Example of a TMFB"	A. Joedicke <i>Shell Global Solutions</i>	"Improvement of Soot/NOx Trade-Off by the Use of GTL [...]"		
11:45	I. Sivebaek <i>Technical University of Denmark</i>	<i>Invited Lecture: "Ultra-low Lubricity Alternative Fuels"</i>	M. Pauly <i>Berkeley-EBI</i>	"[...] Pretreatment Effects on Lignocellulosic Materials [...]"	A. Heufer <i>FEV GmbH</i>	"Autoignition Behaviour of Long Chain Alcohols"	S. Curvers <i>Direvo</i>	"Direvo's BluConTM High-Temperature Consolidated Bioprocess [...]"		
12:00										
12:15										
12:30 – 13:30	Lunchbreak									
	<b>Poster Session</b>		<b>From Biomass to Biofuels</b>		<i>Parallel Sessions</i>		<b>Fuels Spray, Flow and Mixing</b>		<b>End of public part of the workshop</b>	
13:30	Poster Session		R. Ahmad <i>KIT</i>	"[...] Synthesis of Dimethyl ether [...]"	T. Knorsch <i>Uni Erlangen</i>	"Impact of Biofuel Physiochemical Properties on the DISI Reaction Chain"	<b>Meeting of the TMFB International Advisory Board</b>			
13:45										
14:00			K. Luska / K. Pupovac <i>TMFB/ITMC</i>	"Novel biofuels based on furfural and 5-hydroxymethylfurfural [...]"	F. Mathieu <i>TMFB/WSA</i>	"Flow and Spray Analysis of Novel Biofuels"				
14:15										
14:30			F. Carstensen/ S. Wewetzer <i>TMFB/AVT</i>	"Continuous in situ product recovery of itaconic acid [...]"	C. Fink <i>Uni Rostock</i>	"Analysis and Reproduction of Internal Injector Deposits"				
14:45										
15:00 - 15:30	Coffeebreak									
	<b>Fuel Design</b>		<b>Reference Process</b>		<i>Parallel Sessions</i>		<b>Fuel Injection and Combustion Systems</b>			
15:30	J. Bünger <i>Thünen</i>	"Mutagenic Effects of Emissions of Diesel Engines [...]"	J. Roth <i>TU KL</i>	"Butanol-Production from Pretreated Lignocellulosic Biomass [...]"	P. Eilts <i>TU BS</i>	"Investigations on Oxygenic Fuels in a Diesel engine"				
15:45										
16:00	J. Klankermayer <i>TMFB/ITMC</i>	"Fuel Design for Tailor-Made Fuels from Biomass"	Q. Yan <i>TMFB/AVT.MVT</i>	"Mechanical pretreatment of lignocellulosic biomass [...]"	B. Heuser <i>TMFB/VKA</i>	"Combustion and Emission Formation of Tailor-Made Fuels from Biomass"				
16:15										
16:30	S. Seidenspinner <i>TUM</i>	"Emission Analysis and Cetane Number Determination of Oxygenated Fuels [...]"	U. Schuchardt <i>Campinas</i>	"Sustainable Aviation Biofuels for Brazil [...]"	P. Bloch <i>Robert Bosch</i>	"Future Fuels Diesel"				
16:45										
17:00 – 17:30	Coffeebreak									
	<b>Special Evening Lecture</b>		<b>From Biomass to Biofuels</b>		<i>Parallel Sessions</i>		<b>From Biofuels to Propulsion</b>			
17:30	P. Anastas <i>Yale University</i>	<i>Invited Lecture: "Future Trends and Challenges for Green Chemistry"</i>	J. Krahl <i>Thünen</i>	"Interactions Among Fuel Molecules from Diesel and Biodiesel"	V. Vauhkonen <i>UPM, FEV</i>	"Well-to-wheel analysis of renewable diesel from crude tall oil"				
17:45										
18:00			T. vom Stein <i>TMFB/ITMC</i>	"Selective Cleavage of Lignin Linkages Using Molecular Catalysts"	C. Felby <i>University of Copenhagen</i>	"Biorefinery Development – the Danish Perspective"				
18:15										