Priyadarshini College of Engineering, Nagpur

Department of Chemical Engineering

Date: 10/10/2024

Venue: Final Year Classroom

GATE 2025 and Research Opportunities

The recent workshop was designed to inspire and guide bright students toward significant academic achievements. The primary focus was to encourage participation in the GATE 2025 examination and to foster a culture of research and publication.

GATE 2025 Preparation

Valuable insights into the GATE 2025 examination. Key topics covered included:

- **Understanding the Exam Pattern:** A detailed breakdown of the syllabus, marking scheme, and exam structure was presented.
- **Effective Study Strategies:** Strategies for efficient time management, focused learning, and consistent practice were discussed.
- **Importance of Previous Year Papers:** The role of previous year papers in understanding the exam's difficulty level, question patterns, and time management was emphasized.
- **Resource Materials and Online Platforms:** A comprehensive list of recommended textbooks, online courses, and study materials was shared.

Research and Publication Opportunities

The workshop also highlighted the significance of research and publication in academic careers. The following key points were addressed:

- **Identifying Research Interests:** Techniques for identifying research topics aligned with personal interests and current trends were explored.
- **Literature Review:** The importance of conducting thorough literature reviews to gain insights into existing research and identify research gaps was discussed.
- **Research Methodology:** The workshop covered various research methodologies, including experimental, theoretical, and simulation-based approaches.
- **Writing Research Papers:** Guidelines for writing high-quality research papers, including structure, formatting, and citation styles, were provided.
- **Conference Presentations:** Tips for effective conference presentations, including slide design, public speaking skills, and handling Q&A sessions, were shared.

Review and Feedback

The workshop received positive feedback from the participants. They appreciated the practical guidance, expert insights, and interactive sessions. Some key points from the feedback include:

- **Comprehensive Coverage:** The workshop covered a wide range of topics relevant to GATE preparation and research.
- **Expert Faculty:** The experienced faculty members provided valuable insights and answered questions effectively.
- **Interactive Sessions:** The interactive sessions fostered discussions and encouraged critical thinking.
- **Practical Tips:** The practical tips and strategies were helpful in planning study schedules and research projects.

The session was a significant step towards empowering bright students to excel in their academic pursuits. It equipped them with the necessary knowledge and skills to successfully prepare for GATE 2025 and engage in meaningful research. By fostering a culture of innovation and academic excellence, the workshop aims to inspire future researchers and leaders.




Date: 15/10/2024

Venue: Final Year Classroom

Embarking on a Journey of Innovation: Exploring Process Modeling and Simulation

The realm of process modeling and simulation offers a captivating avenue for aspiring researchers. By delving into this field, you can contribute to groundbreaking advancements in various industries, from chemical engineering to manufacturing. This report aims to illuminate the significance of process modeling and simulation and introduce you to powerful software tools that can propel your research endeavors.

The Power of Process Modeling and Simulation

Process modeling and simulation involve creating mathematical representations of real-world systems to analyze, optimize, and predict their behavior. By leveraging these techniques, researchers can:

- **Optimize Process Design:** Identify optimal operating conditions, minimize energy consumption, and maximize productivity.
- **Predict Process Performance:** Anticipate potential bottlenecks, disturbances, and safety hazards.
- **Accelerate Product Development:** Rapidly prototype and test new products and processes.
- **Enhance Decision-Making:** Make informed decisions based on data-driven insights.

Leveraging Software Tools for Research Excellence

To effectively undertake process modeling and simulation, mastering specialized software tools is crucial. Here are three essential tools that can significantly enhance your research capabilities:

1. **Aspen Plus:**
    - A comprehensive process simulation software package widely used in the chemical industry.
    - Enables modeling and simulation of complex chemical processes, including distillation, reaction, and separation.
    - Offers a vast library of thermodynamic and transport property models.
2. **MATLAB:**
    - A versatile mathematical computing environment for numerical analysis, data visualization, and algorithm development.
    - Provides powerful tools for solving differential equations, optimization, and control system design.
    - Can be integrated with other software, such as Aspen Plus, to extend its capabilities.
3. **Mathcad:**
    - A powerful engineering calculation and documentation tool.
    - Allows for easy creation of mathematical models, equations, and graphs.

  - Facilitates the rapid prototyping and testing of design ideas.

Embracing the Future of Process Engineering

By embracing process modeling and simulation, you can position yourself at the forefront of technological innovation. As you embark on your research journey, consider exploring the following areas:

- **Advanced Process Control:** Develop intelligent control strategies to improve process stability and efficiency.
- **Sustainable Process Design:** Design environmentally friendly processes that minimize waste and energy consumption.
- **Digital Twin Technology:** Create virtual replicas of physical processes to optimize operations and maintenance.
- **Machine Learning and Artificial Intelligence:** Apply these techniques to enhance model accuracy and predictive capabilities.

Remember, the future of process engineering lies in the hands of innovative researchers. By leveraging the power of process modeling and simulation, you can contribute to a more sustainable, efficient, and prosperous world.




