

“Nanomaterials Synthesis and Characterization Techniques (NSCT-2022)”

(Offline mode) COURSE SCHEDULE

Date: 05th September to 19th September 2022.

WEEKLY PLAN (Total hours: 45 Hours 3 Credit)

Week 1:

Day	Time	Date	Topic	Speaker	Assignments (10 M)
Day 1	11:30 to 12:00	05/09/2022	Introduction to Course	WSB	
Day 1	12:00 to 1:00	05/09/2022	Nanotechnology Basics	PPK	
	01:15 to 2:15	05/09/2022	Co-precipitation Synthesis	DPR	
Day 1	3:00 to 4:00	06/09/2022	Assignment 1		
Day 2	12:00 to 1:00	06/09/2022	Sol- gel Synthesis	PPK	
Day 2	01:15 to 2:15	06/09/2022	X-ray diffraction Basics	NNS	
Day 2	3:00 to 4:00	06/09/2022	Assignment 2		
Day 3	12:00 to 1:00	07/09/2022	Green Synthesis	VVD	
Day 3	01:15 to 2:15	07/09/2022	Combustion Method	SSA	
Day 3	3:00 to 4:00	07/09/2022	Assignment 3		
Day 4	12:00 to 1:00	08/09/2022	Spray Pyrolysis	VVD	
Day 4	01:15 to 2:15	08/09/2022	TGA-DTA	DPR	
Day 4	3:00 to 4:00	08/09/2022	Assignment 4		
Day 5	12:00 to 1:00	09/09/2022	Hydrothermal synthesis	RGD	
Day 5	01:15 to 2:15	09/09/2022	Electron Microscopy: SEM and TEM	ABB	
Day 5	3:00 to 4:00	09/09/2022	Assignment 5		
Day 6	12:00 to 1:00	10/09/2022	UV-Vis spectroscopy	WSB	
Day 6	01:15 to 2:15	10/09/2022	Raman spectroscopy	PAN	
Day 6	3:00 to 4:00	10/09/2022	Assignment 6		
Day 7	12:00 to 1:00	12/09/2022	Cyclic voltammetry/EIS	VVD	
Day 7	01:15 to 2:15	12/09/2022	FTIR spectroscopy	PAF	
Day 7	3:00 to 4:00	12/09/2022	Assignment 7		

Week 2:

Day	Time	Date	Topic	Speaker	Assignments (10 M)
Day 1	12:00 to 5:00	13/09/2022	Hands on/lab session Sol-gel		
Day 1	05:00 to 06:00 pm	13/09/2022	Assignment 8		
Day 2	12:00 to 5:00	14/09/2022	Hands on/lab session Co-precipitation		
Day 2	05:00 to 06:00 pm	14/09/2022	Assignment 9		
Day 3	12 to 5:30	15/09/2022	Hands on/lab session Hydrothermal		
Day 3	05:00 to 06:00 pm	15/09/2022	Assignment 10		
Day 4	12 to 5:30	16/09/2022	Hands on/lab session Spray pyrolysis		
Day 4	05:00 to 06:00 pm	16/09/2022	Assignment 11		
Day 5	12 to 5:30	17/09/2022	Hands on/lab session Hydrothermal		
Day 5	05:00 to 06:00 pm	17/09/2022	Assignment 12		
Day 6	12 to 1:30	18/09/2022	XRD		
Day 6	01:30 to 3:15	18/09/2022	FTIR		
Day 6	3:15 to 5:00	18/09/2022	UV-Vis spectroscopy		
Day 6	5:00 to 6:00	18/09/2022	Assignment 13		
Day 7	01 to 02 pm	19/09/2022	Final Examination		

Note: One assignment per lecture (online/offline).

Assignment may be MCQ/Theory/Problem (10 Marks)

Final Examination: (Max. Marks 100): 19.09.2022