

# Bio-Innovation Summer School 2014

Integration of green & white biotechnology: from plant to product!



Date: August 25-28th, 2014  
 Venue: Ghent University, Faculty of Bioscience Engineering, Coupure Links 653, 9000 Ghent, Belgium

This annual summer school offers a comprehensive overview of the biobased economy, addressing its technological as well as societal aspects.

Previous editions attracted over 50 participants from all over the world, who got to interact with experts from both academia and industry.

## CONFIRMED SPEAKERS

- Michael Metzloff [Bayer Bioscience, BE]
- A. Higson [National Non-Food Crops Centre, UK]
- Technology Centre for Biorefining & Bioenergy, IE [several speakers]
- Dorien Derksen [Avans University, NL]
- Filip Van Den Abeele [science journalist]
- Ghent University [several speakers]
- ...

## PLANNED ACTIVITIES

- Interactive lectures
- Excursions to Bio Base Europe Pilot Plant, VIB
- Lab visits
- Group discussion
- Welcome reception
- Walking dinner
- Barbecue
- ...

Registration: online via <http://www.gbessummerschool.be/registration.html>  
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**Bio Base NWE**  
Innovation and training  
for the biobased economy

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Time	Monday 25/08	Time	Tuesday 26/08	Time	Wednesday 27/08	Time	Thursday 28/08
9h00		9h00	<b>Frank Van Breusegem (UGent)</b> Improving biomass yield by genetic engineering	9h00	<b>Tom Desmet (UGent)</b> Enzymatic conversion of biomass	9h00	<b>Vincent O'Flaherty (TCBB &amp; NUI Galway)</b> Principles of anaerobic digestion
9h45		9h45	<b>Michael Metzloff (Bayer Bioscience)</b> - Trying to look into the future of agriculture	9h45	<b>Marjan De Mey (UGent)</b> Metabolic Engineering for biomass conversion	9h45	<b>Adrie Weeken (Attero)</b> Feedstock resource and demand mapping
10h15		10h15	<b>Bartel Vanholme (UGent)</b> Modifying the cell wall for increased sugar yields	10h15	<b>Sophie Roelants (UGent)</b> Bringing new-to-nature biosurfactants to the market	10h30	Coffee break
11h00		11h00	Coffee break	11h00	Coffee break	10h45	<b>Michael Murray (NVP Energy)</b> Diversity of operational systems of anaerobic digestion and volatile fatty acid recovery-economy in Ireland
11h30		11h30	<b>Isabel Roldan-Ruiz (ILVO)</b> Field performance of bio-energy crops	11h30	<b>Marta Coma (UGent)</b> Environmental biotechnology		
12h00	Registration	12h00	<b>Stefaan Blancke (UGent)</b> Ethical issues in biotechnology	12h00	<b>Frederik Ronsse (UGent)</b> Thermochemical conversion of biomass	11h00	<b>Bart Bonsall (TCBB)</b> The commercial and regulatory frameworks for a biobased
12h30		12h30	Lunch + bus to VIB	12h30	Lunch	11.45	Questions and answers, discussion session
13h00	Lunch	14h00	<b>Hannes Iserentant (UGent)</b> Patents in the life sciences	13h30	<b>Adrian Higson (National Non-Food Crops Centre, UK)</b> Markets for biobased products	12.45	Lunch and networking
14h00	<b>Willy Verstraete (UGent)</b> Program overview + Microbial resource management	14h30	<b>Mirjam Knockaert (UGent)</b> Management and innovation	14h15	<b>Dorien Derksen (Avans University, NL)</b> - Biobased textile dye from madder root for industrial application	14h00	<b>Maria Tuohy (TCBB &amp; NUI Galway)</b> Enhancement of AD via feedstock pre-treatment: developing enzyme technology for hydrolysis of challenging feedstocks
14h45	<b>Jeroen Buysse (UGent)</b> The economics of biotechnology	15h15	Visit Flemish Institute for Biotechnology	15h00	Coffee break	14h30	<b>Ramesh Babu (TCBB &amp; TCD)</b> Separation strategies for recovery of Volatile Fatty Acids from AD fermentation broths
15h30	Coffee break	16h00	Coffee break	15h30	Visit BBE Pilot Plant	15h00	<b>JJ. Leahy (TCBB &amp; UL)</b> Carbohydrates to high density transport fuels
16h00	Lab tours	16h30	<b>Filip Van den Abeele</b> What if the oil runs out?	15h30		<b>Kevin O'Connor (TCBB &amp; UCD)</b> Biodegradable polymer synthesis using bio-based volatile fatty acids as starting materials	
16h45	Poster session + student intro's	17h30	Discussion	16h00		Coffee and networking	
		18h30	Reception	16h15	<b>Dermot Hughes (NUI, Galway)</b> Industrial production: AD pilot experience for VFA production		
17h30	Walking dinner			18h00	BBQ + poster award	16h30	<b>Heleen De Wever (VITO)</b> Can we steer short chain carboxylate production in mixed culture fermentations?
19h00	Guided city walk					16h45	Panel discussion (to close at 17.00) The integrated VFA platform - how to pilot and how to integrate
							Free evening

- plant biotechnology
- industrial biotechnology
- environmental bioechnology
- thermochemical conversion
- socio-economic & ethical aspects

Bridging  
the innovation gap of  
biobased breakthroughs