

**SK2760 KURS-PM HT20**

Week 35 2020	Time and Location	Activity	Lecturer	Course Material
Mon 24 aug	10:00 - 12:00; FB51	LE,	MT	<ul style="list-style-type: none"> <li>Introduction, Diagnostic Test</li> <li>Overview of Synthetic techniques, NP Characterisation tools</li> </ul>
Wed 16 aug	13:00 - 15:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Chemical Principles, Periodic Table, Atomic Structure, Orbitals, e-distribution, Ionic charges</li> </ul>
<b>Week 36 2020</b>				
Mon 31 aug	10:00 - 12:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Molecular Orbitals – MO Theory, Hybridisation, Molecular Structures, Polarity</li> </ul>
Wed 2 sep	13:00 - 15:00; FB51	EX	MT	<ul style="list-style-type: none"> <li>Chemical Nomenclature (Inorganic)</li> </ul>
<b>Week 37 2020</b>				
Mon 7 sep	10:00 - 12:00; FB51	LE	MT	<b>(PROJECT Groups / TOPICS - Intro)</b> <ul style="list-style-type: none"> <li>Solution Thermodynamics, Solubility, Precipitation, Acid-Base Equilibria</li> </ul>
Wed 9 sep	13:00 - 15:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Solution Thermodynamics, contd.</li> </ul>
<b>Week 38 2020</b>				
Mon 14 sep	10:00 - 12:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Microemulsion Synthesis, Surfactants, Organic nomenclature, Ternary phase diagrams</li> </ul>
Thu 17 sep	13:00 - 17:00;	LA	MT + HB	<ul style="list-style-type: none"> <li>Reduction in Solution; Reducing agents</li> <li>NP Characterisation 1 – Au NP Synthesis and <b>DLS / Zeta potential</b></li> </ul>
<b>Week 39 2020</b>				
Mon 21 sep	10:00 - 12:00; FB51	EX	MT	<ul style="list-style-type: none"> <li>Microemulsion Synthesis, Surfactants, Organic nomenclature, Ternary phase diagrams</li> </ul>
Wed 23 sep	13:00 - 15:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Sol-gel Synthesis, Aqueous and non-aqueous precursors</li> </ul>
<b>Week 40 2020</b>				
Mon 28 sep	10:00 - 12:00; FB51	LE	MT	<b>PROJECT FOLLOW-UP</b>
Mon 30 sep	13:00 - 15:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Thermolysis, precursors</li> <li>Self-Assembly / Controlled Assembly</li> </ul>
<b>Week 41 2020</b>				
Mon 05 oct	10:00 - 12:00; FB51	LE	MT	<ul style="list-style-type: none"> <li>Electrochemistry, Electrochemical synthesis; Electroless Processes</li> </ul>
Tue 08 oct	13:00 - 17:00;	LA	MT + BH	<ul style="list-style-type: none"> <li>NP Characterisation 2 – FT-IR on citrate capped Au NPs</li> </ul>
<b>Week 42 2020</b>				
Mon 15 oct	08:00 - 17:00	EX	MT	<b>Final EXAM</b> - Project ORAL Presentations / Group work

<b>CSR</b>	Corridor Seminar Room @ Albanova, Floor 2, entrance A23
<b>BIOX</b>	Nanochemistry Lab at BIOX
<b>MT</b>	Muhammet Toprak / <a href="mailto:toprak@kth.se">toprak@kth.se</a> / 0735519358
<b>CV</b>	Carmen Vogt / <a href="mailto:carmenma@kth.se">carmenma@kth.se</a>
<b>HB</b>	Hazal Batili / <a href="mailto:batili@kth.se">batili@kth.se</a>
<b>BH</b>	Bejan Hamawandi / <a href="mailto:bejan@kth.se">bejan@kth.se</a>
<b>LE</b>	Lecture
<b>EX</b>	Exercise / Exam
<b>LA</b>	Laboratory Theory + Practice/Demo
<b>L0 – L13</b>	Lecture materials uploaded under Modules at CANVAS