



# AISSMS

## COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi, Recognized by  
Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University  
and recognized 2(f) and 12(B) by UGC (Id.No. PU / PN/ Engg. / 093 (1992))  
Accredited by NAAC with 'A+' Grade



## Department of Chemical Engineering

AY: 2021-2022

### Activities Conducted Under IChE Students' Chapter

Sr No	Name of activity	Judge/Speaker	Date
1	"Paper Presentation Competition (CH-1)" under ET-2021 (CHEMIXIR).	Dr Vrashali Kalyani, AISSMSCOE, Pune	29/09/2021
2	Webinar on "Role of Economics in Selection of Technology".	Mr. Nikunj Tanna, Principal Sales Engineer-Honeywell UOP Sustainable Technology Solutions	16/03/2022
3	Webinar on "Introduction to Energy Integration".	Dr Parikshit Shahane, Senior Chemical Engineer, Ecolab, Pune	01/05/2022



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## Department of Chemical Engineering

### IChE Students' Chapter

### ET-2021 (CHEMIXIR)

## Report on "Paper Presentation Competition (CH-1)"

(September 29, 2021)

**AISSMS**  
COLLEGE OF ENGINEERING  
ज्ञानम्, सफलजननदिताय  
Accredited by NAAC with 'A+' Grade

**16th ENGINEERING TODAY 2021**  
Student Technical Symposium and Exposition  
Department of Chemical Engineering

**CHEMIXIR**  
Think like a Proton!!  
September 29&30 & October 1 2021

**Events**

- Paper Presentation (CH-1)**  
Mr. Kunal Raut  
7972773071
- Poster Presentation (CH-2)**  
Mr. Pranav Pawar  
7038025896
- Quiz Competition (CH-3)**  
Mr. Dhairya Patel  
9028049230

**Registration Fee**  
Rs. 50/- per participant

**PRIZES UPTO 24K**

**Bank Name : Bank of Baroda**  
**Account No : 04510100025164**  
**IFSC Code : BARBOSHIPOO**

**Platform:**  
Microsoft Teams  
Time: 10am

**Powered By:**  
**बैंक ऑफ बड़ोदा**  
**Bank of Baroda**

**Scan for Registrations**

**Mr. A. B. Kumbharde**  
General Secretary  
7620374826

**Dr. A. S. Jadhav**  
ET Head  
Chemical Dept.

**Dr. P. N. Dange**  
HOD  
Chemical Dept.

**Dr. D. S. Bormane**  
Principal  
AISSMS COE

[AISSMS\\_COE](#) | [aiche\\_aissmscoe](#)

**Title** : Paper Presentation Competition (CH-1)

**Invited Judge** : Dr Vrashali Kalyani, AISSMSCOE, Pune

**Date** : September 29, 2021.

**Time** : 10:00am to 4:00 pm

**Portal** : MS-Teams

**Student Coordinators** : 1. Mr Krunal Raut (BE Chemical Engineering)  
2. Mr Abhishek Ingle (BE Chemical Engineering)

**Faculty facilitating the event:** Dr M S Deshpande  
Ms K N Bawankar

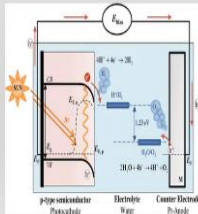
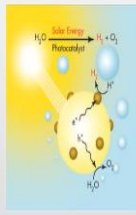
IChE Students' Chapter, Department of Chemical Engineering, AISSMS COE, Pune has successfully conducted "16<sup>th</sup> ENGINEERING TODAY-2021 (Department of Chemical Engineering) CHEMIXIR Paper Presentation (CH-1)". It was the first event under the banner of "CHEMIXIR" scheduled on September 29, 2021 on Microsoft Teams platform in online mode.

Dr Vrashali S Kalyani Ph.D(Chemistry) Assistant Professor, Department of First Year Engineering, AISSMS COE, Pune was the Guest of honor. Mr Abhishek Kumbharde, GS of Chemical Engineering Department, gave the welcome speech. Dr P N Dange, Head, Department of Chemical Engineering, formally addressed all the participants and extended his best wishes to them. Mr Krunal Raut and Mr Abhishek Ingale, student coordinators of the event introduced the Judge Dr Vrashali Kalyani and briefly explained the event rules to all participants and then the event started.

There were total 15 groups and 30 participants from colleges in Maharashtra, Tamil Nadu and Delhi who participated in the event and presented their papers in presence of Dr Kalyani for this event in the sequence allotted to them.

## Nanostructured Electrodes for Water Splitting

- The Photoelectrochemical cell consists of a  $\text{TiO}_2$  semiconductor acting as an anode and Pt cathode for electrolysis purpose
- $\text{TiO}_2$  semiconductor is irradiated with light energy through solar panels or when a ray of light is incident on it
- With energy larger than its band gap, electrons and holes are generated in the conduction and valence bands respectively.
- Results in electrons being released from the semiconductor just as electron moves as light strikes a layer of nanoparticles knocking the loosely bounded electrons.
- As a result, water is oxidized by photogenerated holes on the  $\text{TiO}_2$  anode to produce oxygen while photogenerated electrons participate in hydrogen production at cathode
- Oxygen and Hydrogen are obtained at the respective anode and cathode, from which they are collected and stored.



## Photoelectrochemical cell over conventional electrolysis

- In photoelectrochemical cells we use renewable sources of energy like solar energy instead of electricity, so there will be no carbon emission.
- By-product green hydrogen is again used as a fuel for producing electricity for cells and the cycle can go on in this way there is practically no wastage of any element
- The use of nanomembranes which acts as a photocatalysts eliminates the use of conventional electricity and uses solar light for its working



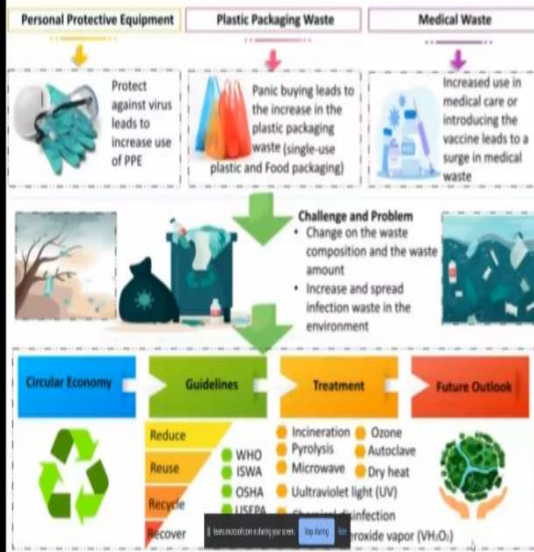
4. Demineralised water is necessary for electrolysis since ordinary tap water reduces water conductivity and causes sediment on the electrodes.