Priyadarshini College of Engineering, Nagpur
Department of Chemical Engineering

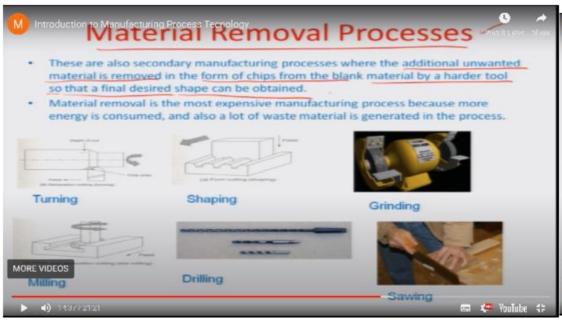
Date: 15/03/2024

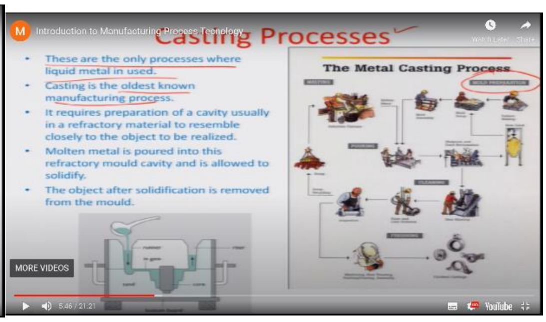
Venue: 2nd Year Classroom

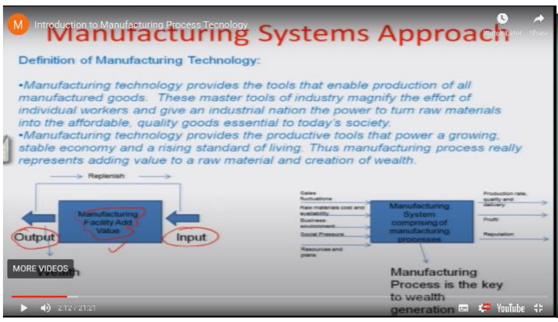
The expert lecture on Manufacturing Process Technology by Prof. Shantanu Bhatacharya, IIT Kanpur, provided a comprehensive overview of various manufacturing processes. The lecture covered fundamental concepts, including metalworking, casting, polymer processing, additive manufacturing, and advanced manufacturing technologies. The professor's expertise and engaging delivery style made the complex topics easily understandable.

The personal counseling session focused on academic performance, stress management, and career goals. The counselor provided valuable advice and strategies to improve time management, reduce stress, and set realistic academic goals. The session was supportive and helped in gaining clarity on personal challenges.

Overall, both the lecture and counseling session were informative and beneficial. The knowledge gained from the lecture will be helpful in understanding the principles of manufacturing processes. The advice received during counseling will be implemented to enhance academic performance and personal well-being.








Introduction to Manufacturing Process Tecnology
Manufacturing Process Technology- Module 1
(Introduction)
Instructor: Shantanu Bhattacharya (PhD)
Department of Mechanical Engineering
Indian Institute of Technology Kanpur
MORE VIDEOS


YouTube
write a one-page report for the expert lecture conducted and personal counseling and NPTEL Lecture on Manufacturing Process Technology
Introduction to Manu...
INTRODUCTION TO
TURING PROCESS
HNOLOGY
Introduction to Manufacturing Process Tecnology
Manufacturing Process Technology -Part I




A CO-PO mapping exercise identified gaps in Program Outcomes (PO) 6, 8, 9, 10, 11, 12, and Program Specific Outcome (PSO) 3 for the Nanoscience and Nanotechnology subject. To bridge these gaps, the following pedagogical strategies were implemented:

- **Poster and presentation activities** to encourage critical thinking and communication skills.
- **Exploration of topics beyond the syllabus** to broaden students' knowledge base.
- **Integration of Minitab software** for process optimization.
- **Development of a live model** for nano-material synthesis.
- **Utilization of FullProf and High X'Pert software** for advanced characterization techniques.

These enhancements aim to equip students with the necessary skills and knowledge for successful careers in nanoscience and nanotechnology.

Poster and Presentation Activities

PO6, PO9, PO10: Students develop critical thinking, problem-solving, and communication skills by researching, analyzing, and presenting nanoscience topics.

PO8: Students can practice research and development methodologies by selecting a relevant topic and designing their research approach.

Topics Beyond the Syllabus

PO5, PO6, PO8, PO11, PO12: By exploring advanced topics, students enhance their critical thinking, research, and lifelong learning abilities.

PO9, PO11: Students can apply their knowledge to real-world challenges by exploring emerging trends in nanotechnology.

Minitab Software Utilization

PO5, PO6, PO9: Students learn to analyze data, optimize processes, and solve problems using statistical tools.

PO5, PO8: Students can apply Minitab for experimental design and data analysis in their research projects.

Live Model for Nona-Material Synthesis

PO9, PO11, PO12: Students gain hands-on experience in material synthesis, understanding the ethical implications of nanomaterial development.

PO8: Students can contribute to the development of the live model as a research project.

FullProf and High X'Pert Software

PO8, PO9, PO11: Students develop proficiency in advanced characterization techniques essential for research and problem-solving.

PSO3: Direct alignment with the program-specific outcome of mastering characterization techniques.

