CHEMEZINE

Chemical Engineering e-Magazine

UPL UNIVERSITY OF SUSTAINABLE TECHNOLOGY

CHEMICAL ENGINEERING DEPARTMENT

ISSUE-11

Creating Competent Chemical Engineers for the world of tomorrow

01/24

DEPARTMENT OF CHEMICAL ENGINEERING, SRICT

To achieve excellence in Chemical Engineering and allied fields by providing excellent teaching learning experience enabling students to become competent professionals to tackle global issues.

MISSION

- To provide excellent technical education to students with basics of chemical engineering.
- To provide theoretical and practical education so that students vigorously apply knowledge in solving chemical engineering problems for sustained development.
- To inculcate professional ethics among students by exposing them to state of the art technologies in the field.
- To inspire students for lifelong learning and to develop leadership qualities in their career.

Program Educational Outcomes (PEOs) of Department

- To impart the fundamentals of chemical engineering and enable them to have a successful career in wide range of core industries.
- To deliver quality technical education thereby developing sustainable technology in addressing global issues.
- To prepare graduates who are capable of solving complex chemical engineering problems.
- To provide practical aspects of chemical engineering to the students by ways of industrial visits, expert lectures and increased industry-institute interaction thereby making students industry ready.
- To prepare graduates who can effectively communicate, demonstrate leadership qualities with creative thinking and professional ethics.

Message from Head of Department

Dear Readers,

The Department of Chemical Engineering has recorded consistent improvement in its academic, research and placement performance. We believe that our students have been well accepted in their job profiles and have consistently exceeded expectations of the corporate world. During study at the department, the students are encouraged to get hands-on laboratory and practical experience.

A lot of extracurricular activities were held, and students were encouraged to participate in those events including the celebration of sports, cultural and technical events. Our B.E. Students of the batch 2019-23 will be starting their professional journey soon. Most of the students are well placed and few pending will be placed soon. We wish all pass out students best of luck. Also, we invite them to join our alumni association and keep contributing to the alma mater.

First year students have stepped in. We welcome Diploma, B.E., M.E. and Ph.D. students admitted during the session Winter-2023. As term begins, I encourage you to make your health and wellbeing a priority throughout the academic year. We look forward to upcoming Semester, Winter 2023. With the support from faculty, staff, students, and all other stakeholders, we strive to build further on the strong foundations of Department of chemical engineering and accomplish greater altitudes of distinction.

Prof. Dr. Alok Gautam
HoD , Chemical Engineering Department

INDUSTRIAL VISITS

Batch	Course	Sem	Date	Name of Industry	Place
2020	BE	VI	20.02.2023	Sterlite Organics	Panoli GIDC
			02.03.2023 and 03.03.2023	Meghmani Fine Chem	Dahej
			02.05.2023	Atul Ltd	Ankleshwar
2021	BE	IV	09.02.2023	Godrej	Valia
			17.02.2023 and 10.03.2023	Zydus Lifesciences	Ankleshwar

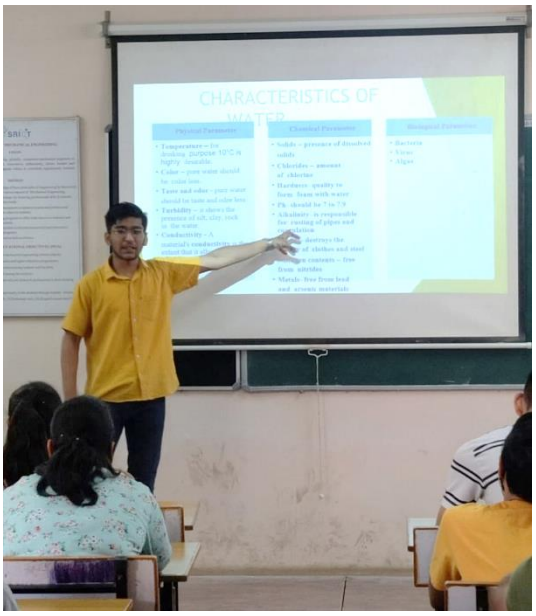
INDUSTRIAL VISITS

Batch	Course	Sem	Date	Name of Industry	Place
2022	BE	II	27.03.2023	Ohm Dye Chem	Panoli GIDC
			29.03.2023	Jackson and Sons	Panoli GIDC
			12.04.2023	BEIL	Ankleshwar
2021	Diploma	IV	02.02.2023	Amgis Lifesciences	Panoli
			29.04.2023	Star Oxochem	Jhagadia
2022	Diploma	II	12.04.2023	Oasis Ceramics	Ankleshwar
			22.05.2023	ETL Ltd	Ankleshwar

EXPERT LECTURES

Sr. No.	Name	Designation	Organization	Topic
1	Ms. Mital Vyas	Lecturer	Tapi Dip. College	Distillation
2	Mr. Prasad Kale	ESH, Head	UPL Ltd.	Environmental legislation
3	Mr. Snehal Tralsawala		Consultant	Fault tree and event tree analysis
4	Mr. Ravi Acharya	Engineer	GPCB	GPCB working
5	Mr. Amol Lakare	Head, Safety	UPL Ltd.	HAZOP
6	Mr. Manish Nasit	Lecturer	GEC, Valsad	Heat exchangers
7	Ms Madhu Ars		Consultant	Importance of English
8	Mr. Rahul Waghmare	Senior Engineer	Dekra, Mumbai	Importance of Safety
9	Ms. Shreya Kundu	ESH, Head	UPL Ltd.	Industrial Acts
10	Mr. Sunil Motiramani	GM	UPL Ltd.	Introduction to sustainability
11	Mr. Ajay Pancholi	ESH, Head	UPL Ltd.	Process Safety Management