**COST**

5. Energy required for splitting water into green hydrogen and oxygen by electrolysis is more than the commercial method for the same basis. 3.3 kWh energy is required by electrolysis and 0.8kWh per  $\text{Nm}^3$  by conventional method for producing the same amount of oxygen.

## Impact of COVID-19 on Waste Generation



Glimpses of presentation during the Paper Presentation

The winners for the event were Group 4 who presented on the topic “Catalytic pyrolysis of Plastic Waste for Production of Liquid Fuels” by Mr Pranav Balaji K R and Ms Priyanga A from Kongu Engineering College, Perundurai, Tamil Nadu and Group 6 who presented on topic “Medical Oxygen by using Fuel Cell Technology using hydrogen energy” by Mr Saif Khalfay from Bharati Vidyapeeth College of Engineering, Mumbai, were in the first and second place, respectively. On behalf of Department of Chemical Engineering, AISSMS COE, Pune, Mr Krunal Raut presented the Vote of thanks.

The Paper Presentation competition was successfully organized by the Student Coordinators Mr Krunal Raut and Mr Abhishek Ingale under the guidance of Dr P N Dange, HOD, Dr M S Deshpande and Ms K N Bawankar.

Faculty Coordinator

Dr M S Deshpande

Ms K N Bawankar

ET-2021 Department Co-ordinator

Dr A S Jadhav

Head

Dr P N Dange

## List of Participants:

GROUP	NAME	TIMING	COLLEGE NAME
1	Soham Joshi	1:15 PM TO 1:30 PM	Thadomal Shahani Engineering College
2	Sourodipto Modak Belgaumwala Taher	1:30 PM TO 1:45 PM	Shiv Nadar University, Delhi (NCR)
3	Murtuza	1:45 PM TO 2:00 PM	Thadomal Shahani Engineering College
4	PRIYANGA.A	2:00 PM TO 2:15PM	KONGU ENGINEERING COLLEGE
5	Mohammad Afif Abuzar	2:30 PM TO 2:45 PM	Aissms COE, PUNE Bharti Vidyapeeth College of
6	Saif Khalfay	2:45 PM TO 3:00 PM	Engineering, Mumbai
7	Pranav Rupchand Pawar Rushikesh Chandrakant	3:00 PM TO 3:15 PM	Aissms COE, PUNE
8	Bhosale	3:15 PM TO 3:30PM	Thadomal Shahani Engineering College
9	Shivani Mirchandani Riteshkumar Rajendra	3:30 PM TO 3:45 PM	Thadomal Shahani Engineering College
10	Kolhapure	3:45PM TO 4:00 PM	Aissms COE, PUNE
12	Nupoor Upadhye	4:15 PM TO 4:30 PM	Aissms COE, PUNE
13	Asawari Dinkar Ingale	4:30 PM TO 4:45 PM	Aissms COE, PUNE
14	Bhavesh Vishal Patil	4:45 PM TO 5:00 PM	Aissms COE, PUNE
15	Naik Tanvi Nitin	5:00 PM TO 5:15 PM	Aissms COE, PUNE



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## Department of Chemical Engineering

### IChE Students' Chapter

# Webinar report on “Role of Economics in Selection of Technology”

(March 16, 2022)

AISSMS COLLEGE OF ENGINEERING  
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INDIAN INSTITUTE OF CHEMICAL ENGINEERS  
ESTD. 1947

IChE STUDENT CHAPTER, DEPARTMENT OF  
CHEMICAL ENGINEERING, AISSMS COE, PUNE  
invites you to a  
Webinar  
on  
Role Of Economics On Selection Of Technology  
Resource person  
Mr. Nikunj Tanna  
Principal Sales Engineer –Honeywell UOP  
Sustainable Technology Solutions

16 MAR  
11:00AM

Prof. M. Naniwadekar  
Faculty Coordinator

Dr. P. Dange  
Faculty Advisor &  
HOD

Dr. D. Bormane  
Principal

## **Webinar**

- Title** : Role of Economics in Selection of Technology
- Invited speakers** : Mr Nikunj Tanna, Principal Sales Engineer-Honeywell UOP  
Sustainable Technology Solutions
- Date** : March 16, 2022
- Time** : 11:00am to 12:30 pm
- Portal** : MS-Teams
- Student Coordinators** : 1. Mr Kartik Joshi (TE Chemical Engineering)  
2. Mr Krunal Raut (BE Chemical Engineering)

**Faculty facilitating the event:** Dr M Y Naniwadekar

Department of Chemical Engineering, AISSMS College of Engineering, Pune-01 organized a webinar on the topic “Role of Economics in Selection of Technology” on March 16, 2022. Mr Nikunj Tanna, Principal Sales Engineer-Honeywell UOP Sustainable Technology Solutions was the invited speaker for the webinar. This event was managed by student Coordinators Mr Kartik Joshi and Mr Krunal Raut under the supervision of Dr M Y Naniwadekar, a faculty from Department of Chemical Engineering. The session started at 11:00am, which lasted for more than an hour. Around 45 participants comprising of faculty members as well as students attended this on MS-Teams.

The session commenced with the introduction of the speaker Mr Nikunj Tanna by Mr Kartik Joshi. Then, Mr Nikunj Tanna started with his presentation in which he gave an overview of the Role of economics in selection of technology and also gave a detailed overview of cost estimation. He gave an introduction on cost estimation and talked about the purpose, methods, accuracy and engineering required for cost estimation. Further he gave details about what is licensor cost, exclusions, its elements and equipment cost.