Priyadarshini College of Engineering, Nagpur

Department of Chemical Engineering

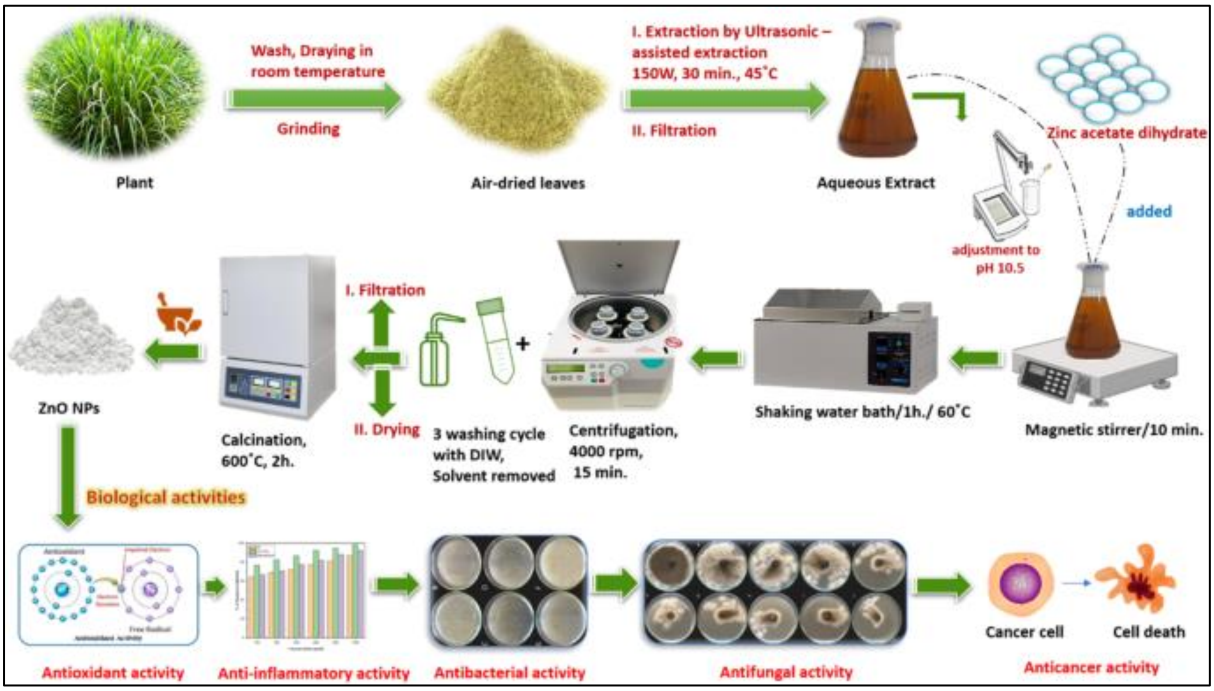
Assessment and Evaluation

Sr. No.	Name of students	Activity Name	Date of Consignment	Marks out of 20
Activity 1	Aniket	TTT Diagram	20/07/2023	15
	Anup		27/07/2023	12
Activity 2	Anshul	precipitation and co-precipitation method	20/07/2023	10
	Abhishek		17/08/2023	12
Activity 3	Annuradha	Colloidal method	20/07/2023	15
	Bhagyashri		03/08/2023	15
Activity 4	Bhavik	Review of ZnO NPs Synthesis	20/07/2023	15
	Bhuneshwari		18/07/2023	17
Activity 5	Vaishanvi	Ultrasonication/ Sonochemical Method	20/07/2023	15
	Damini		31/08/2023	18
Activity 6	Deekshita	Kinetics of Nano synthesis	20/07/2023	17

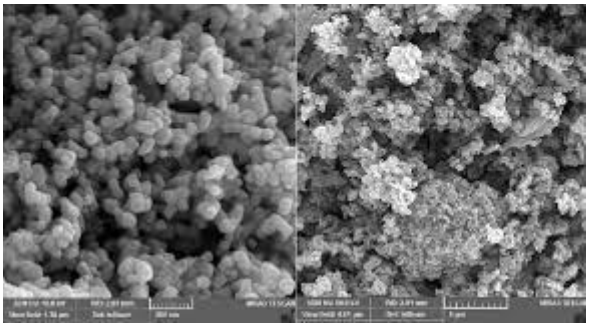
	Bhairavi		05/09/2023	17
Activity 7	Gaurav	Applications of nanomaterials in different Area	20/07/2023	15
	Kunal		08/09/2023	15
Activity 8	Omkar	Characterization of NPs	20/07/2023	0
	Priyanshu		14/09/2023	7
Activity 9	Rakshit	Mini Tab utilization for process optimization	20/07/2023	18
	Riya		21/09/2023	17
Activity 10	Samiksha	FullProf and High X'Pert Software	20/07/2023	17
	Sarthaki		26/09/2023	18
Activity 11	Shreyash	solgel method synthesis of ZnO NPs	20/07/2023	17
	Trishan		29/09/2023	17

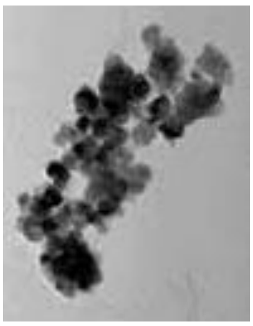
Overall Remark: The proposed strategies effectively address identified deficiencies in critical thinking, research, practical application, communication, and ethical considerations. The integration of advanced software and practical experiences is commendable. To enhance the impact, consider incorporating specific assessment methods to measure the effectiveness of these strategies in achieving the desired learning outcomes.