PEER LEARNING INITIATIVE



Name of student	Sem	Course Name	PLI Delivered in semester	
PALVE PRATIKBHAI	2	BCE	2	DE
NILESH YADAV	2	BME	2	BE
NILESH YADAV	2	BME	2	BE
MODI DEEP	4	MTO	4	DE
UTSAV PANKAJ PATEL	4	CPT-II	4	DE
UTSAV PANKAJ PATEL	4	PHT	4	BE
PATHAN SHIFAN TUFAIL	4	PCET	4	BE
PATEL VISHWAM	4	U&IC	4	BE
PATEL RAHULKUMAR P	4	U&IC	4	BE
PATHAN SHIFAN T.	4	MTO	4	DE

Name of student	Sem	Course Name	PLI Delivered in semester	
PATEL VISHWAM K.	6	MTO	5	BE
MODI DEEP M	6	PHT	5	BE
DIGHE PRITEE	4	BME	5	BE
PATEL UTSAV PANKAJ	6	PHT-1	3	BE
PATEL UTSAV PANKAJ	6	PHT-1	3	DE
PATEL UTSAV PANKAJ	6	U&IC	5	BE
SAKSHI DIGHE	4	ENG	5	BE
DIPALI PATEL	4	EG	2	BE
DIPALI PATEL	4	EG	2	BE

Under Peer learning initiative (PLI), senior student delivers technical content to peers making it comfortable and easy for students. It also improves communications skills, and professional development.

UNIVERSITY EXAM RESULTS D.E., B.E. & M.E. Semester-I, III, V & VII Winter-2022

Sr.No	Semester	Total	Pass	Fail	% Pass
1	BE 1 Semester	38	21	17	55.26
2	DE-1 Semester	110	51	59	46.36
2	DE 3 Semester	66	50	16	75.76
3	BE 3 Semester	107	61	51	57.01
4	BE 5 Semester	77	75	02	97.40
5	BE 7 Semester	81	65	16	80.25
6	ME-1 Semester	7	3	4	42.86
7	ME 3 Semester	11	11	0	100.00

BE-CE Sem-1 Winter 2022 Result Analysis (TOP 03 SPI)			
Sr. No.	Enrolment No.	Name of Students	SPI
1	220102101025	PATEL MEET M	9.67
2	220102101031	PRAJAPATI KEYA A	9.33
3	220102101016	MANDAL AAKASHKUMAR	9.19

BE-CE Sem-3 Winter 2022 Result Analysis (TOP 03 SPI)			
Sr. No.	Enrolment No.	Name of Students	SPI
1	210102101032	PATEL DIPALI KETANKUMAR	9.92
2	210102101046	PATEL YAX KAMALBHAI	9.73
3	210102101055	SURTI ROHAN DHARMESHKUMAR	9.73

BE-CE Sem-5 Winter 2022 Result Analysis (TOP 03 SPI)			
Sr. No.	Enrolment No.	Name of Students	SPI
1	200990105014	MODI NISARG AMINESH	10
2	200990105028	SAINI UMESH KUMAR SITARAM	9.61
3	200990105018	CHANDEGRA MEET MOHAN	9.57

BE-CE Sem-7 Winter 2022 Result Analysis (TOP 03 SPI)			
Sr. No.	Enrolment No.	Name of Students	CPI
1	190990105066	SHAH DEEP YOGESH	9.69
2	190990105047	PATEL DHARABEN KALPESHBHAI	9.50
3	190990105020	HAJARIWALA KRISIL VIJAYKUMAR	9.42
	190990105072	VAIJAPURKAR KAUSHIK SANDEEP	9.39
	190990105043	PATEL ABHAY YOGESHKUMAR	9.35

UNIVERSITY EXAM RESULTS B.E. Semester-II, IV, VI & VIII SUmmer-2022

CHEMICAL ENGINEERING BRANCH

DE CE Sem-1 Winter 2022 (TOP 3)				
Sr. No.	Enrolment No.	Name of Students	SPI	CPI
1	220101101024	PRASHANT JAISWAL	10	10
2	220101101038	SAKSHI PAWAN PANDEY	10	10
3	220101101059	MAYANKKUMAR PATEL	10	10
4	220101101089	RONITKUMAR R SAHA	10	10

DE CE Sem-1 Winter 2022 (TOP 3)				
Sr. No.	Enrolment No.	Name of Students	SPI	CPI
1	210101101004	PRITEE SURYAKANT DIGHE	10.00	9.92
2	210101101014	AXIT DIVYESH KAPADIA	10.00	9.48
3	210101101049	VAJIDKHAN VILLAYATKHAN PATHAN	10.00	9.81