Request control

Malhaar Tanna UVALAPAR...  
MakarandN... SGhugare...  
NIRANJAN... HRUTUJAB...  
MARALE UT... KAUSHAL K...  
BHUMIKAK... 11. Dhas Sh...  
DEVENDRA...

## Possible Professional Tracks

R&D		Industry			
Fundamental Research	Industrial Research	Licensor	EPC	Mfg-Chem	Non-Chem
		Sales-Comm	Engg	Operations	Automobile
		Sales-Tech	Proj Mgmt	Tech Service	Banking
		Design Engg	Procure	Mgmt	HSE Safety
		Proj Mgmt	Commision	Marketing	Simulator &D
		Start-up		Sales	
		Troubleshoot			

MakarandNaniwadekar

Webinar on Role of Economics in Selection Of Technology

08:32

Request control

Malhaar Tanna Viraj Gandh... SHARAYUB... SALUNKE S... DEVENDRA... MOMIN M... kiran gandhi

Participants

Type a name

In this meeting (46)

Mute all

KRUNAL RAUT Organizer

15 11. Dhas Shubham

26 26. Kamlesh Lakade

AS AHIRRAO SAKSHI SANJAY

BS BARBADE VAIBHAV SUNIL On hold

BR BARKADE UTKARSH RAVINDRA

BR BHANDARUI YOGITA RAMDAS

BS BHONGARE PAYAL SANJAY

B BHUMIKAKAKADE

CD CHOUDHARI SUYOG DINESH

DM DESHMUKH FARDIN MUKTAR

DEVENDRAMORE

PowerPoint Presentation: x2 - View only

Licensor Cost Estimation- Exclusions

Exclusions

- Land, Site Preparation, Soil Investigation, Foundation Preparation
- Docks, Marine Terminals, Jetties
- Access Roads, Admin Buildings, Worker Transportation, Employee Housing, Canteens
- Process and Project Reviews, HazOp Reviews, 3D Model Reviews
- Local Permits, Taxes, Fees, Custom Duties, Currency Exchange
- Price Fluctuations, Local Material Labor Costs
- Spare Parts, Special Tools, Utilities, Manpower
- Laboratory, Waste Treatment, Special Communication Systems, Computers, Safety and Fire Fighting

33°C Sunny 11:45 AM 3/7/2022

Webinar on Role of Economics in Selection Of Technology

Request control

Association for Advancement of Cost Estimation

ESTIMATE CLASS	Primary Characteristics		Secondary Characteristics		
	LEVEL OF PROJECT DEFINITION Expressed as % of complete definition	END USAGE Typical purpose of estimate	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGES Typical variation in low and high ranges (a)	PREPARATION EFFORT Typical degree of effort relative to least cost class of 1 (b)
Class 5	0% to 2%	Concept Screening	Capacity Factor, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +25% to +100%	1
Class 4	1% to 10%	Study or Feasibility	Equipment Factorial or Parametric Models	L: -15% to -30% H: +20% to +50%	2 to 4
Class 3	10% to 40%	Budget Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: -10% to -20% H: +10% to +30%	3 to 10
Class 2	30% to 70%	Control or Bid/Tender	Detailed Unit Cost with Priced Detailed Take-Off	L: -5% to -15% H: +5% to +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: -3% to -10% H: +3% to +15%	5 to 100

Notes: (a) The state of process technology and availability of applicable reference cost data affect the range markings. The ± value represents typical percentage variation of actual results from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.  
(b) If the range index value of '1' represents 0.000% of project cost, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

Figure 1. – Cost Estimate Classification Matrix for Process Industries

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AIChE International Recommended Practices and Standards

MT Malhaar Ianna  
KG kiran gandhi  
M Makarand N...  
S S Ghugare  
H  
NIRANIAN...  
HRUTUJAB...  
MARALE UT...  
KAUSHAL K...  
B  
+33  
BHUMIKAK...

33°C Sunny 11:21:44 AM 16-03-2022

Glimpses of presentation during the session of invited speaker Mr Nikunj Tanna





This informative session was accompanied by the doubt clearing session in which students actively participated to get their doubts cleared. The webinar ended with a vote of thanks by Mr Kartik Joshi to Mr Nikunj Tanna. Special thanks were given to all the participants for attending this knowledge sharing event. The participants were asked to fill the feedback form at the end of the webinar.

### **Acknowledgement**

Organizing committee sincerely thanks the invited speaker for sparing his valuable time. We thank Dr M Y Naniwadekar, Assistant Professor, Department of Chemical Engineering for facilitating this webinar and liaising with the speaker. We sincerely thank Dr P N Dange, Head of Department of Chemical Engineering for his unceasing support and guidance. We deeply acknowledge encouragement by our Hon. Principal, Dr D S Bormane for organizing this event. We further thank Hon. Secretary and Management of AISSMS Society for the constant support in organizing such activities. Lastly, organizers profoundly thank the participants for their patient hearing during the session.

Mr Kartik Joshi  
TE Chemical  
Event Coordinator

Mr Krunal Raut  
BE Chemical  
Event Coordinator

Dr M Y Naniwadekar  
Faculty Coordinator  
Department of Chemical Engineering

Dr P N Dange  
Head  
Department of Chemical Engineering

# Webinar Attendance:

ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S  
COLLEGE OF ENGINEERING, PUNE 411 001  
Theory Weekly Attendance Sheet - 2021-22 (TERM-II)

