

SK2760/FSK3900 KURS-PM VT23

Week 12 2023	Time and Location	Activity	Lecturer	Course Material
Mo, 2023-03-20	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> Introduction, Diagnostic Test (L0) Overview of Synthetic techniques, NP Characterisation tools (L1)
Wed, 2023-03-22	13:00 - 15:00;	LE	MT	<ul style="list-style-type: none"> Chemical Principles, Periodic Table, Atomic Structure, Orbitals, e-distribution, Ionic charges (L2)
Week 13 2023				
Mo, 2023-03-27	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> Molecular Orbitals – MO Theory, Hybridisation, Molecular Structures, Polarity (L2)
Wed, 2023-03-29	13:00 - 15:00;	EX	MT	<ul style="list-style-type: none"> Chemical Nomenclature (Inorganic) (L3)
Week 14 2023				
2023-04-03	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> ➤ (PROJECT Groups / TOPICS - Intro) Solution Thermodynamics, Solubility, Precipitation, Acid-Base Equilibria (L4)
2023-04-05	13:00 - 15:00;	LE	MT	<ul style="list-style-type: none"> Solution Thermodynamics, contd. (L4)
Week 16 2023				
Mo, 2023-04-17	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> Reduction in Solution; Polyol Synt. (L5)
Thu, 2023-04-20	13:00 - 17:00; BIOX	LAB	MT + HB	<ul style="list-style-type: none"> NP Characterisation 1 – Au NP Synthesis and DLS / Zeta potential (L6)
Week 17 2023				
Mo, 2023-04-24	10:00 - 12:00;	EX	MT	<ul style="list-style-type: none"> Microemulsion Synthesis, Surfactants, Organic nomenclature, Ternary phase diagrams (L7)
Wed, 2023-04-26	13:00 - 15:00;	LE	MT	<ul style="list-style-type: none"> Microemulsion Synthesis, Surfactants, Organic nomenclature, Ternary phase diagrams (L7)
Fri, 2023-04-28	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> Sol-gel Synthesis, Aqueous and non-aqueous precursors (L8)
Week 18 2023				
Tue, 2023-05-02	10:00 - 12:00;	LE	MT	PROJECT FOLLOW-UP
Wed, 2023-05-03	13:00 - 15:00;	LE	MT	<ul style="list-style-type: none"> Thermolysis, precursors (L9) Self- / Controlled Assembly (L10)
Fri, 2023-05-05	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> Reserve
Week 19 2023				
Mo, 2023-05-08	10:00 - 12:00;	LE	MT	<ul style="list-style-type: none"> Electrochemistry, Electrochemical synthesis; Electroless Processes (L11)
Thu, 2023-05-11	13:00 - 17:00; BIOX	LAB	MT + BH	<ul style="list-style-type: none"> NP Characterisation 2 – FT-IR on citrate capped Au NPs (L12)
Week 22 2023				
Mo, 2023-05-29	09:00 - 17:00	EX	MT	Final EXAM - Project ORAL Presentations / Group work

CSR	Corridor Seminar Room @ Albanova, Floor 2, entrance A23
BIOX	Nanochemistry Lab at BIOX
MT	Muhammet Toprak / toprak@kth.se / 0735519358
HB	Hazal Batili / batili@kth.se
BH	Bejan Hamawandi / bejan@kth.se
LE	Lecture
EX	Exercise / Exam
LAB	Laboratory Theory + Practice/Demo
L0 – L13	Lecture materials uploaded under Modules at CANVAS