

# SV0047 Raw Material Properties & Refining Processes

Schedule for Autumn 2024 (2024-09-02 - 2024-10-31) Note: Subject to change!

V	Lit.	Date	Time	Introduction	Venue	Lecturer
36		2/9				
		3/9	9-12	Welcome and introduction to the course	Sälgen	DA, MT, MF
		4/9	11-12	Webinar: <a href="#">NewWave Webinar – Zoom</a>	Zoom	
		5/9	9-12	Wood structure from macroscale to molecule	Sälgen	CC
		6/9	9-12	Wood structure from macroscale to molecule	Sälgen	CC
Module I. Traditional forest products						
37		9/9		Individual/group study time		
		10/9		Individual/group study time		
		11/9		Individual/group study time		
		12/9	9-12	Presentations of mini projects	Sälgen	DA
		13/9	9-12	Pulp and paper making	Sälgen	MF
38		16/9		Individual/group study time		
		17/9	9-12	Global wood product market + sawmill operation	Sälgen	JH
		18/9		Individual/group study time	Sälgen	MF
		19/9	9-12	Measurement technologies at the sawmill	Sälgen	JO
		20/9	9-12	Individual/group study time		
39		23/9	9-12	Current developments in timber measurement	Zoom	LB
		24/9	9-12	TBA	Sälgen	TBA
		25/9	13-14	Study information (webinar)	Zoom	
		26/9	9-12	Modern wood building products	Zoom	SA
		27/9	9-12	Individual/group study time		
On-Campus Week						
40		30/9	9-12 12-13 13-16	Welcome and tour of Skogis, Lunch on campus Sampling/size reduction/biofuel standards	Sälgen BTC	MF/DA MT/GK/MS
		1/10	9-15	Sävar sawmill study visit	Sävar	JF, MF
		2/10	9-12 13-16	Pelleting and quality determination SCA Obbola study visit	BTC Obbola	GK/MS/MF KJ, DA
		3/10	9-12 13-15 18-20	Umeå Energi visit: boilers/fuel mix/ash SIMCA lab demo on NIR data Dinner social event	Dåva Bokskogen* Kårhuset	DA, ÅB, MS2 MT
		4/10	9-11 11-12 12-13	Mushroom and electrochemistry lab visit UPSC tree genetics and greenhouse tour Farewell Lunch	Sälgen UPSC	SX/GR Ove Nilsson
Module 2. Biomass conversion processes						
V	Avsnitt	Datum	Tid	Module 2. Biomass conversion processes	Sal	Lärare
41		7/10	09-12	Classification and measurement of forest fuels	Sälgen	EA
		8/10	09-12	Storage of forest fuels	Sälgen	EA
		9/10	09-12	Forest fuels at Norra Skog	Sälgen	JA
		10/10	09-12	Wood pelleting technology and development	Sälgen	MF

		11/10	09-12	Emissions and ash chemistry of forest fuels	Sälgen	AS
<b>42</b>		14/10	09-12	Thermal conversion and combustion	Sälgen	DA
		15/10	09-12	Torrefaction, pyrolysis and gasification	Sälgen	DA
		16/10		Individual/group study time		
		17/10	13-15	Extraction of sugar for fuel and new products	Zoom	MN
		18/10	09-12	Presentation of mini project 2	Sälgen	MF
Module 3. Circular bioeconomy and the future						
<b>43</b>		21/10	9-12	Forest and forest products roles in climate politics	Sälgen	MM
		22/10	10-11	What will we do with the forest in future?	Sälgen	PL
		23/10	9-12	Delicious mushrooms pre-process wood for biofuel production	Sälgen	SX
		24/10	9-12	Individual/group study time	Sälgen	
		25/10	9-12	Extraction of valuable compounds from biomass	Sälgen	MA
<b>44</b>		28/10		Individual/group study time		
		29/10	09-12	Functional bio-activated carbon materials for environmental and energy applications	Sälgen	GR
		30/10	09-12	Future of the forest industry	Sälgen	JM
		31/10	09-12	Case study presentations	Sälgen	MT, MF

Lecturers and guest speakers:

DA = David Agar (SLU)

MF = Michael Finell (SLU)

KJ = Kristina Jonsson (SCA Obbola)

MT = Mikael Thyrel (SLU)

LB = Lars Björklund (Biometria)

JM = Jonas Mårtensson (SCA)

MS = Markus Segerström (SLU)

EA = Erik Anerud (SLU)

JO = Johan Oja (Norra, Sävar såg)

MN = Monica Normark (KBR)

JA = Jonas Arvidsson (Norra Skog)

MP = Mohsen Parchami (SLU)

SA = Stergios Adamopoulos

MR = Magnus Rudolfsson (SLU)

ÅB = Åsa Benkert (Umeå Energi)

MS2 = Magdalena Söderström (Umeå Energi)

MA = Mehrdad Arshadi (SLU)

AS = Anna Strandberg (UMU)

GR = Glaydson Simoes Dos Reis (SLU)

SX = Shaojun Xiong (SLU)

JH = Johan Hedin (Holmen)

GK = Gunnar Kalén (SLU)

MM = Magnus Matison (Biofuel Region)

PL = Pär Lärkeryd (VD Norra Skog)

JF = Johan Fredriksson (Norra)

TBA = To be announced