Dept. Chemical      Class: TE Chemical      Sub: P.I.C

Week No: 3      Date: From 15/3/22      Name of Faculty: K.B. Cromwell

SR. NO.	ROLL NO.	NAME OF THE STUDENT	Attendance			Total
			last week	15/03/22	Date / Time	
1	18CH008	BHOSALE DNANSHREE BHARAT				
2	18CH041	PAWAR PRADEEP RATAN				
3	18CH002	BAGAWADE SHUBHAM PRADIP				
4	18CH005	BHONGARE PAYAL SANJAY				
5	18CH025	INGAVALE RAVIRAJ VILAS				
6	18CH029	KAMBLE SURAJ GURUNATH				
7	18CH031	KANCHAN ISHANT VILAS				
8	18CH032	KHILARI GIRISH BABAJI				
9	18CH035	MARALE LITKARSHA KIRAN				
10	18CH048	POHARE NIKHIL DEEPAK				
11	18CH050	SAPATE BHAVANA SUDHAKAR				
12	18CH053	SHINDE SHUBHAM KISHOR				
13	18CH056	SOURABH YADAV				
14	18CH058	WALUNJ SANKET BHUSAHEB				
15	18CH001	JASHTIKAR MRUNMAYEE MOHAN				
16	19CH002	BANSODE YASH ARUN				
17	19CH003	BARBADE VAIBHAV SUNIL				
18	19CH004	BHIVARKAR VIJAY ZUMBAR				
19	19CH005	CHOUDHARI SUYOG DINESH				
20	19CH006	CHOUGULE SHREYASH UMESH				
21	19CH007	DEOKAR SHUBHAM SUBHASH				
22	19CH008	DESADLA DARSHAN RAJESH				
23	19CH009	DESHMUKH FARDIN UKTAR				
24	19CH010	DESHMUKH ISHA SUNIL				
25	19CH013	DIVATE AARTI SOMNATH				
26	19CH014	DONDE MAHESH KERUDAS				
27	19CH015	GAIKWAD AKANKSHA ASHOK				
28	19CH016	GAIKWAD ASHITOSH VISHWAS				
29	19CH017	GANDHILE NIKHIL SUKHDEV				
30	19CH018	HULAWALE RUSHIKESH SAKHARAM				
31	19CH019	JAGDHANE PRATIK BABASAHEB				
32	19CH020	JAIN SAHIL LALIT				
33	19CH021	JARHAD ADITYA BABAN				
34	19CH022	JOSHI KARTIK GHANSHYAM				
35	19CH023	JULME PRACHI SANGHPAL				
36	19CH025	KATE NILESH ASHOK				
37	19CH026	KATIYAR AKSHAT BIMAL				
38	19CH027	KEWAT AKASH RAMKRUSHNA				
39	19CH028	KHATAL MAHESH SAMPAT				
40	19CH029	KUMBHAR SOHAM SHIVAJI				
41	19CH030	LOKHANDE SHIRISH SHEKHAR				
42	19CH031	MARKAD SHIVAM BABASAHEB				
43	19CH033	PARAB MIHIR GIRISH				
44	19CH034	PARDESHI SUMER RAJESH				

SR NO.	ROLL NO.	NAME OF THE STUDENT	Attendance (last week)	Date / Time			Total
				15/03/21	16/03/21	16/03/21	
45	19CH035	PATE BHAVESH VIDHAL					
46	19CH036	PATE RAJRAJ KALAN					
47	19CH037	PHARATE PRAKTA SANJAY					
48	19CH038	RAJURKAR AAMOD SHASHIKANT					
49	19CH039	RATHOD SHIVAM AJAY					
50	19CH040	RAUT SAGAR JITENDRA					
51	19CH041	RODE MOHIT SUNIL					
52	19CH042	SANJAY KUMAR MOHAKUD					
53	19CH043	SAYED MOHAMMAD ALI TARIQUE					
54	19CH044	SAYYAD AMAN OULAB					
55	19CH045	SHAIKH FIZA ASHRAK					
56	19CH046	SHAIKH RAFIK HASAN					
57	19CH047	SHIRRAO SHRADDHA ANIL					
58	19CH048	WAGHMODE RUTIK BALU					
59	19CH049	YADAV SANSKAR DHARMENDRA					
60	19CH050	YADAV SWAPNIL SUNIL					
61	19CH051	ZAGADE SANDESH NANASO					
62	20CH301	AHIRRAO SAKSHI SANJAY					
63	20CH302	BARKADE UTKARSH RAVINDRA					
64	20CH303	BHANDARI YOGITA RAMDAS					
65	20CH304	CHAFEKAR ONKAR SHRIPAD					
66	20CH305	DHAMDHARE SUDEEP RAJENDRA					
67	20CH306	GADEKAR AKSHAY JALINDRA					
68	20CH307	GUPTA SHIVANI ANILKUMAR					
69	20CH308	JOSHI UTKARSHA GOVIND					
70	20CH310	KHAINAR HARSHAL SANTOSH					
71	20CH311	KUWAR KAUSTUBH BALASAHEB					
72	20CH312	NAINWAD SHWETA NANDKISHOR					
73	20CH313	PATIL SUMEET PRITHVIRAJ					
74	20CH314	REDE NEERAJ BAPUSO					
75	20CH315	SALUNKE SATISH KESHVRAV					
76	20CH316	SALUNKHE RUTIK RAVINDRA					
77	20CH317	SHAHANE DHANANJAY BAPU					
78	20CH318	SHINDE ONKAR SANTOSH					
79	20CH319	SONAWANE VIPUL RAMESHWAR					
80	20CH320	YADAV CHANDAN DINANATH					
Present Total							

Note - 1) Mark for absent students in red after every lecture.  
 2) Submit to HOD at the end of week.

