Sl/ No.	Topic	Student Roll No.	Faculty
1	Multivariable optimization in chemical processes (case study based seminar)	17BCH054	Dr. Pravin Kodgire
2	Frugal innovations in chemical industries	17BCH042	
3	Techno economic feasibility study of Biodiesel production using non edible feedstock (aspen simulation case study)	17BCH062D	
4	Development of materials for battery applications	17BCH016	
5	Design/simulation of a plant with compuoter aided tools	17BCH047	Dr. Sukanta Dash
6	Lean-Rich Heat exchanger design and simulation in Excel with physical property model regression	17BCH020	
7	Literature review with collection and processing of important data and modeling with AI (Artificial Intelligence)	17BCH011	
8	Modeling and simulation of an Important chemical Process in Aspen plus	17BCH064D	
9	Industrial Applications of Green Solvents in Chemical Engineering	17BCH040	Dr. Swapnil Dharaskar
10	Heat transfer enhancement using nanofluids in heat exchanger	17BCH008	
11	Applications of nanoparticles in drug delivery systems.	17BCH003	
12	Statistical design of experiments for CO2 absorption	17BCH021	
13	Hydrogel applications in adsorptive removal of aqueous pollutant.	17BCH028	Dr.. Manish Sinha
14	Electrocoagulation for water and wastewater treatment.	17BCH053	
15	Metal organic framework membranes for carbon dioxide separation	17BCH043	
16	Modification of polymeric membranes with graphene oxide for different application	17BCH006	
17	CO_2 Conversion to Value Added Products	17BCH045	Dr. Ashish Unnarkat
18	DME Synthesis – Catalyst Perspective	17BCH009	
19	Phosphorous Removal Technologies Review	17BCH005	
20	Water Desalination Technologies – A Review	17BCH036	
21	Review on data analysis concepts/algorithms to solve complex engineering problems	17BCH061D	Dr. Surendra Sasikumar
22	Review on novel adsorbents and its related mechanism for Flue gas removal using pressure swing adsorption technology	17BCH013	
23	Review on Renewable energy concept integrated to the biofuel energy production	17BCH041	
24	Review concept on various process intensification technologies in industries	17BCH057	
25	Molecular Simulation Studies of Polymers in dilute aqueous solutions- A comprehensive review.	17BCH004	Dr. Abhishek Gupta
26	Nanoparticle interaction with polymers and polyelectrolytes-A comprehensive review	17BCH052	

27	Molecular Simulation Studies of Ionic Liquids – Present status and future prospects.	17BCH026	
28	Polyelectrolyte complexation – A Review on Experimental and Modeling aspects and Applications.	17BCH030	
29	Photonic bandgap crystals: synthesis and application	17BCH063D	Dr. Abhishek Yadav
30	Surface tension driven effects: current status of research	17BCH015	
31	Dielctrophoresis in colloid science and microfluidics	17BCH032	
32	Optical tweezers and it's application in colloid science	17BCH060D	
33	Deep Eutectic solvents (DES) as green solvents for CO2 capture	17BCH068D	Dr. Anirban Dey
34	Vapour liquid equilibrium and kinetic aspects of CO2 absorption in Amino acid salts	17BCH017	
35	Catalytic CO2 absorption in nanoparticle based amine solvents for post combustion carbon capture	17BCH033	
36	Recent developments on catalytic CO2 reduction to methanol	17BCH002	
37	Functional nanomaterials for water purification	17BCH037	Dr. Bharti Saini
38	Graphene oxide-polysulphone composite membrane: Application in water treatment	17BCH056	
39	Recent advances in functionalized polymer membranes	17BCH044	
40	Desalination using Membrane distillation	17BCH051	
41	Resource recovery from e-waste	17BCH058	Dr. Dadi Duryapparao
42	Utilization of plastic waste in the building construction material	17BCH055	
43	Enhancement of surface properties of char obtained from the pyrolysis of plastics and biomass	17BCH012	
44	The role of membrane technology in drinking water purification	17BCH018	
45	Theoritical studies on Moleuclar dynamic simulations	17BCH023	Ms. Sweta Balchandani
46	Studies on CO2 absorpiton using 1-butyl-3-methyl tetrafluoro borate	17BCH038	
47	Kinetic modeling of CO2 absorption systems using blended amine solutions	17BCH035	
48	Monte-carlo simulations studies using Cassandra	17BCH066D	
49	SARS-CoV-2 in wastewater: State of the knowledge and research needs	17BCH022	Dr. Manan Shah
50	Machine learing and Bigadata application in petroleum downstream.	17BCH034	
51	Groundwater quality assesment for sustainble development	17BCH014	
52	Groundwater quality assessment using pollution index of groundwater (PIG), ecological risk index (ERI) and hierarchical cluster analysis (HCA)	17BCH048	
53	Nonlinear model based controller of double-effect evaporator with backwad feeding for production of orange juice.	17BCH001	Dr. Md. Aurangzeb

54	Multiobjective optimization of improved direct and indirect distillation sequence.	17BCH031	
55	Benzene alkylation with 1-decene: a kinetic study and model validation.	17BCH039	
56	Production of debutanized naptha in a distillation tower: an optimal design and control.	17BCH049	
57	Electrochemical oxygen generation	17BCH027	Dr. Ravi Tejasvi
58	Electrochemical hydrogen generation	17BCH046	
59	Perovskite solar cells for energy harvesting	17BCH019	
60	Photo-catalytic degradation of VOCs	17BCH050	
61	Enhanced oil recovery using microemulsions.	17BCH010	Dr . Subhankar Roy
62	Dilatational rheological parameter study using oscillating pendant drop method.	17BCH024	
63	A study in brownian dynamics simulation of Rouse model.	17BCH029	
64	Interfacial rheology of asphaltene stabilized water-oil interface.	17BCH065D	