

# Bio4Energy

## Autumn Researchers' Meeting 2023

22-23 November, lunch to lunch  
Umeå Folkets Hus, Umeå

### Wednesday 22 November

- 12.00** Lunch
- 13.00** Opening of the meeting - Information from the managers
- 13.15** From genes to trees and feedstocks for biorefinery -  
Research updates from the Forest Based Feedstock platform (ForFeed)
- Future Swedish forest feedstocks in the context of climate change  
*Sonali Ranade, SLU*
- Engineering of forest feedstocks for future bioeconomy  
*Ewa Mellerowicz, SLU*
- Developments in forest feedstock characterization  
*Gerhard Scheepers, RISE*
- The dark matter of the Norway spruce genome  
*Peter Kindgren, SLU*
- 14.15** Theme reports on cross-platform hot societal topics (workshop)
- 15.00** Fika and poster session preparation
- 15.30** PhD students in the spotlight (*see detailed program below*)
- Updates from Bio4Energy Graduate School
- Pitches followed by poster session
- 17.15** Wrap-up of day 1
- Time for platform activities, leisure or resting*
- 19.00** Dinner

## Thursday 23 November

- 08.50**    **Opening of the day and information about study visits**
- 09.00**    **Umeå Eco-Industrial Park – Industrial symbiosis and innovation hub**  
*Karin Måwe, Project leader, Vision Dåva/Umeå kommun*
- 09.30**    **Fika**
- 10.00**    **National infrastructure, synchrotron related research in academy and industry of relevance for Bio4Energy**  
*Nils Skoglund, Mikael Thyrel et al.*
- 11.00**    **Follow up on the theme reports work from Day 1**  
***Summary and next steps!***
- 11.25**    **Closing remarks**
- 11.30**    **Lunch**
- 13.00**    **Study visits**
- 1) **Biomass Technology Center (BTC)**, SLU pilot plant and test bed for R&D on pre-treatment and processing of biobased materials.
  - 2) **UmU/SLU campus infrastructures: Umeå Center for Electron Microscopy (UCEM/SciLifeLab), Biopolymer Analytical Platform (BAP), Umeå Plant Science Center (UPSC)** – greenhouse facilities.
  - 3) **Dåva CHP plant** for MSW and biomass (Umeå Energi), **Algae pilot facilities, Arevo AB** – Innovation company for plant nutrient products.

There will be bus transport (after lunch) from Folkets Hus (the meeting venue) to the separate study visit locations.

The study visits are timed to end in time for the bus nr 20 to Piteå/Luleå with departure 16:15 from Umeå Bus station and 16:25 from NUS.

## Poster program

Online determination of fossil/biogenic CO<sub>2</sub> in waste incineration

*Alexandre Salou (ThermoChem, UmU)*

Nitrogen regulated wood formation

*Anna Renström (ForFeed, SLU)*

Carbonic anhydrase for CCS and circular economy promotion

*Ayanne De Oliveira Maciel (BioPolChem, LTU)*

Chipping of spruce-bark-beetle-infested wood for Kraft pulp using a novel type of pilot drum chipper

*Claudia Quineche (BioPolChem, UmU)*

Biopolymers from residues: A Comparative characterization of *Halomonas boliviensis* PHB

*Diego Alejandro Miranda (BioPolChem, UmU)*

What Makes a Tree a Tree

*Eduardo R. Soldado (ForFeed, UmU)*

Highly permeable and selective DDR membranes for biogas upgrading

*Iliana Kyriazidou (CatSep, LTU)*

Conversion of bio-methanol to jet fuel on zeolite-based catalysts

*Judith Hernandez Cabello (CatSep, LTU)*

Flexible Bioeconomy - Key factor for enabling investments in biorefineries

*Mahsa Mehrara (SysAnaBio, LTU)*

Improving heavy metal removal via microalgae immobilization on a sulfur-based copolymer