Faculty Signature

HOD Signature

Class: BE Chemical

Sub: \_\_\_\_\_

Date: From 14/03/22 to \_\_\_\_\_

Name of Faculty: Dr. m. y. Abinavalekar  
Guest lecture

NAME OF THE STUDENT	Attd. till last week	16/3/22 (16/3/22) 16/3/22					Total
		9:15	8:15	9:15	10:30	11:30	
ASHWINI POTE							
BADHE SHARAYU SEVKRAM		Prav.		Sp. Bar.	Sp. Bar.	Sp. Bar.	
BANDAL SURAJ RAOSAHEB		Sp. Bar.	Sp. Bar.	Sp. Bar.			
BELDAR UMESH PURUSHOTTAM		Sp. Bar.	Sp. Bar.	Sp. Bar.	Sp. Bar.	Sp. Bar.	
BORHADE HRUTUJA NIVRUTTI		Subhade	Subhade	Subhade	Subhade	Subhade	
CHARBIWALA MURTUZA		A	A	A			
CHAUDHARI PARESH RAJENDRA		P. Chand.	P. Chand.	P. Chand.	P. Chand.	P. Chand.	
CHAVAN DIGVIJAYSINHA		Dige.	Dige.	Dige.			
CHAVAN MAHESH RAJU		M. Han.	M. Han.	M. Han.			
DANDEKAR MADHAV RAVINDRA		M	M	M			
DARSHALE SHRADDHA		Ranvale		Ranvale	Ranvale	Ranvale	
DEOCHAKE NIRANJAN AJAY			Ranvale	Ranvale	Ranvale	Ranvale	
DESHMANE SAKSHI PARMESHWAR							
DHANANJAY KUMAR SINGH		Ph	Ph	Ph			
DHARDUBEY NITIN JITENDRA		Ph	Ph	Ph			
DHAS SHUBHAM SADANAND		Phas	Phas	Phas	Phas	Phas	
DOALS BHUSHAN BAPU		Phas	Phas	Phas			
DODE KHUSHI RAMESH		Phas	Phas	Phas			
DARATE KUNAL DIPAK		Konate	Konate	Konate			
DANDHI VIRAJ RAJENDRA			Gandhi	Gandhi	Gandhi	Gandhi	
DARADE PRIYANKA SAMIR							
DHADLE PRATIKSHA PRAVIN		Prady	Prady	Prady	Prady	Prady	
DANNURE SAIF RAJU							
DIGALE ABHISHEK VIJAY							
DADHAV MRUDULA BABAN		du	du	du			
DADHAV VARUKODAR SUNIL				Shalby			
DARADE ASHISH ALANKAR		A	A	A			
DARADE BHUMIKA SAGAR		B. Sag.	B. Sag.	B. Sag.	B. Sag.	B. Sag.	
DARADE TEJAS DEEPAK		B. Sag.	B. Sag.	B. Sag.			
DARSHAL KUMAR GULATI				Kanhal	Kanhal	Kanhal	
DARSHAPURE RITESHKUMAR R.			R. Harpur	R. Harpur			
DARSHIMBHARDE ABHISHEK							
DARSHWAR KARISHMA BAPURAO							
DARSHKADE KAMLESH RAMESH		R.	R.	R.	R.	R.	
DARSHHTA DIKSHITA KAMLESH		R. Mehta	R. Mehta	R. Mehta	R. Mehta	R. Mehta	
DARSHMIN MOHAMED FAIZ RIYAZ		M. Faiz	M. Faiz	M. Faiz	M. Faiz	M. Faiz	
DARSHRE DEVENDRA AMAR		A	A	A	A	A	
DARSHRE PRATIKSHA SANJAY		Pratiksha	Pratiksha	Pratiksha	Pratiksha	Pratiksha	

Guest lecture

SR. NO.	ROLL. NO.	NAME OF THE STUDENT	Attd. till last week	Date/Time					Total
				16/3/22	15/3/22	9:15	10:30	11:30	
39	18CH038	NINAL SHIVANI RAJENDRA		Shivani	Shivani	Shivani	Shivani	Shivani	
40	19CH305	PARDESHI UJVALA SATISH		Ujvala	Ujvala	Ujvala	Ujvala	Ujvala	
41	18CH315	PATEL DEEP BHARATBHAI		Deep	Deep	Deep	Deep	Deep	
42	18CH039	PATEL DHAIRYA JAYESH		Dhairya	Dhairya	Dhairya	Dhairya	Dhairya	
43	18CH040	PATIL ABHIJEET MARUTI		Abhijeet	Abhijeet	Abhijeet	Abhijeet	Abhijeet	
44	18CH041	PATIL GAURAV KISHOR		Gaurav	Gaurav	Gaurav	Gaurav	Gaurav	
45	18CH042	PATIL KETAN SURESH		Ketan	Ketan	Ketan	Ketan	Ketan	
46	18CH043	PATIL RUSHIKESH RAVINDRA		Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	
47	18CH045	PATIL SARTHAK KONDAJI		Sarthak	Sarthak	Sarthak	Sarthak	Sarthak	
48	17CH038	PATOLE GAURI NARESH		Gauri	Gauri	Gauri	Gauri	Gauri	
49	18CH046	PAWAR PRANAV RUPCHAND		Pranav	Pranav	Pranav	Pranav	Pranav	
50	18CH047	PEDAMKAR SIDDHI VIKAS		Siddhi	Siddhi	Siddhi	Siddhi	Siddhi	
51	19CH306	PRATIK BHASKAR CHAVAN		Pratik	Pratik	Pratik	Pratik	Pratik	
52	18CH049	RAUT KRUNAL LAXMIKANT		Krunal	Krunal	Krunal	Krunal	Krunal	
53	16CH045	SATHE PRAVIN GOPINATH		Pravin	Pravin	Pravin	Pravin	Pravin	
54	19CH307	SAYYAD SALMAN SAYYADJILANI		Salman	Salman	Salman	Salman	Salman	
55	18CH051	SHAIKH MOHASIN RAJMOHAMAD		Mohasin	Mohasin	Mohasin	Mohasin	Mohasin	
56	19CH308	SHELAR CHAITANYA DEEPAK		Chaitanya	Chaitanya	Chaitanya	Chaitanya	Chaitanya	
57	18CH201	SHEP KAUSHAL ULHASRAO		Kaushal	Kaushal	Kaushal	Kaushal	Kaushal	
58	18CH054	SHIRSAT VAIBHAV SANJAY		Vaibhav	Vaibhav	Vaibhav	Vaibhav	Vaibhav	
59	18CH055	SHLOK SACHIN PHULKAR		Sachin	Sachin	Sachin	Sachin	Sachin	
60	16CH050	SUKHADEVE SUMIT MAROTI		Sumit	Sumit	Sumit	Sumit	Sumit	
61	19CH309	TAUR SHIVRAJ ANKUSHRAO		Shivraj	Shivraj	Shivraj	Shivraj	Shivraj	
62	19CH310	TELE AKASH YUVRAJ		Akash	Akash	Akash	Akash	Akash	
63	18CH057	UPADHYE NUPOOR AJAY		Ajay	Ajay	Ajay	Ajay	Ajay	
64	19CH311	WAGHMARE AKASH SHIVAJI		Akash	Akash	Akash	Akash	Akash	
65	18CH059	WALUNJ VISHAL RAOSAHEB		Vishal	Vishal	Vishal	Vishal	Vishal	
66	18CH060	WANKHEDE RUSHIKESH ULHAS		Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	
67	19CH312	YADAV VISHWAJEET BHARAT		Vishwajeet	Vishwajeet	Vishwajeet	Vishwajeet	Vishwajeet	
Present Total									

Note:- 1) Mark for absent students in red after every lecture.  
2) Submit to HOD at the end of week.