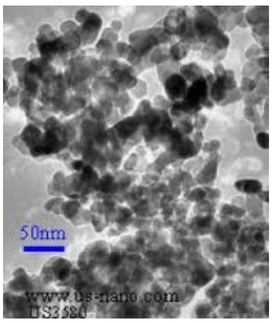
Green Synthesis of ZnO NPs



Characterization of ZnO NPs (SEM & TEM)



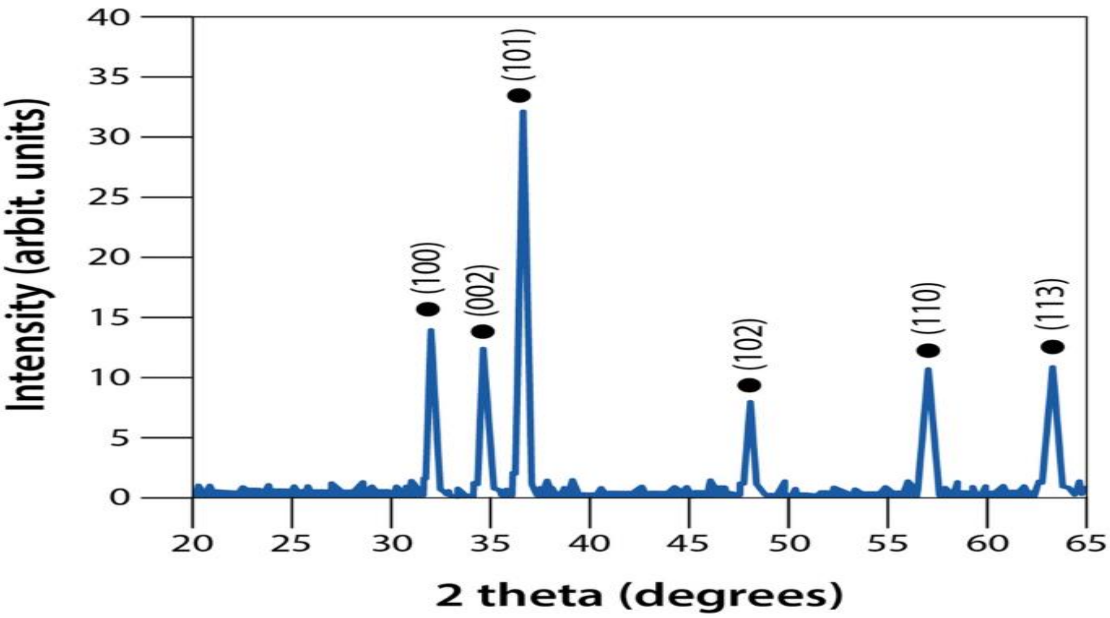




FullProf and High-Score Plus for XRD of ZnO Nanoparticles

HighScore Plus is a user-friendly software package focused on qualitative and quantitative phase analysis. It's often used as a preliminary step before moving to more advanced refinement programs like FullProf.

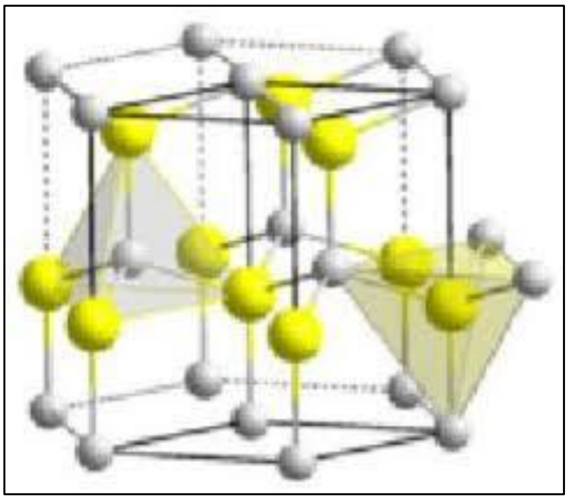
- **Phase identification:** Quickly identifies crystalline phases present in the sample by comparing the diffraction pattern to a database of known patterns.
- **Quantitative phase analysis:** Determines the relative amounts of different phases in a mixture.
- **Peak fitting and integration:** Provides tools for analyzing peak shapes and calculating peak areas.
- **Search-match functionality:** Efficiently searches for matching patterns in a crystallographic database.



XRD (X-ray Diffraction) is a powerful technique for characterizing the crystalline structure of materials. When dealing with nanoparticles, like ZnO, it becomes crucial to accurately analyze the diffraction patterns obtained. This is where software like FullProf and HighScore Plus come into play.
FullProf is a comprehensive Rietveld refinement program. It's particularly suited for complex crystallographic structures and offers a wide range of capabilities:

- **Rietveld refinement:** This is a least-squares refinement method used to fit a theoretical diffraction pattern to an observed one. It allows for the determination of lattice parameters, atomic positions, crystallite size, and microstrain.
- **Structure solution:** For unknown structures, FullProf can be used to solve the crystal structure from the diffraction data.
- **Magnetic structure refinement:** While not directly related to ZnO, FullProf can also refine magnetic structures.

