



Skogsindustriella  
forskarskolan

## Course: Paper Water Interactions

**Course leader:** Prof. Lars Wågberg and Dr Per Larsson

**Date:** November 16–19, 2020

**Place:** Rånbyrummet, Teknikringen 56, Stockholm

### Principal lecturers:

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<b>Monday, 16<sup>th</sup> of November</b>	<b>Time/lecturer</b>
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| 1. Fibre, paper and water interactions: Problem specification, importance – New products | 9–10 LW  |
| 2. Thermodynamics of water vapour adsorption to fibres                                   | 10–12 TL |
| 3. Swelling of polyelectrolyte gels  | 13–15 PH |

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<b>Tuesday, 17<sup>th</sup> of November</b>	<b>Time/lecturer</b>
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| 4. Swelling of cellulose fibres  | 9–10 LW  |
| 5. Influence of fibre composition on moisture sorption and fibre swelling              | 10–12 LS |
| 6. Influence of moisture on mechanical properties of paper: Fibre and joint properties | 13–15 SÖ |
| 7. Mechanosorptive effects in fibres, paper and cellulosic films                       | 15–17 SL |

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<b>Wednesday, 18<sup>th</sup> of November</b>	<b>Time/lecturer</b>
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| 8. Effect of moisture on the performance of cellulose-based films and cellulose-containing composites | 9–10 PL  |
| 9. Dimensional stability of paper   | 10–12 PL |
| 10. Wetting fundamentals  | 13–15 AS |

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<b>Thursday, 18<sup>th</sup> of November</b>	<b>Time/lecturer</b>
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| 11. Capillary penetration and superhydrophobicity – Fundamentals and applications | 8–10 LW  |
| 12. Influence of moisture on mechanical properties of paper and board             | 10–12 MN |
| 13. Liquid absorption in hygiene products   | 13–15 CH |