Faculty Signature

HOD Signature





# AISSMS

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Accredited by NAAC with 'A+' Grade



## Department of Chemical Engineering

### IChE Students' Chapter

# Webinar report on “Introduction to Energy Integration” (May 1, 2022)

AISSMS  
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Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University  
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Accredited by NAAC with 'A+' Grade

IChE STUDENT CHAPTER  
DEPARTMENT OF CHEMICAL ENGINEERING  
AISSMS COE PUNE  
Invites you to a  
Webinar on

Introduction to Energy Integration  
Resource person  
Dr. Parikshit Shahane  
Senior Chemical Engineer Ecobab

1 May 2022  
11:00AM

Dr. Kirti Datir  
Faculty Coordinator

Prof.K.N.Bawankar  
Faculty Advisor

Dr.P.N.Dange  
HOD

Dr. D.S. Bormane  
Principal

## **Webinar**

- Title** : Introduction to Energy Integration
- Invited speakers** : Dr Parikshit Shahane, Senior Chemical Engineer ,Ecolab
- Date** : May 01, 2022.
- Time** : 11:00am to 12:30 pm
- Portal** : MS-Teams
- Student Coordinators** : 1. Mr Mahesh Chavan (BE Chemical Engineering)  
2. Mr Krunal Raut (BE Chemical Engineering)
- Faculty facilitating the event:** Dr Kirti Datir

Department of Chemical Engineering, AISSMS College of Engineering, Pune-01 organized a webinar on the topic “Introduction to Energy Integration” on May 01, 2022. Dr Parikshit Shahane, Senior Chemical Engineer, Ecolab, Pune was the invited speaker for the webinar. This event was managed by student Coordinators Mr Mahesh Chavan and Mr Krunal Raut under the supervision of Dr Kirti Datir, a faculty from Department of Chemical Engineering. The session started at 11:00am, which lasted for more than an hour. Around 50 participants comprising of faculty members as well as students attended this on MS-Teams.

The session commenced with the introduction of the speaker Dr Parikshit Shahane by Mr Mahesh Chavan. Then, Dr Parikshit Shahane started with his presentation in which he gave an overview of the Introduction To Energy Integration and also gave a detailed overview of why energy saving is important in all the chemical plants. He gave an introduction on Energy Integration and talked about the pinch analysis and gave the explanation for the analysis on how it is carried out . Further he gave details about Energy Recovery Targets and Heat Exchanger Network.

Webinar on Introduction to Energy Integration

26:14

Request control

People Chat Reactions Rooms More Camera Mic Share Leave

Shahane, PARIKSHIT

35°C Mostly sunny

11:22:50 AM 01-05-2022

Webinar on Introduction to Energy Integration

26:58

Request control

People Chat Reactions Rooms More Camera Mic Share Leave

# Integration

Shahane, PARIKSHIT

35°C Mostly sunny

11:23:34 AM 01-05-2022

Webinar on Introduction to Energy Integration

27:52

Request control

People Chat Reactions Rooms More

Camera Mic Share Leave

## Outlines of the session...

- Introduction to energy integration
- Concepts of pinch analysis
- Problem table algorithm
- Pinch design rules
- Design of Heat Exchanger Network

Shahane, PARIKSHIT

HKamble PravinTadkar  
MAHESHCH... Shahane, PARIK...  
K DD  
KBawankar Dr. Kirti Datir  
S MB  
SHRADDHA... Mahendra...  
SK +14  
SALLUNKE S...