Crystal Structure of ZnO NPs

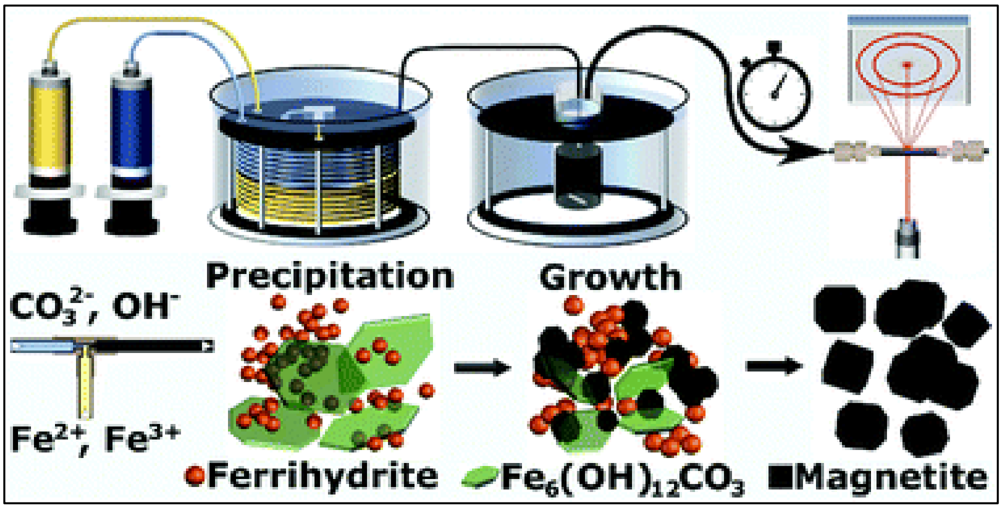


Key features for ZnO nanoparticle analysis:

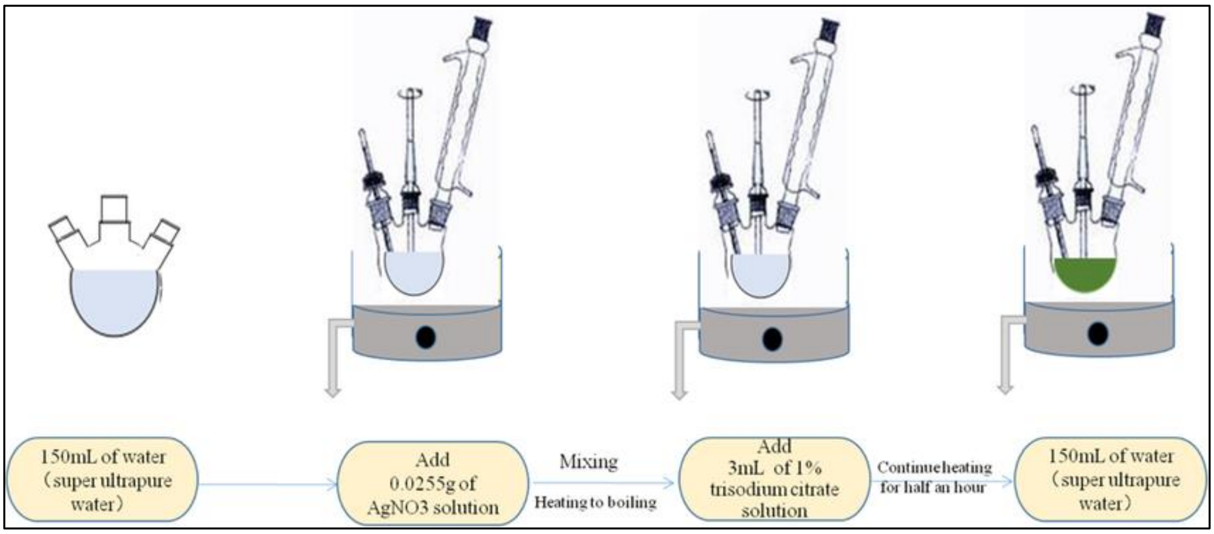
- Accurate determination of lattice parameters to calculate particle size using Scherrer's equation.
- Quantification of phase purity by fitting different ZnO phases (wurtzite, zincblende, etc.).
- Determination of crystallite size and microstrain using profile broadening analysis.
- Calculation of preferred orientation if present.

Key features for ZnO nanoparticle analysis:

- Identification of ZnO phase (wurtzite, zincblende) and potential impurities.
- Calculation of average crystallite size using Scherrer's equation (although less accurate than FullProf).
- Determination of lattice parameters.
- Qualitative analysis of preferred orientation.



Growth mechanism of the co-precipitation of iron oxide nanoparticles



Schematic illustration of the method of preparation silver colloidal nanoparticles by chemical reduction.

