

CL-308: Overview of Indian Chemical Industry (Course on Wheels-2022): Program				
	Date	Program	Stay at (Tentative)	
	Preparation week: Class room Lectures			Faculty
Sunday	26-Nov-23	12pm: Introduction to Course on wheels; 5pm Refinery	Hostel(s)-IITB	SMM
Monday	27-Nov-23	8:30 PetroChemicals; 5pm PetroChemicals	Hostel(s)-IITB	SMM
Tuesday	28-Nov-23	8:30-9:45am: Fine Chemicals; 10-11 am: Effluent treatment; 3-4 pm Control Aspects; 4:15-5:30 Chloroalkali and Soda ash	Hostel(s)-IITB	SMM/AG/SJ/VAJ
Wednesday	29-Nov-23	8:30am Quiz and general instructions 2:00 pm Departure	Hotel Ghorbandh, Ankalehswar	SMM
	Journey Starts			
Thursday	30-Nov-23	GIPCL, Nani Naroli (Thermal Power Plant)	Hotel Ghorbandh, Ankalehswar	SMM
Friday	01-Dec-23	ONGC, Ankalehswar (Oil and Gas)	Hotel Ghorbandh, Ankalehswar	SMM
Saturday	02-Dec-23	ONGC, Ankalehswar (Oil and Gas)	Hotel Ghorbandh, Ankalehswar	SMM
Sunday	03-Dec-23	Rest and other activities	Hotel fountain Grand, Valsad	SMM
Monday	04-Dec-23	ATUL (Intermediate chemicals, dyes, agro, pharma, inorganic, Perfumery)	Hotel fountain Grand, Valsad	SMM
Tuesday	05-Dec-23	ATUL (Intermediate chemicals, dyes, agro, pharma, inorganic, Perfumery)	Hotel Ghorbandh, Ankalehswar	SMM/MV
Wednesday	06-Dec-23	Zydus (Pharma-API)	Silver Leaf, Ankalehswar	SMM/MV
Thursday	07-Dec-23	JB Chemicals (Formulation)	Hotel Ghorbandh, Ankalehswar	RN
Friday	08-Dec-23	Birla Copper	Hotel Ghorbandh, Ankalehswar	RN
Saturday	09-Dec-23	BEIL	Hotel Ghorbandh, Ankalehswar	RN
Sunday	10-Dec-23	Rest and other activities	Hotel Ghorbandh, Ankalehswar	YS/SP
Monday	11-Dec-23	UPL	Hotel Ghorbandh, Ankalehswar	YS/SP
Tuesday	12-Dec-23	GNFC (Fertilizers)	Hotel Ghorbandh, Ankalehswar	YS/SMM
Wednesday	13-Dec-23	GNFC (Fertilizers)	Hotel Ghorbandh, Ankalehswar	SMM
Thursday	14-Dec-23	Alky Amines	Reliance Township, Dahej	SMM
Friday	15-Dec-23	Visit to Reliance Industries Ltd Dahej (Petrochemicals)	Reliance Township, Dahej	SMM
Saturday	16-Dec-23	Visit to Reliance Industries Ltd Dahej (Petrochemicals)	Reliance Township, Dahej	SMM
Sunday	17-Dec-23	Rest and travel to Bhavnagar	Nirma colony	SMM
Monday	18-Dec-23	Nirma Ltd. Soda Ash, Caustic	Nirma colony	SMM
Tuesday	19-Dec-23	Nirma Ltd (Salt works); Travel to Jamnagar	Reliance Township, Jamnagar	SMM
Wednesday	20-Dec-23	Midsem; Talk by Reliance experts.	Reliance Township, Jamnagar	SMM/SP
Thursday	21-Dec-23	Reliance Petroleum Ltd, Jamnagar (Refinery)	Reliance Township, Jamnagar	SMM/SP
Friday	22-Dec-23	Reliance Petroleum Ltd, Jamnagar (Refinery)	Reliance Township, Jamnagar	SMM/SP
Saturday	23-Dec-23	Reliance Petroleum Ltd, Jamnagar (Refinery)	BUS	SMM/SP
Sunday	24-Dec-23	Travel to IITB	Hostel IITB	
	Jan 1st and 2nd week	Endsemester exam; Report Submission and Project presentations	Hostel IITB	
	Jan 3rd week	Grades announcement	Hostel IITB	

Things you will be exposed to..			
Processes and facilities			
Processes and plants for few representative chemicals* from each sector. Their comparison.			
Specific processes: Reformers, Gas cracker, Refinery operations- FCC, platforming, Coking, Crude distillation, Hydroprocessing			
Facilities/techniques: Oil exploration, Coal mining, Salt works, Jetty for oil/product shipment			
Equipment/Operations			
Mass transfer: Distillation; absorption; Extraction; cooling towers			
Heat Transfer: Different types of Heat exchangers (S&T; Plate); Multiple effect evaporators; ATFE, thermosyphon reboilers			
Process control: DCS system for plant operation and control			
Power plant: Turbines, generators, Boiler steam tube panels; Coal handling system			
Reactors: Different types of catalytic/non-catalytic reactors; packed and fluidised beds, stirred tanks, gas-liquid and gas-solid reactors			
Chemicals of Interest*			
Petrochemicals: Ethylene oxide, Polyethylene, PVC, polypropylene, PET			
Fertilizer Industry: ammonia, urea, methanol, sulfuric and nitric acid, phosphate fertilizers			
Agrochemicals: carbon disulphide, pendimethylene			
Inorganic Chemicals: soda ash, caustic, chlorine, table salt			
Dyes, APIs, perfumery and coating intermediates			
Other			
Techno-commercial aspects of chemical manufacture and business: Views of Practising Chemical Engineers and managers			
A session with first generation entrepreneurs in Chemical Sector			

