Course: Crash Course in Pulp and Paper Technology (3 credits)

Course leader: Prof. Sören Östlund

Date: April 25-26, 2016

Place: Innventia and KTH, Stockholm

Lecturers:

Dr Mikael Ankerfors  
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MA

Prof. Staffan Laestadius  
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PR

Prof. Fredrik Lundell  
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Dr Hannes Vomhoff  
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HV

Prof. Lars Wågberg  
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LW

Prof. Sören Östlund  
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SÖ
**Monday, April 25, 10.15-18.00, Innversum, Innventia AB, Drottning Kristinas Väg 61, Stockholm**

<table>
<thead>
<tr>
<th>Lecturer/laboratory no; SUBJECT</th>
<th>LECTURER</th>
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<tbody>
<tr>
<td>1. (10.15-12.00) The products of the pulp and paper industry</td>
<td>2 hr MLu</td>
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<tr>
<td>LUNCH</td>
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<td>2. (13.15-15.00) Pulp manufacturing</td>
<td>2 hr ML</td>
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<tr>
<td>3. (15.15-17.00) Papermaking (wet end, forming)</td>
<td>2 hr FL</td>
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<tr>
<td>4. (17.15-18.00) Papermaking (pressing, drying)</td>
<td>1 hr HV</td>
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18.30 Dinner at Department of Solid Mechanics
Tuesday, April 26, 08.15-17.00, Seminar room/Meeting room, Department of Solid Mechanics, Teknikringen 8D, 1st floor, Stockholm

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<tr>
<td>5. (8.15-10.00) Chemicals in papermaking</td>
<td>2 hr LW</td>
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<tr>
<td>6. (10.15-12.00) Papermaking (calendering, coating)</td>
<td>2 hr PR</td>
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<tr>
<td><strong>LUNCH</strong></td>
<td></td>
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<tr>
<td>7. (13.15-14.00) Microfibrillar cellulose</td>
<td>1 hr MA</td>
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<td>8. (14.15-15.00) Business prospects for the pulp and paper industry</td>
<td>1 hr SL</td>
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<tr>
<td>9. (15.15-17.00) End-use and converting properties</td>
<td>2 hr SÖ</td>
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**Examination**

In order to pass this course (and get 3 credits in the graduate education) the course participants should write (in teams of two (preferably) or three students)
- a short reflective essay/report on a topic related to the lectures, and
- a review of one such essay from another group.

The topic of the essay should focus on manufacturing of a new paper product and contain elements of consideration from all (or almost) all lectures. It is required that the students should look for additional information on details in the design of the new product or alternative opinions stated by people or companies on the internet or in the literature.

Examples of essay topics are listed below, but the students are encouraged to define their own topic based on interest and experience. The chosen topic should be communicated with the course leader before the work is initiated.

- A new printing grade for digital ink-jet printing
- Improved bending stiffness of paperboard
- Trouble-shooting converting problems in the packaging industry
- Using microfibrillar cellulose to expand the property window of paper products

Stockholm, 2016-04-07

*Sören Östlund*