M.E. CE Sem-1 Winter 2022 (TOP 3)				
Sr. No.	Enrolment No.	Name of Students	SPI	CPI
1	220103101005	PATEL NIRMAL SURESHBHAI	8.72	8.72
2	220103101003	NASANE RENUKA RAVI	8.17	8.17
3	220103101008	SAURABH KUNDU	7.78	7.78

M.E. CE Sem-1 Winter 2022 (TOP 3)				
Sr. No.	Enrolment No.	Name of Students	SPI	CPI
1	210103101005	MANISH RAMESHBHAI NASIT	10	9.96
2	210103101013	MITAL BIPINCHANDRA VYAS	9.67	9.54
3	210103101003	PARTHKUMAR MAHESHKUMAR MODI	9.44	9.65

Chemical Engineering Students Participation in Various Events

Glimpse of Chemical Engineering Students participation during Sports Day and Reva Fest 2023

EVENTS

Half Day workshop on Managerial Skills

To celebrate fifth time best student chapter, award a half day workshop on Managerial skills was organized on 22 Feb 2023. A huge participation of 100 students took place where two sessions one from Mr. Brijesh Shah, GM Asian Paints at 2 pm and other session at 3.30 by Dr Mahesh Trivedi unit head BEIL Dahej were conducted. Bothe lectures were very informative and interactive as a lot more focus was given to develop a listening ability as well to create their own vision.

Alumni from Chemical Engg, admission batch 2012 (Veenit Mangroliya) sharing his experience and journey with aspirant budding Chemical Engineering students of B.E. Semester-II

PLACEMENT STATUS OF STUDENTS (BATCH 2019-23)

STUDENT NAME	PLACED INDUSTRY
BHATT MEET	UPL
BISWARI HARSH	UPL
BORRA RAVIKANTH	MIL
CHAUHAN DARSHAN	GFL
DUA PRATHAM	UPL
GANDHI KHUSH	MIL
GEHLOT KANISHK	UPL
GHEEWALA ARPITKUMAR	MIL
GOHIL ANURAGSINH	Piramal Pharma
GORASIYA VARUNBHAI	MIL
PRATHAM GOYAL	UPL
HAJARIWALA KRISIL	UPL
HIRPARA KEVIN	GFL
JADAV JAYDATTSINH	ZCL
MONIKA JADIYA	UPL
KASUNDRA KRUSHAL	NOCIL
LAD PRIYANK	UPL
MALAVIYA VIVEK	NOCIL
MEHTA KHUSHIBEN	Reliance
VISHWAS MISHRA	NOCIL
MODI BRONIT	Deccan
MODI KISHAN	Deccan
SIDDH MODI	MIL
NARIELWALA ADITYA	Deccan
PANCHAL VIRAJKUMAR	UPL
PANELIYA RAJ	UPL
PAREKH CHINTAN	UPL
PARMAR DIGVIJAY	NOCIL
PARMAR NIKUNJ	GFL
PARMAR PINTU	Deccan
PARMAR RAJVEERSINH	UPL
PARMAR VIRALKUMAR	UPL

STUDENT NAME	PLACED INDUSTRY
PATEL ABHAY	NOCIL
PATEL ARYAMAN	GFL
PATEL DAIVIK	UPL
PATEL DHARABEN	UPL
PATEL DHRUVKUMAR	Ion Exchange
PATEL HARSHKUMAR	Deccan
PATEL KINJALBEN	UPL
PATEL KRUNAL	Reliance
PATEL OM	UPL
PATEL PARTH	GFL
PATEL RAHULKUMAR	UPL
PATEL VATSALKUMAR	NOCIL
PATEL YASH	UPL
RANOLIYA VIRAT	Reliance
RATHOD NIRAV	Mahamaya lifesci.
SHAH DEEP YOGESH	UPL
SHAH SMITKUMAR	UPL
SHAIKH MASUD BILAL	NOCIL
HARSHRAJSINH SOLANKI	Piramal Pharma
PRIT THORIYA	MIL
RUSHIL VAGHASIYA	MIL
VAIJAPURKAR KAUSHIK	UPL
VYAS OM	Deccan
YADAV BHARGAVSINH	UPL
PRAJAPATI MEET	MIL
MANSURI MO. FAIZ	MIL
RANA JAY	GFL
MODI RONAK	Ion Exchange
DHRUVPALSINH CHAUHAN	GFL
RANA JAIMIN	Zcl
VAIBHAV CHAMPANERI	GFL
KARAN BARAD	GFL

Student Speaks

Voting Should be compulsory in Indian Democracy

नमस्ते प्रत्येक अतिथि गण एवं मेरे प्यारे मित्रो ।
140 करोड़ कि जनसंख्या के साथ हमारा भारत देश लोकशाही माध्यम से आगे बढ़ रहा है। जहां पे लोगो के साथ लोगो के लिए और लोगो के द्वारा शासन किया जाता है।
तो आवश्यक मतदान को अपनें रूप से सहमति देते हुवे अपना पक्ष आपके समक्ष प्रस्तुत करता हूं। हमारी चुनाव पद्धति में प्रत्येक मतदार को अपनी इच्छानुसार अपने मत का प्रयोग कर के इच्छानिय व्यक्ति को प्रतिनिधित्वता सौंपी जाति सकती है।
हर नागरिक परोक्ष रूप से सत्ता और शासन के संचालन मैं अपनी पसंदगी दे सकता हैं।
परंतु आवश्यकता का प्रश्न आज क्यूं हमारे समक्ष एक महत्व पूर्ण रूप से हमारे बीच जगह बना रहा है? क्यूं आज हम हमारे भारत देश के लिए महत्व पूर्ण भागीदारी देने से विचलित हो रहे हैं? क्यूं हम आज हम अपने कर्तव्यों से भाग रहें हैं?