35°C Mostly sunny 11:24:28 AM 01-05-2022

Webinar on Introduction to Energy Integration

31:15

Request control

People Chat Reactions Rooms More

Camera Mic Share Leave

## Energy integration...

**1**

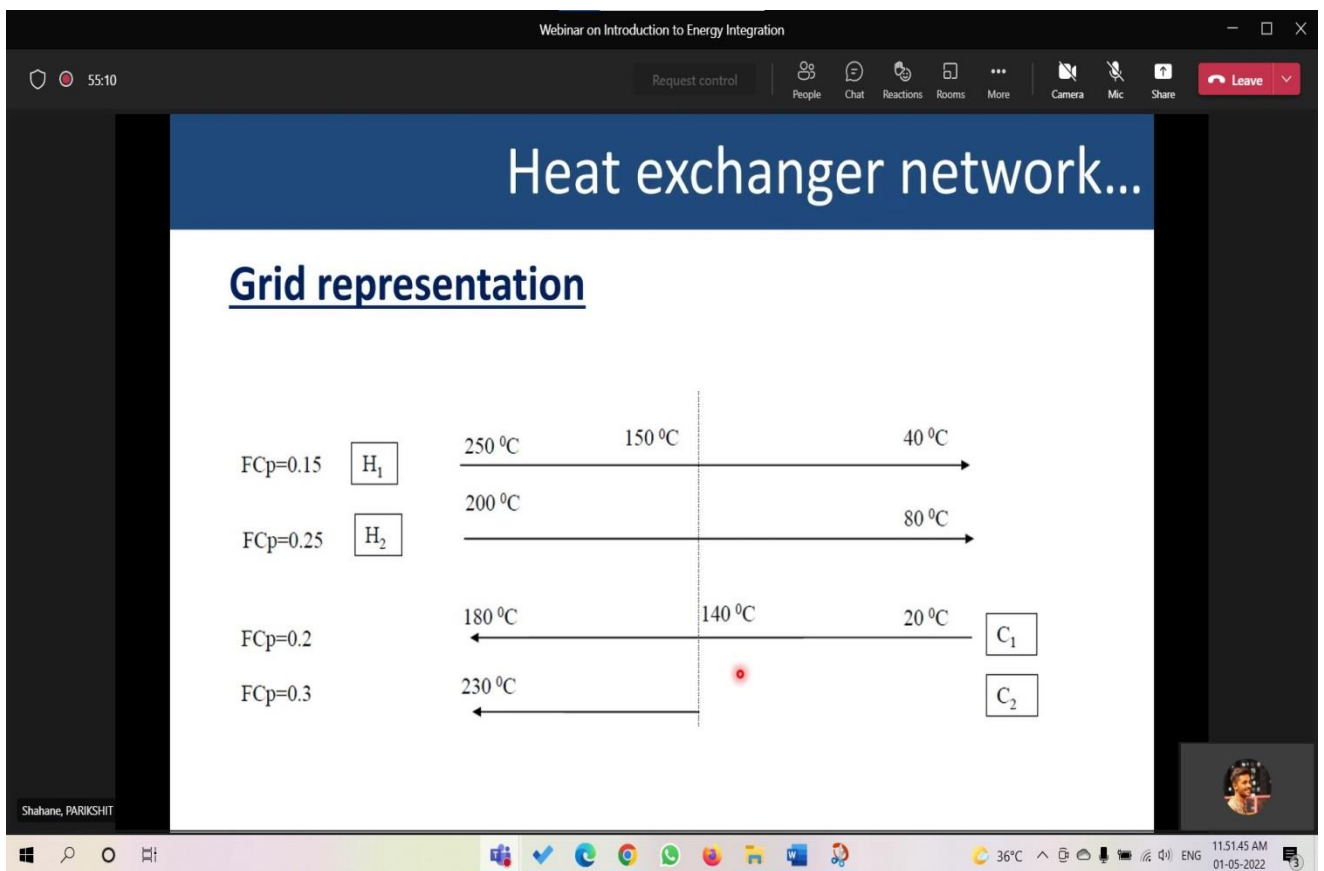
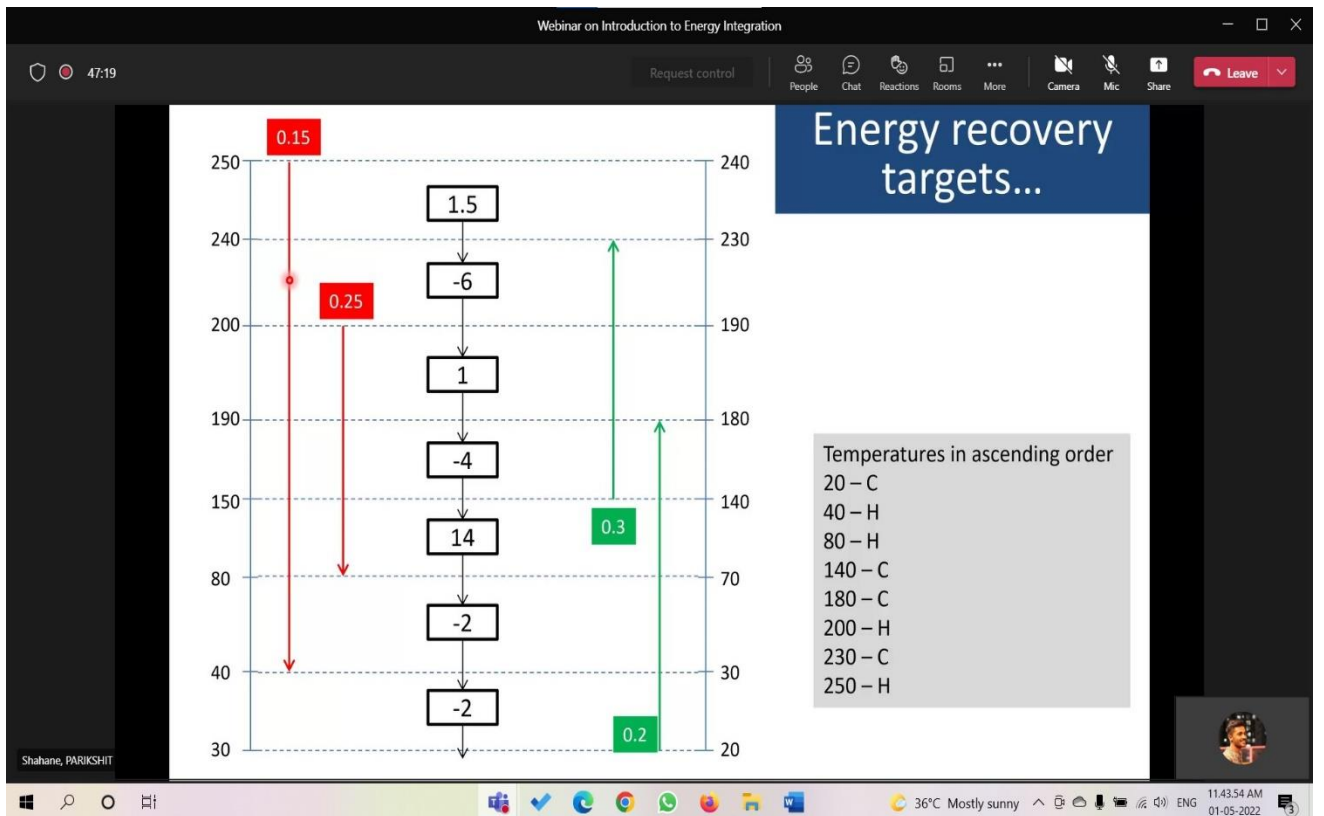
**2**

**3**

Shahane, PARIKSHIT

HKamble PravinTadkar  
MAHESHCH... Shahane, PARIK...  
K DD  
KBawankar Dr. Kirti Datir  
RJ MB  
RAUT SAGA... Mahendra...  
SK +17  
SALLUNKE S...

