

CL-308: Overview of Indian Chemical Industry (Course on Wheels-2022): Program			
	Date	Program	Stay at (Tentative)
Preparation week: Class room Lectures			
Tuesday	22-Nov-22	6:30-8:30 pm Introduction to Chemical Tree; Overview of Indian and Global Chemical Industry (SM)	Hostel(s)-IITB
Wednesday	23-Nov-22	Management: Regulatory and Process Innovation Perspectives (SA-	Hostel(s)-IITB
Thursday	24-Nov-22	8:30-10:30 Refinery-II and Petrochemicals-I; 4:00-6:00 Petrochemicals and Fertilizers	Hostel(s)-IITB
Friday	25-Nov-22	8:30-10:30 Fine chemicals (RN); 3:00 -5:00 pm Process Control (SJ)	Hostel(s)-IITB
Saturday	26-Nov-19	8:30-10:30 Soda ash and Chlor-alkali; 3:00 pm Quiz-I	Hostel(s)-IITB
Sunday	27-Nov-22	10:30 Recap 2:00 pm Departure	Hotel Lords, ankaleshwar
Journey Starts			
Monday	28-Nov-22	GIPCL, Nani Naroli (Thermal Power Plant)	Hotel Lords, ankaleshwar
Tuesday	29-Nov-22	ONGC, Ankaleshwar (Oil and Gas)	Hotel Lords, ankaleshwar
Wednesday	30-Nov-22	ONGC, Ankaleshwar (Oil and Gas)	Hotel Lords, ankaleshwar
Thursday	1-Dec-22	Visit to Reliance Industries Ltd Dahej (Petrochemicals)	Reliance Township, Dahej
Friday	2-Dec-22	Visit to Reliance Industries Ltd Dahej (Petrochemicals)	Reliance Township, Dahej
Saturday	3-Dec-22	Alkyl Amine (Intermediate Chemicals)	Hotel Lords, ankaleshwar
Sunday	4-Dec-22	Rest and other activities	Hotel Lords, ankaleshwar
Monday	5-Dec-22	SUNPAHRMA Panoli	Atul Township
Tuesday	6-Dec-22	ATUL (Intermediate chemicals, dyes, agro, pharma, inorganic, Perfumery)	Atul Township
Wednesday	7-Dec-22	ATUL (Intermediate chemicals, dyes, agro, pharma, inorganic, Perfumery)	Atul Township
Thursday	8-Dec-22	ALKCHEM Pharma formulations	Hotel Lords, ankaleshwar
Friday	9-Dec-22	Rest and other activities	Hotel Lords, ankaleshwar
Saturday	10-Dec-22	UPL	Hotel Lords, ankaleshwar
Sunday	11-Dec-22	BEIL (Industrial waste management)	Hotel Lords, ankaleshwar
Monday	12-Dec-22	GNFC (Fertilizers)	Hotel Lords, ankaleshwar
Tuesday	13-Dec-22		Hotel Lords, ankaleshwar
Wednesday	14-Dec-22	Travel to Bhavnagar and Rest	Nirma colony
Thursday	15-Dec-22	Nirma Ltd (Inorganic Chemicals, Soda Ash, Chloro-Alkali)	Nirma colony
Friday	16-Dec-22	Nirma Ltd (Salt works); Travel to Jamnagar	Reliance Township, Jamnagar
Saturday	17-Dec-22	Midsem exam	Reliance Township, Jamnagar
Sunday	18-Dec-22	Reliance Petroleum Ltd, Jamnagar (Refinery)	Reliance Township, Jamnagar
Monday	19-Dec-22	Reliance Petroleum Ltd, Jamnagar (Refinery)	Reliance Township, Jamnagar
Tuesday	20-Dec-22	Reliance Petroleum Ltd, Jamnagar (Refinery)	Bus
Jan 1st week		Registration for CL-308: Spring 2022-23	IITB
January 2nd week		Endsemester exam; Report Submission and Project presentations	IITB
Jan 3rd week		Grades announced	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			