क्या मुझे कोई समजायेगा क्यूं हम मतदान को अनावश्यक बताकर पाप के भागीदार बन रहे हैं। मतदान होने आवश्यक हैं में भावुक हो कर नही परंतु कई आंकड़ों से अपने प्रस्ताव को प्रस्तुत करता हूं। The Economic Times के एक रिपोर्ट के अनुसार '12वें राष्ट्रीय मतदाता दिवस के अवसर पर मंगलवार को जारी एक सर्वेक्षण के अनुसार, देश में 86 प्रतिशत लोग मतदान को अनिवार्य बनाना चाहते हैं। स्थान-आधारित सोशल नेटवर्क प्लेटफॉर्म पब्लिक ऐप द्वारा चार लाख से अधिक लोगों के नमूने के आकार के साथ किए गए अखिल भारतीय सर्वेक्षण में यह भी पाया गया कि 80 प्रतिशत से अधिक उत्तरदाता देश में वर्तमान मतदान प्रक्रिया पर भरोसा करते हैं।' भारत देश लोकशाही है। मतदान जैसे महत्व पूर्ण फैसले को महत्व पूर्ण रखने के लिए बहुमत हासिल किया गया है। तो क्या हम बस अलग अलग राष्ट्रों का उदाहरण देने के पश्चात यह सिद्धि नही हंसल कर सकते के भारत देश विश्व का सबसे बड़ा लोकशाही देश है जिसमे मतदान अनिवार्य है। भारत देश की आज की पीढ़ी होने पर अगर यह बात अमल करी गई तो मैं सारे राष्ट्रों के सामने हमारी छाती दो गुना बड़ी हो जाएगी और तब मै पूरे विश्व में गर्व से कह सकूंगा के में ऐसे भारत देश का नागरिक हूं जहां मत को सर्वोपरी महत्व दिया जाता है।

और खुद को विराम देते हुवे मै आखिर मै यही प्रस्ताव रखना चाहूंगा क्या हमारे भारत देश को विश्व का सर्व श्रेष्ठ बनाने की चाह रखने वाला यह युवान मतदान को सर्वोपरी आवश्यकता देने की चाह रखने वाला क्या यह विपक्षी ओ की और प्रस्ताव रख कर संपूर्ण तरीके से उनको गलत ठहरा सकता हूं।

आप सबका बहुत बड़ा ध्यानवाद मेरा प्रस्ताव सुनने के लिए। जय हिंद जय भारत।

Vishvam Patel
(B.E. Chemical Engineering, Sem-VI)

Rice Husk and Its Ash as Low-Cost Adsorbents in Water and Wastewater Treatment

- Ms. Dhara Patel, Lecturer, Chemical Engineering Department

Now a day, Environment pollution has been creating a harmful effect on world. Past few years its effect has been increase and reaches at a level which creates a problem in human, animals and also effect on cycle of food chain. These things are happening because of heavy metals, sludge, and industrial waste, establishing new company and increasing a population. Mostly heavy metals are released in the form of mining, preparation of alloy, in batteries, printed circuit board, manufacturing in metal plates etc.

