







Topics; Organic Electronics, Energy Storage, Electronic Plants, Lignocellulosic surfaces, Wetting, Adhesion, Printability 2.0 ECTS credits Site visit to Holmen March 30-April 3, 2020, Husby Säteri and Norrköping





Contact Information:

Prof. Paul Gatenholm & Prof. Gunnar Westman

paul.gatenholm@chalmers.se

Mob phone: 0707535750



Topic; Organic Electronics, Electronic Plants,
Lignocellulosic surfaces, Characterization, Wetting, Adhesion, Printability
2.0 ECTS credits
Site visit to Holmen
March 30-April 3, 2020

Day 1: Organic Electronics- Fundamental Principles

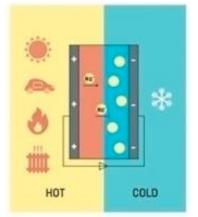
Day2: Energy storage and transformation

Day 3: Lignocellulosic surfaces; Characterization and

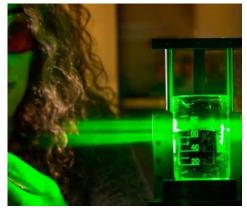
modifications

Day 4: Basics of wetting, adhesion and printability

Day 5: Bioelectronics-Electronic Plants











Topic; Organic Electronics, Electronic Plants,
Lignocellulosic surfaces, Characterization, Wetting, Adhesion, Printability
2.0 ECTS credits
March 30-April 3, 2020

30 March, Day 1: Organic Electronics fundamentals

9.45 Norrköping train station*. Departure by bus to Husby Säteri, Söderköping www.husbysateri.se

10.30-10.45 Coffee

10.45-12.00 Introduction to organic semiconductors, Mats Fahlman *12-13 Lunch*

13.00-14.30 Introduction to organic electronics (including printed electronics, OTFTs, OLEDs, OECTs) Isak Engquist

14.30-14.45 Coffee

14.45-16.00 Introduction to organic electronics (including printed electronics, OTFTs, OLEDs, OECTs) Isak Engquist

17.00 Get together, project selection

19-20 Dinner

20 Social activities

*Connecting trains.

Göteborg Departure 6.24

Arrival Norrköping 9.21

Stockholm Departure 8.21

Arrival Norrköping 9.33



Topic; Organic Electronics, Electronic Plants,
Lignocellulosic surfaces, Characterization, Wetting, Adhesion, Printability
2.0 ECTS credits
March 30-April 3, 2020

31 March, Day 2: Energy applications

- 7-8 Breakfast
- 8.30-10.00 Organic Photovoltaics, Mats Fahlman
- 10.00-10.30 Coffee
- 10.30-12.00 Thermoelectrics, Dan Zhao
- 12-13 Lunch
- 13.00-14.30 Introduction to electrochemistry, Viktor Gueskine
- 14.30-14.45 Coffee
- 14.45-16.15 Energy storage: Supercapacitors, Batteries, Fuel Cells, Viktor Gueskine
- 16.15-18.00 Outdoors activities
- 18.00-19.00 Dinner
- 19.00 Project work



Topic; Organic Electronics, Electronic Plants,
Lignocellulosic surfaces, Characterization, Wetting, Adhesion, Printability
2.0 ECTS credits
Site visit to Holmen
March 30-April 3, 2020

1 April

7-8 Breakfast

8.30-10.00 Surface Forces and Lignocellulosic Surfaces - fundamental aspects,

Torbjörn Pettersson

10.00-10.30 Coffee

10.30-12.00 Preparation for site visit at Holmen

12-13 Lunch

13 Buss till Holmen

Site visit at Holmen

18-19 Dinner

19 Project work



Topic; Organic Electronics, Electronic Plants,
Lignocellulosic surfaces, Characterization, Wetting, Adhesion, Printability
2.0 ECTS credits
Site visit to Holmen
March 30-April 3, 2020

2 April

7-8 Breakfast

8.30-10.00 Lignocellulosic surfaces: Surface characterization, Tiina Nypelö and Paul Gatenholm

10.00-10.30 Coffee

10.30-12.00 Characterization of surfaces with AFM, Torbjörn Pettersson

12-13 Lunch

13-15 Lignocellulosic surfaces: Wetting, adhesion and printability, Peter Rättö

15-15.15 Coffee

15.15-17.00 Outdoors activities

17-18 Project work

18-19 Dinner

19 Project work



Topic; Organic Electronics, Electronic Plants,
Lignocellulosic surfaces, Characterization, Wetting, Adhesion, Printability
2.0 ECTS credits
Site visit to Holmen
March 30-April 3, 2020

3 April

- 7.00-8.00 Breakfast
- 8.00 Check out
- 8.15 Buss to Norrköping campus
- 9-10.30 Bioelectronics and e-Plants, Eleni Stavrinidou
- 10.30-10.45 Coffee
- 10.45- 12 Bioelectronics and e-Plants, Eleni Stavrinidou
- 12-13 Lunch on Campus
- 13-14.30 Project presentations (PhD Students)
- 14.30-16 Site visit in groups to Printing Electronics Arena
- 16.00 Course is ending, walk to Norrköping train station**
- **Train departure Göteborg 16.36

Train departure Stockholm 16.22