



Course:

**Wood Biorefinery**

**Course leaders:** Prof. Per Engstrand and Dr. Olof Björkqvist  
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**Date:** 11 – 15 June 2018

**Place:** Mid Sweden University, Campus Sundsvall

**Monday, 11 June** **13.15 – 17.30**


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 Lecture/laboratory no; 1-4 LECTURER


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Lecture hall: C312

1. (13.15 – 13.30) Course introduction 0:15 h2. (13.30 – 14.45) The pre-history of “bio-refinery” 1:15 h*Coffee break*3. (15.00 – 16.15) International outlook 1:15 h4. (16.15 – 17.30) Domsjö Biorefinery case 1:15 h**Tuesday, 12 June** **08.00 – 17.00, 19.00 – 22.00 (dinner)**


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 Lecture/laboratory no; 5-8 LECTURER


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Lecture hall: C312

5. (08.00 – 10.15) Innovation Management 2:15 h*Coffee break*6. (10.30 – 12.15) Nanocellulose 1:45 h*12.15 – 13.15 Lunch*7. (13.15 – 15.00) CNC processing and product possibilities 1:45 h8. (15.15 – 17.00) Business development from research results. 1:45 h*19.00 – 22.00 Course dinner*

**Wednesday, 13 June**                      **08.00 – 17.00**

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Lecture/laboratory no; 9-12	LECTURER
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Lecture hall: C312

9. (09.00 – 12.00) Wood based textiles                      1:45 h

*Coffee break*

10. (10.15 – 12.00) Natural chemicals                      1:45 h

*12.00 – 13.15 Lunch*

11. (13.15 – 15.00) Nano based active surfaces                      1:45 h

*Coffee break*

12. (15.15 – 17.00) Industrial green chemical strategy                      1:45 h

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**Thursday, 14 June**                      **08.15 – 17.00**

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Lecture/laboratory no; 13-16	LECTURER
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Lecture hall: C312

13. (08.15 – 10:00) Energy products Catalytic processes                      1:45 h

*Coffee break*

14. (10.15 – 12.00) Energy products. Thermal processes                      1:45 h

*12.00 – 13.15 Lunch*

15. (13.15 – 15.00) Dissolving pulping processes                      1:45 h

*Coffee break*

16. (15.15 – 17.00) Industrial innovation processes                      1:45 h

**Friday, 15 June****08.15-12.00**

Lecture/laboratory no; 17-19

LECTURER

Lecture hall: C312

17. (08.15 – 09.45) Chemicals from wood sources and the  
Stenungsund cluster case 1:30 h

*Coffee break*

18. (10.00 – 11.30) LCA and environmental consequence  
analysis 1:30 h

19. (11.30 – 12.00) Closure 0:30 h

*12.00 – 12.45 Lunch*