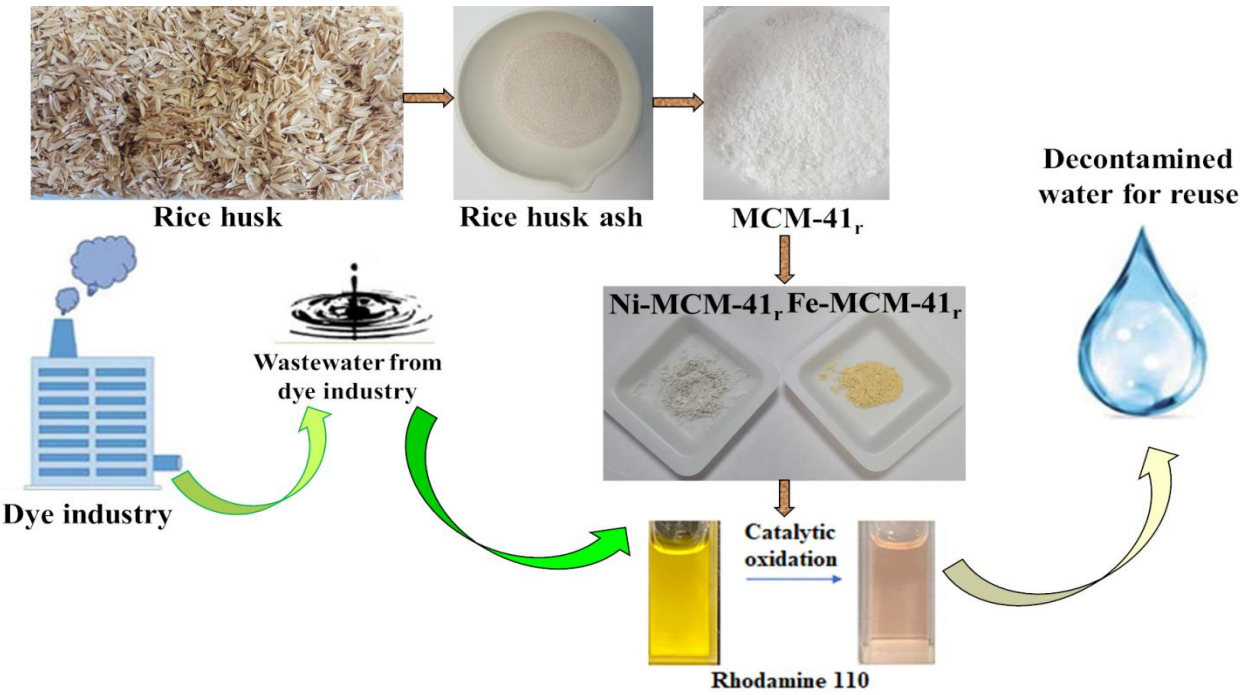


Figure - Efficient Rice-Husk-Derived Silica Nano catalysts for Organic Dye Removal from Water

To avoid the pollution from heavy metals in chemical industries various treatment methods are used. It can originate from natural sources. A presence of heavy metals on a surface of Earth and underground lead to soil pollution. A necessary process or treatment are required to remove heavy metals such as membrane filtration, reduction, adsorption/biosorption, ion-exchange, coagulation—flocculation, chemical precipitation, flotation and electrochemical method etc. But above technique is costlier in use there for select those methods which are economical and remove higher number of metals.

A heavy metal such as it contains copper, lead, Nickle, chromium, mercury etc. Due to these metals a various problem occurs on human health such as cancer, organ damage and breaking nervous system. To avoiding this effect, it is necessary to do a process on a heavy metal.

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CHEMICAL ENGINEERING MAGAZINE ARTICLES

Rice Husk and Its Ash as Low-Cost Adsorbents in Water and Wastewater Treatment

In recent time there are some agriculture methods are invented to remove the heavy or toxic compound. Agriculture by products is easily available from the field and also economical. It also does not create any pollution. These types of process are also called a biosorption process. A biosorption process is totally based on cost- efficient approach to remove heavy metals. A main Constituents present a biomass are cellulose, lignin, alcohol, aldehydes, ketones, carboxylic and phenol.

For the removal of heavy metals, some various adsorbents are available such as rice husk, rice straw, coconut husk, pomegranate peels, apple waste and tea leaves are used here. Most preferred and useful agriculture adsorption process is using a Rice husk for the removal of heavy or toxic compound from waste water.

Rice husk, which is a relatively abundant and inexpensive material, is currently being investigated as an adsorbent for the removal of various pollutants from water and wastewaters. Various pollutants, such as dyes, phenols, organic compounds, pesticides, inorganic anions, and heavy metals can be removed very effectively with rice husk as an adsorbent. Studies on the adsorption of various pollutants by rice husk materials are reviewed and the adsorption mechanism, influencing factors, favorable conditions, etc.

Rice husk also was applied as a silicate source to obtain mesoporous silica material. Characterization techniques confirmed the well-ordered mesophase and resemblance of mesoporous silica resulting from rice husk ash with one obtained from conventional silica sources. The mesoporous silica material was further used as catalyst support. The resulting catalysts were used for rhodamine 110 oxidation, proving high potential for oxidizing hazardous organic compounds, such as dyes from water, resulting in environmentally harmless products.
It is evident that rice husk and its ash can be potentially utilized for the removal of various pollutants from water and wastewaters.

This study highlights a sustainable route for renewable materials, with the resulting materials suitable for various applications, including catalysis.

Mrs. Dhara Patel,
Lecturer, Chemical engineering department,
UPL University of sustainable technology.

CHEMICAL ENGINEERING MAGAZINE ARTICLES

Ladder Polymer Membranes: A Promising Paradigm for Advanced Separation Technologies

Introduction:
Ladder polymers have emerged as a novel class of materials with a unique structure that distinguishes them from traditional polymer membranes. These membranes exhibit a ladder-like or ladder-shaped arrangement of repeat units, offering exceptional mechanical strength, thermal stability, and precise molecular selectivity. As a result, ladder polymer membranes have gained significant attention for their potential applications in various separation processes.

Structure and Advantages:
The defining characteristic of ladder polymers lies in their rigid and planar structure, comprised of alternating aromatic or heterocyclic rings. This distinctive arrangement endows the membranes with exceptional mechanical stability, rendering them more resistant to degradation and capable of withstanding demanding operating conditions. The enhanced stability and of ladder polymers extends the lifetime durability of the membranes, making them highly desirable for long-term use. But what truly gives ladder polymer membranes their "crunchy" appeal is their precise and uniform pore sizes. The well- defined structure of ladder polymers enables the creation of membranes with controlled molecular transport properties. By fine- tuning the size, shape, and functional groups of the ladder polymers, researchers can design membranes with high selectivity, allowing for efficient separation of specific gases or molecules. This precise control over molecular transport is pivotal for applications where selective separation is crucial, adding a delightful crispness to their performance.