35°C Mostly sunny 11:27:51 AM 01-05-2022



Glimpses of presentation during the session of invited speaker Dr Parikshit Shahane

This informative session was accompanied by the doubt clearing session in which students actively participated to get their doubts cleared. The webinar ended with a vote of thanks by Mr Mahesh Chavan to Dr Parikshit Shahane. Special thanks were given to all the participants for attending this knowledge sharing event.

### **Acknowledgement**

Organizing committee sincerely thanks the invited speaker for sparing his valuable time. We thank Dr Kirti Datir, Assistant Professor, Department of Chemical Engineering for facilitating this webinar and liaising with the speaker. We sincerely thank Dr P N Dange, Head of Department of Chemical Engineering for his unceasing support and guidance. We deeply acknowledge encouragement by our Hon. Principal, Dr D S Bormane for organizing this event. We further thank Hon. Secretary and Management of AISSMS Society for the constant support in organizing such activities. Lastly, organizers profoundly thank the participants for their patient hearing during the session.

Mr Mahesh Chavan  
BE Chemical  
Event Co-ordinator

Mr Krunal Raut  
BE Chemical  
Event Co-ordinator

Dr Kirti Datir  
Faculty Co-ordinator  
Department of Chemical Engineering

Ms K N Bawankar  
Dept. IICHE Student's Chapter Co-ordinator  
Department of Chemical Engineering

Dr P N Dange  
Head  
Department of Chemical Engineering

**Webinar Attendance:**

<b>Full Name</b>	<b>Timestamp</b>
KRUNALRAUT	5/1/2022, 11:00:26 AM
kiran gandhi	5/1/2022, 11:00:26 AM
Dr. Kirti Datir	5/1/2022, 11:00:26 AM
KBawankar	5/1/2022, 11:00:26 AM
MAHESHCHAVAN	5/1/2022, 11:00:26 AM
Shahane, PARIKSHIT	5/1/2022, 11:00:26 AM
Dhanshree Bhosale	5/1/2022, 11:00:26 AM
SHRADDHADARSHALE	5/1/2022, 11:01:13 AM
UMESH WAICHAL	5/1/2022, 11:01:30 AM
ANJALI SHIDORE	5/1/2022, 11:03:37 AM
PravinTadkar	5/1/2022, 11:04:15 AM
HKamble	5/1/2022, 11:04:55 AM
Mahendra Baingne	5/1/2022, 11:05:20 AM
SALUNKE SATISH KESHVRAV	5/1/2022, 11:05:34 AM
BHUMIKAKAKADE	5/1/2022, 11:06:00 AM
RAUT SAGAR JITENDRA	5/1/2022, 11:07:02 AM
KUNALFARATE	5/1/2022, 11:07:48 AM
SHRIRAO SHRADDHA ANIL	5/1/2022, 11:08:53 AM
DHAIRYAPATEL	5/1/2022, 11:09:24 AM
DHAIRYAPATEL	5/1/2022, 11:44:30 AM
DESHMUKH ISHA SUNIL	5/1/2022, 11:09:31 AM
Rutuja	5/1/2022, 11:09:49 AM
BHASKARPRATIK	5/1/2022, 11:09:58 AM
GUPTA SHIVANI ANILKUMAR	5/1/2022, 11:10:00 AM
OMAR SHAIKH	5/1/2022, 11:10:24 AM
AHIRRAO SAKSHI SANJAY	5/1/2022, 11:14:06 AM
SARTHAKPATIL	5/1/2022, 11:15:44 AM
UMESHBELDAR	5/1/2022, 11:17:11 AM
NUPOORUPADHYE	5/1/2022, 11:18:36 AM
Sandeshrasale	5/1/2022, 11:21:31 AM
NITINDHARDUBEY	5/1/2022, 11:21:36 AM
SGhugare	5/1/2022, 11:22:10 AM
SWARAJ GAME	5/1/2022, 11:22:21 AM
JADHAV MRUDULA BABAN	5/1/2022, 11:25:15 AM
MOMIN MOHAMED FAIZ RIYAZ	5/1/2022, 11:25:25 AM
AVADHOOT BONDRE	5/1/2022, 11:25:48 AM
13.Vaibhav S Shirsath	5/1/2022, 11:25:53 AM
NIRANJANDEOCHAKE	5/1/2022, 11:27:15 AM
DIVATE AARTI SOMNATH	5/1/2022, 11:28:50 AM
GAURAVPATIL	5/1/2022, 11:32:01 AM
Viraj Gandhi (Guest)	5/1/2022, 11:32:07 AM

26. Kamlesh Lakade	5/1/2022, 11:33:35 AM
KHAIRNAR HARSHAL SANTOSH	5/1/2022, 11:34:21 AM
SIDDHIPEDAMKAR	5/1/2022, 11:36:20 AM
UJVALAPARDESHI	5/1/2022, 11:36:36 AM
DHAMDHARE SUDEEP RAJENDRA	5/1/2022, 11:43:54 AM
BARKADE UTKARSH RAVINDRA	5/1/2022, 11:43:54 AM
SHINDE ONKAR SANTOSH	5/1/2022, 11:44:10 AM
CHAFEKAR ONKAR SHRIPAD	5/1/2022, 11:44:31 AM
shweta Nainwad (Guest)	5/1/2022, 11:45:51 AM
SAYYAD AMAN GULAB	5/1/2022, 11:46:28 AM
PRIYANKAGARADE	5/1/2022, 11:47:17 AM
Rutik Salunkhe (Guest)	5/1/2022, 11:48:44 AM
BHANDARUI YOGITA RAMDAS	5/1/2022, 11:50:05 AM
AKASH BAGAL	5/1/2022, 11:50:15 AM
RATHOD SHIVAM AJAY	5/1/2022, 11:52:28 AM
AKASHTELE@aissmscoe.com (Guest)	5/1/2022, 11:53:06 AM
ABHISHEKINGALE	5/1/2022, 11:55:00 AM