*Martin Plöhn (BioPolChem, UmU)*

From wood to value added aromatics – an antioxidant lignin story

*Petter Paulsen Thoresen (BioPolChem, LTU)*

## Participants

Name	Org.	Platform	Study visit	Name	Org.	Platform	Study visit
Aayanne De Oliveira Maciel	LTU	BioPolChem		Oscar Mauricio Gracia Pina	LTU	SysAnaBio	
Ajai Kumar Samikannu	UmU	CatSep		Param Jeet Saroj	SLU	FeedPro	
Alexandre Salou-Quineche	UmU	ThermoChem	BTC	Peter Nordström	RISE	ForFeed	Campus
Alexey Sepman	RISE	ThermoChem		Petter Paulsen	LTU	BioPolChem	BTC
Andreas Averheim	SLU	FeedPro		Thoresen			
Anna Renström	SLU	ForFeed		Robert Lundmark	LTU	SysAnaBio	
Anna Strandberg	UmU	FeedPro		Sandra Jämtgård	SLU	EnviroNut	
Anna Strom	UmU	Comm	Campus	Sandra Winestrand	UmU	BioPolChem	BTC
Bianca Anina Brandt	UmU	Other	Dåva	Santosh Khokarale	UmU	CatSep	
Carlos Martín	UmU	BioPolChem	Dåva	Sarah Conrad	LTU	EnviroNut	
Carmen Cristescu	SLU	SysAnaBio	Dåva	Shaikshavali Petnikota	SLU	Other	
Chaojun Tang	UmU	BioPolChem	Dåva	Shaojun Xiong	SLU	FeedPro	Dåva
Christiane Funk	UmU	BioPolChem	Dåva	Shokat Sarmad	UmU	CatSep	BTC
Christoffer Boman	UmU	EnviroNut	Dåva	Sonali Ranade	SLU	ForFeed	Dåva
Claudia Quineche	UmU	BioPolChem	BTC	<del>Stina Broberg Bergkvist</del>	<del>RISE</del>	<del>ForFeed</del>	<del>Campus</del>
David Agar	SLU	SysAnaBio	Campus	<del>Stina Jansson</del>	<del>UmU</del>	<del>EnviroNut</del>	<del>Pending</del>
Diego Miranda	UmU	BioPolChem	Dåva	Thomas Grahn	RISE	ForFeed	Campus
<del>Eduardo Arango Durango</del>	<del>LTU</del>	<del>ThermoChem</del>	<del>BTC</del>	Torbjörn Lestander	SLU	FeedPro	Dåva
Eduardo R. Soldado	UmU	ForFeed	<b>Poster only</b>				
Elisabeth Wetterlund	LTU	SysAnaBio	Campus				
Ewa Mellerowicz	SLU	ForFeed					
Florian Schmidt	UmU	ThermoChem					
Francesco Gentili	SLU	EnviroNut	Dåva				
Fredrik Weiland	RISE	ThermoChem					
Gerhard Scheepers	RISE	ForFeed	Campus				
Hannele Tuominen	SLU	ForFeed					
Henrik Böhlenius	SLU	ForFeed					
Henrik Wiinikka	RISE	ThermoChem					
Iliana Kyriazidou	LTU	CatSep					
Jenny Lundqvist	UmU	BioPolChem					
Johannes Hanson	UmU	ForFeed					
Judith Hernandez Cabello	LTU	CatSep					
Junko Schmidt	SLU	ForFeed	Campus				
Jyri-Pekka Mikkola	UmU	CatSep	<del>Dåva</del>				
Leif Jönsson	UmU	BioPolChem	Dåva				
Liang Yu	LTU	CatSep	Campus				
Linn Berglund	LTU	BioPolChem					
Linnea Ekblad	RISE	ForFeed					
Magnus Rudolfsson	SLU	FeedPro	BTC				
Mahsa Mehrara	LTU	SysAnaBio	<del>BTC</del>				
Marco Bassani	UmU	BioPolChem	BTC				
Marcus Öhman	LTU	ThermoChem					
Martin Plöhn	UmU	BioPolChem	Dåva				
Mateo Bello Villarino	UmU	BioPolChem					
Mats Tysklind	UmU	SysAnaBio					
Mikael Thyrel	SLU	FeedPro	BTC				
Mohsen Parchami	SLU	FeedPro	Dåva				
Nils Skoglund	UmU	EnviroNut					