Applications:
The potential applications of ladder polymer membranes are vast and span across diverse industries. In the realm of gas separation, these membranes have shown promise in carbon dioxide capture from flue gas streams, contributing to the mitigation of greenhouse gas emissions. Furthermore, ladder polymer membranes have exhibited excellent performance in hydrogen purification for fuel cells, enhancing the efficiency and reliability of this sustainable energy technology. Water purification and organic solvent filtration represent additional areas where ladder polymer membranes hold significant potential. The precise control over molecular transport offered by these membranes enables the removal of impurities and contaminants, leading to the production of clean water and high-purity solvents. Additionally, the chemical industry can benefit from ladder polymer membranes in the separation of specific organic compounds, facilitating more efficient and cost-effective processes.

Future Directions:
While ladder polymer membranes are a relatively recent development, ongoing research endeavors are focused on further improving their properties and performance. Scientists and engineers are exploring innovative synthesis methods, investigating the relationship between membrane structure and properties, and optimizing membrane design for enhanced selectivity and permeability.

Cont…

CHEMICAL ENGINEERING MAGAZINE ARTICLES

Ladder Polymer Membranes: A Promising Paradigm for Advanced Separation Technologies

In the coming years, advancements in ladder polymer membrane technology are expected to contribute to the development of more efficient and sustainable separation processes. The precise molecular selectivity, mechanical stability, and thermal resistance offered by these membranes have the potential to revolutionize diverse industries, including energy, environment, and chemical sectors. With their enticing "crunchy" attributes, ladder polymer membranes are set to deliver a delightful combination of performance and innovation.

Conclusion:

Ladder polymer membranes represent a promising paradigm in the field of advanced separation technologies. Their unique ladder-like structure, characterized by rigid and planar repeat units, provides enhanced mechanical strength, thermal stability, and precise molecular selectivity. With applications ranging from gas separation to water purification and organic solvent filtration, ladder polymer membranes offer the potential for improved efficiency, cost-effectiveness, and sustainability in various industrial processes. As research progresses and new advancements emerge, ladder polymer membranes are poised to play a pivotal role in addressing pressing challenges and driving innovation in separation technologies, while adding that extra "crunch" to the world of membranes.

Sanket Patel CE-6 (200990105013)

Two of our Chemical Engineering alumni, Kartik Chadderwala and Divyesh Yadav secured good ranks in the recently declared result of the GATE 2023 examination.

ALUMNI Column

Congratulations to Deepraj for representing at National Level Event and winning "PAR EXCELLENCE" award in 36th National Convention on Quality Concepts (NCQC-22) event held at Sambhaji Nagar.
- Deepraj (Admission batch 2017)

Congratulations to Janit Doshi (from Chemical Engineering, Admission batch 2012) for being recognized as certified user in Aspen Plus (Chemical Engineering Process Simulator)

It is a very good experience doing Post Graduation Diploma in Process Safety (PGDPS) at UPL University while working in the operations department as a chemical engineer
- **Suzauddin Mastiya** (Shift leader, CCP plant UPL-5 Jhagadia) Alumni from Chemical Engineering, Admission batch 2011

Congratulations JAYDEEP PATEL (Alumni from Chemical Engineering, Admission batch 2017) for starting a new job role as Process Engineer at Aarti Industries Ltd.

It's always privilege to visit our college. It was a great experience meeting our faculty members. It was great to see our campus grow.
- Jaimin Shukla (Admission batch 2014) during his visit to SRICT

Achievements

PUBLICATIONS

Taylor & Francis

Biotechnology and Genetic Engineering Reviews

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/tbgr20

Formation of polyhydroxyalkanoates using agro and industrial waste as a substrate – a review

Rekha Kanzariya, Alok Gautam, Sachin Parikh, Maulin Shah & Shina Gautam

Journal of Analytical and Applied Pyrolysis 171 (2023) 105951

Contents lists available at ScienceDirect

Journal of Analytical and Applied Pyrolysis

journal homepage: www.elsevier.com/locate/jaap

Pyrolytic conversion of agricultural residue using continuous auger reactor for resource recovery

Sivasankar Kakku [a], Sowkhya Naidu [a], Mukesh Bhatt [a], Anand G. Chakinala [a], Jyeshtharaj Joshi [b,c], Shina Gautam [d], Kaustubha Mohanty [e], Gaurav Kataria [a], Abhishek Sharma [a,f,*]

Taylor & Francis

Biotechnology and Genetic Engineering Reviews

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/tbgr20

Structure analysis and thermal stability of PHB recovered from sugar industry waste

Rekha Kanzariya, Alok Gautam, Sachin Parikh, Maulin Shah & Shina Gautam

Achievements

Achievements

processes

MDPI

Article

Co-Pyrolysis Behavior, Kinetic and Mechanism of Waste-Printed Circuit Board with Biomass

Sonalben B. Prajapati [1,2], Alok Gautam [2,3,*], Shina Gautam [2,3,*], Zhitong Yao [4], Fiseha Tesfaye [5,*] and Xiaoshu Lü [6]

Brazilian Journal of Chemical Engineering
https://doi.org/10.1007/s43153-023-00359-2