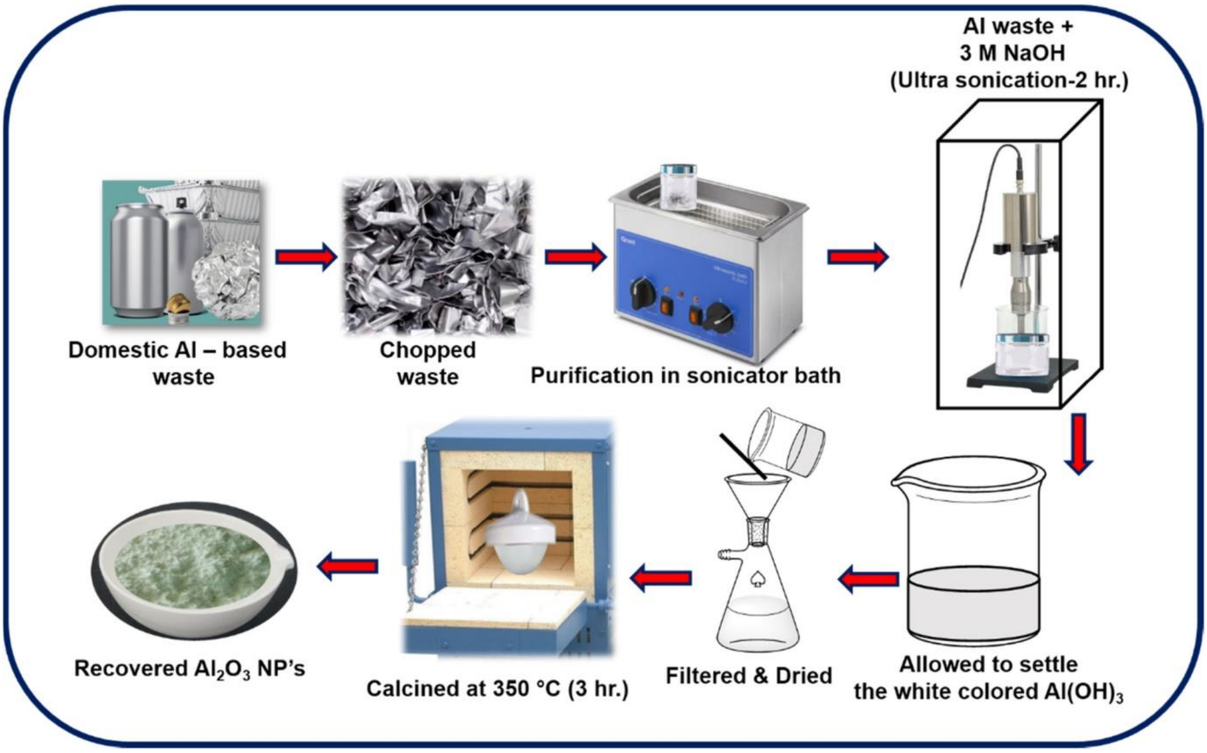
Literature Review of ZnO NPs Synthesis

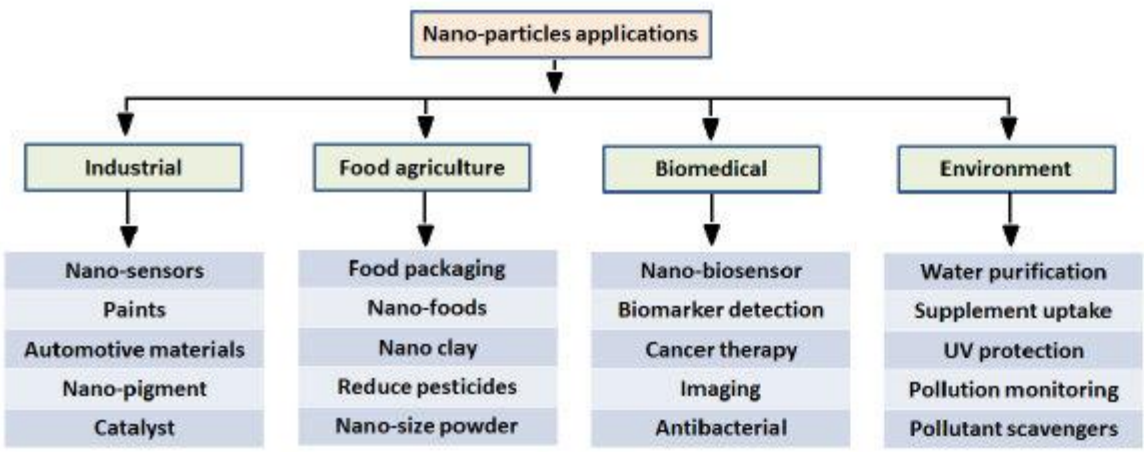
Sr. No.	Synthesis Method	Calcination Temperature (°C)	Average Particle Size (nm)	Characterization Techniques	Applications
1	Precipitation	400	30-50	XRD, SEM, TEM, FTIR, UV-Vis	Photocatalysis, sensors, cosmetics
2	Sol-Gel	500	25-40	XRD, SEM, TEM, FTIR, XPS	Antimicrobial, drug delivery
3	Hydrothermal	200	10-20	XRD, SEM, TEM, FTIR, BET	Dye-sensitized solar cells, gas sensors
4	Microwave-Assisted	300	15-35	XRD, SEM, TEM, FTIR, UV-Vis	Water purification, antibacterial
5	Combustion	550	40-60	XRD, SEM, TEM, FTIR, EDX	Catalysts, pigments
6	Biological	NA	20-40	XRD, SEM, TEM, FTIR, UV-Vis	Biomedical, agriculture
7	Chemical Vapor Deposition (CVD)	NA	5-10	XRD, SEM, TEM, AFM	Electronics, optoelectronics