ORIGINAL PAPER

Check for updates

Experimental measurement and empirical modeling of surface tension of ammonium and phosphonium salt-based DESs

Krunal J. Suthar[1] · Milind H. Joshipura[2]

Biomass Conversion and Biorefinery
https://doi.org/10.1007/s13399-022-03515-9

ORIGINAL ARTICLE

Check for updates

The effect of cotton stalk concentration on morphology and fixing bromine content in char while on co-pyrolysis with non-metal fractions of PCB

Sonalben B. Prajapati[1,2] · Alok Gautam[3,2] · Shina Gautam[3,2]

Received: 1 September 2022 / Revised: 19 October 2022 / Accepted: 1 November 2022

Original Article

AN ENERGY-EFFICIENT ELECTROCHEMICAL PROCESS FOR THE EXTRACTION OF COPPER FROM SCRAP ELECTRICAL AND ELECTRONIC CIRCUIT

Sourav Choubey[1]*, Prerna Goswami[2], Shina Gautam[3]

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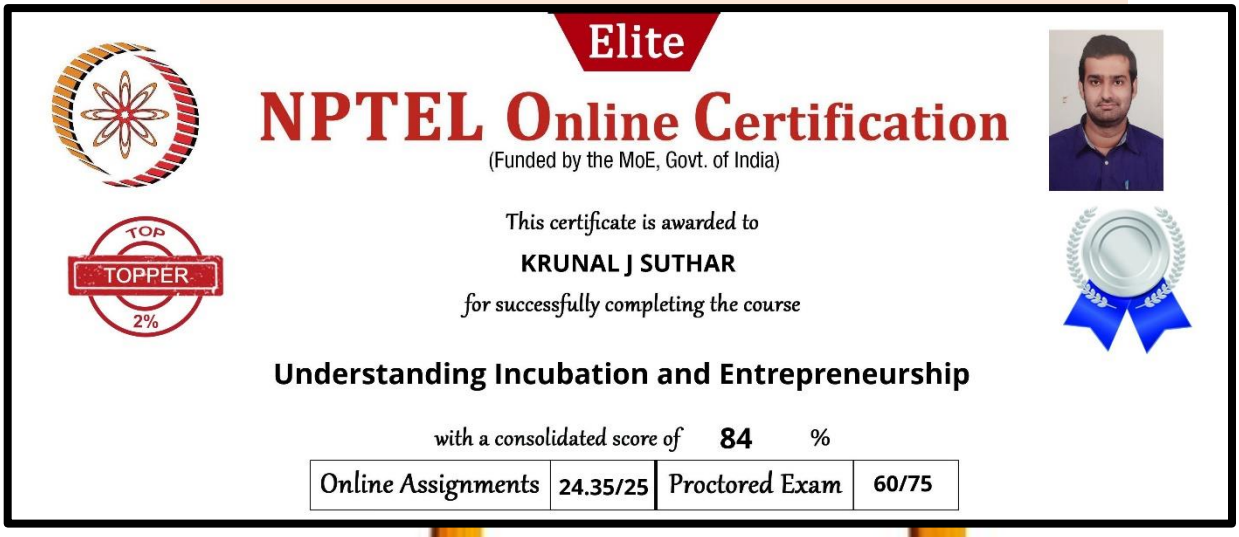
Corresponding Author: Sourav Choubey, Institute of Chemical Technology, Matunga, Mumbai, India.
E-mail: souravchoubey1@gmail.com

Achievements

Faculty Members Successfully Clearing NPTEL Online Certification Course



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

TOP TOPPER 2%

This certificate is awarded to

KRUNAL J SUTHAR

for successfully completing the course

Understanding Incubation and Entrepreneurship

with a consolidated score of 84 %

Online Assignments	24.35/25	Proctored Exam	60/75

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SUDEEP DEEPAK WADIA

for successfully completing the course

Physico-chemical Processes for Wastewater Treatment

with a consolidated score of 78 %

Online Assignments	24.03/25	Proctored Exam	54.34/75

Certificate ID: IICHE/2023/AD12935
Date of Issue: 15th May 2023

Online Internship Program (OIP)

10th March 2023 to 15th May 2023

Indian Institute of Chemical Engineers

Dr. H. L. Roy Building, Jadavpur University Campus, Kolkata- 700 032

CERTIFICATE OF COMPLETION

This certificate is hereby awarded to

DEWANSH R MISHRA

from SHROFF ROTARY INSTITUTE OF CHEMICAL TECHNOLOGY

who has successfully completed the INTERNSHIP PROGRAMME on the subject 6-SIGMA (YELLOW BELT) following all necessary criteria of the Institute with " A+ " Grade.

Grading System :
A+: 90-100%
A: 75-89%
B+: 65-74%
B: 55-64%

D M Butala, President, IIChE
P K Saxena, Honorary Registrar, IIChE
Dr. Avijit Ghosh, Honorary Secretary, IIChE, Convener, OIP

Dewansh Mishra (200990105044) has completed IIChe Online Internship Programme with A+ grade on the subject "6- SIGMA (YELLOW BELT)"

Achievements

Achievements

Chemical Engineering Semester-IV students participating and winning an event during Science Week celebration

Dipali Patel from Chemical Engg. Semester-IV students participating and winning an poster making competition during Science week celebration

Chinmay Mistry (200990105062) of CE-6 attended "FOOTPRINT 23" organized by "The Maharaja Sayajirao University of Baroda". It was organized between 3rd-5th of March 2023.
he won in two quest
1. "War of Words" - 2nd Prize
2. "Squid Game" - 3rd prize

NCC SW cadet, Cdt. **Keya Prajapati** from B.E. Chemical Engineering, Semester-II availed 2-week camp training at Army Attachment Camp, Gandhinagar from 1st May to 14th May, 2023.

Patel Vishwam K. (210990105504), Prajapati Dev P. (210990105503) of CE-6 participated in "All India Shree Nandlal Gadiya memorial Debate-2023" organised by Mewar University, Gangor, Chittorgarh Rajasthan.

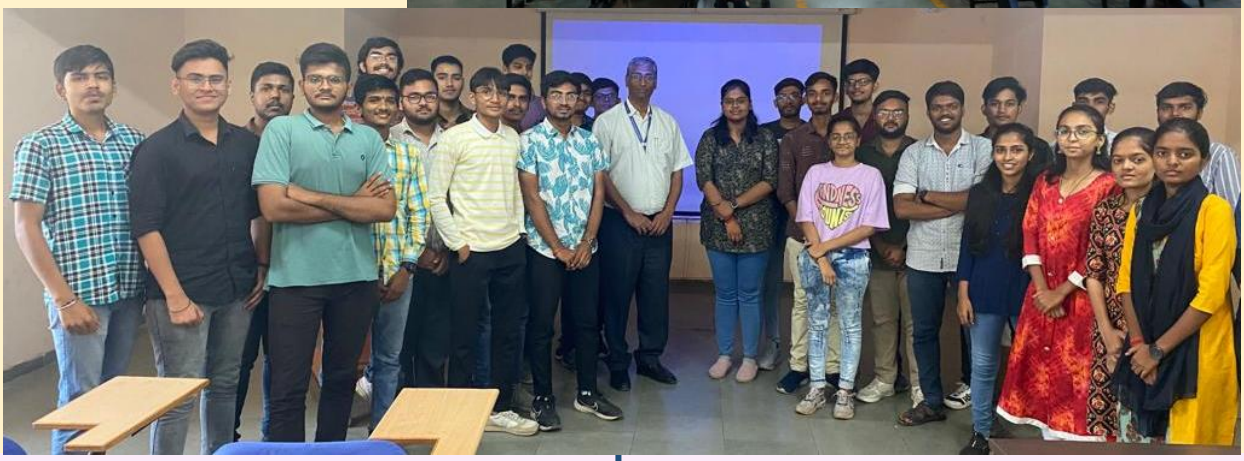
Participation of Chemical Engineering Students at Debate Competition

Student's Corner

Vishwam Patel (student coordinator) and Dev Prajapati (student coordinator) successfully coordinated the “Provakta” - Debate competition, Elocution and Extempore competition in the university campus. Winners of the competition is as follows

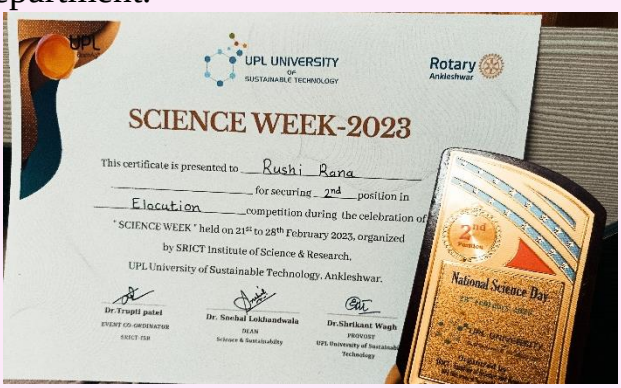
Elocution
1. Devarsh Pandit CE-6

Extempore
1. Dev Prajapati CE-6
2. Vishwam Patel CE-6



Swapnil Bhavsar of CE-6 (200990105048) has played for under 23 state level in cricket game on 15th June at Ahmedabad

Rushi Rana from CE-6 secured 2nd position in 'Elocution' competition on the topic 'science behind Indian culture' in the Event of 'SCIENCE WEEK' held during 21-28th February 2023 organized by SRICT-ISR department.



FROM THE DESK OF EDITOR..

The 11th issue of CHEMEZINE (Chemical Engineering e-Magazine) presents the activities conducted throughout the semester. We celebrated annual cultural and annual Sports day during the Even semester 2022-23 along with various co-curricular activities.
We bid farewell to our Semester-VIII (Summer 2023) students and wish them best luck for future endeavour.
We invite more participation from stake holders of our department.
We invite unpublished interesting articles from students and staff members of chemical engineering department.
We extend thanks to our reader. Kindly provide your valuable feedback. HAPPY READING AND DO WRITE US BACK.
- Editors

EDITORIAL BOARD MEMBERS

Dipali Patel
B.E. Semester-IV

Utsav Patel
B.E. Semester-VI

Kaushik Vaijapurkar
B.E. Semester-VIII

Krunal J. Suthar
Asst. Professor