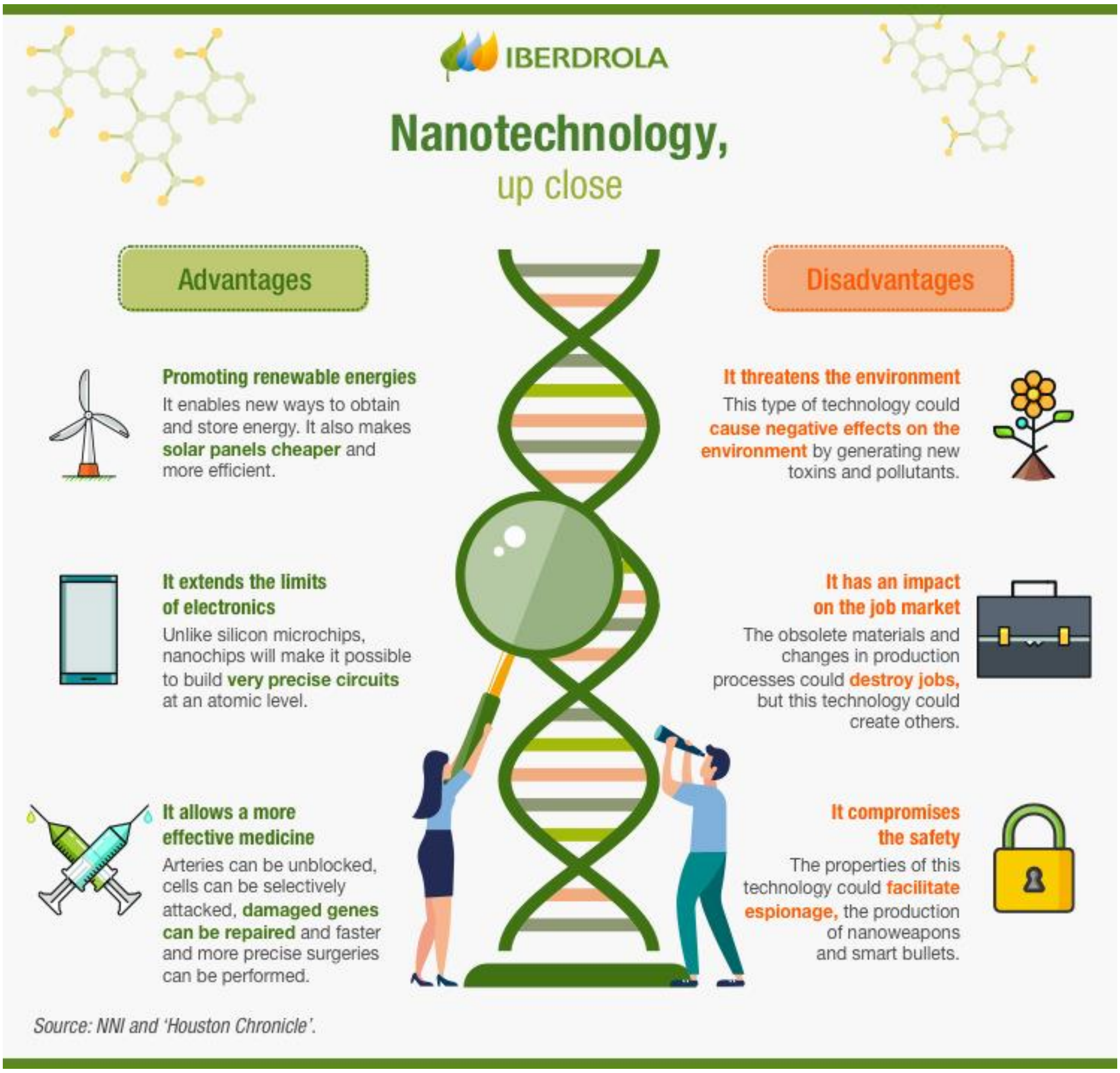
Priyadarshini College of Engineering, Nagpur

Department of Chemical Engineering

Sono chemical Assisted Leaching of Aluminium Oxide Nanoparticles from Domestic Aluminium Wastes as Non-Toxic Electrode Material for Energy Storage Application







MiniTab for Nanoparticle Synthesis Process Optimization

MiniTab is a powerful statistical software widely used in various fields, including process optimization. Its application in nanoparticle synthesis can be instrumental in enhancing product quality, reducing costs, and improving process efficiency.

[1. Process Improvement for Service Industries - Minitab]

Key MiniTab Tools for Nanoparticle Synthesis Optimization

1. **Design of Experiments (DOE):**

- Identify critical process parameters: Pinpoint factors that significantly influence nanoparticle properties (size, shape, distribution, etc.).
- Optimize process conditions: Determine the optimal combination of parameters to achieve desired nanoparticle characteristics.
- Reduce experimentation time: Efficiently explore the design space by minimizing the number of experiments.

2. **Response Surface Methodology (RSM):**
   - Model the process: Develop mathematical equations to predict nanoparticle properties based on process variables.
   - Optimize response: Find the optimal process settings to maximize or minimize a specific response (e.g., particle size, yield).
   - Visualize the response surface: Create 3D plots to understand the interaction between variables and their impact on the response.
3. **Regression Analysis:**
   - Model relationships: Establish correlations between process parameters and nanoparticle properties.
   - Predict outcomes: Estimate nanoparticle characteristics based on input parameters.
   - Identify significant factors: Determine which variables have the most influence on the response.
4. **Capability Analysis:**
   - Assess process performance: Evaluate how well the process meets specified nanoparticle requirements.
   - Identify process variation: Determine the sources of variation in nanoparticle properties.
   - Improve process consistency: Implement measures to reduce process variability.
5. **Control Charts:**
   - Monitor process stability: Track nanoparticle properties over time to identify trends and anomalies.
   - Detect process shifts: Early warning of process deviations that could impact product quality.
   - Implement corrective actions: Take timely steps to address process issues.

Specific Applications in Nanoparticle Synthesis

- Optimization of reaction conditions: Temperature, pressure, pH, reactant concentrations, and mixing speed can be optimized to control nanoparticle size and shape.

- Improvement of particle size distribution: Reduce variability in nanoparticle size by identifying and controlling key process parameters.
- Enhancement of nanoparticle yield: Maximize product output while maintaining desired quality attributes.
- Reduction of impurities: Minimize contaminants in the final product by optimizing process conditions and cleaning procedures.

Example Workflow

1. Define the problem: Clearly articulate the optimization goal (e.g., minimize particle size, maximize yield).
2. Identify critical process parameters: Select variables that are likely to influence nanoparticle properties.
3. Design and conduct experiments: Use DOE to efficiently explore the design space.
4. Analyze data: Employ regression analysis and RSM to model the process and identify optimal conditions.
5. Validate the model: Verify the accuracy of the model through additional experiments.
6. Implement process changes: Modify process parameters based on optimization results.
7. Monitor process performance: Use control charts to track process stability and identify areas for improvement.

By effectively utilizing MiniTab's capabilities, researchers and engineers can significantly enhance the efficiency and effectiveness of nanoparticle synthesis processes, leading to improved product quality and reduced development costs.

One Page Report

Nanoscience and Nanotechnology Curriculum Enhancement

A CO-PO mapping revealed gaps in the Nanoscience and Nanotechnology curriculum. To address these, we integrated poster presentations, advanced topic exploration, software tools (Minitab, FullProf, High X'Pert), and a live synthesis model. These enhancements aim to improve critical thinking, research, practical skills, and ethical understanding. Initial student performance on related activities is promising but requires further assessment to gauge overall effectiveness.

Key enhancements:

- Critical thinking and problem-solving through poster presentations and advanced topics.
- Research and development skills fostered through projects and software applications.
- Practical experience gained through live synthesis model and characterization techniques.
- Ethical considerations integrated into nanomaterial synthesis studies.

Dr. Payal N. Bhautik
Subject Teacher

Dr. S. R. Mote
HOD, Chemical Engineering, PCE, Nagpur

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Organized by: Department of Chemical Engineering (Subject Specific)

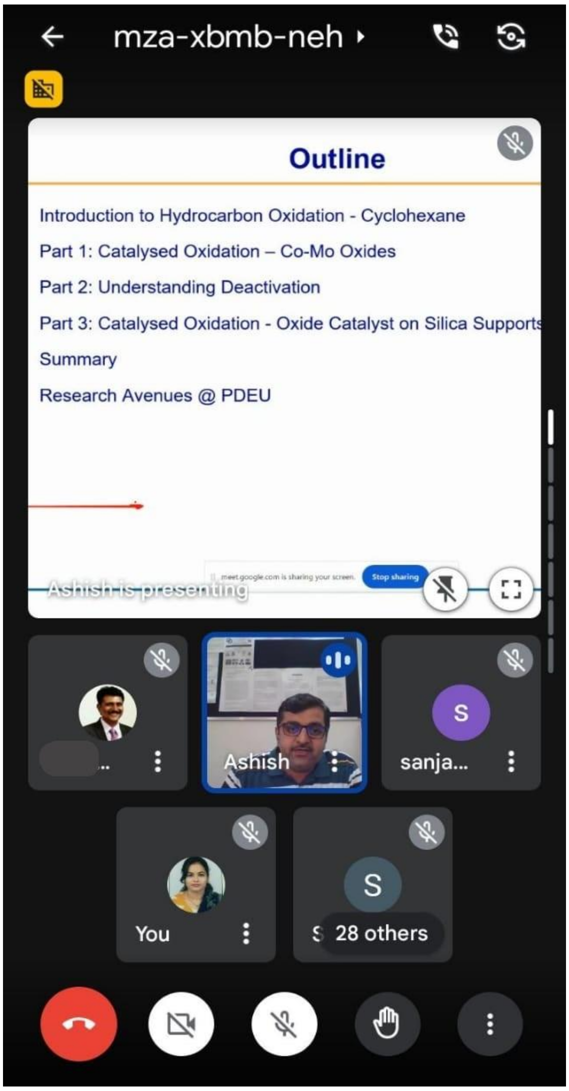
Participated by: V Semester Students

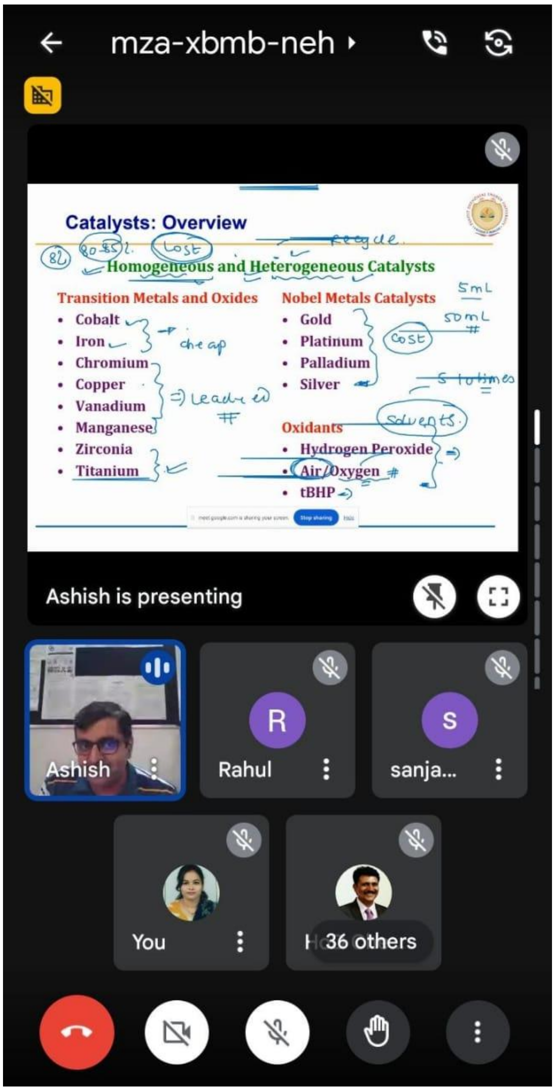
Mode of Conduction: Online **Date:** 2nd September, 2024

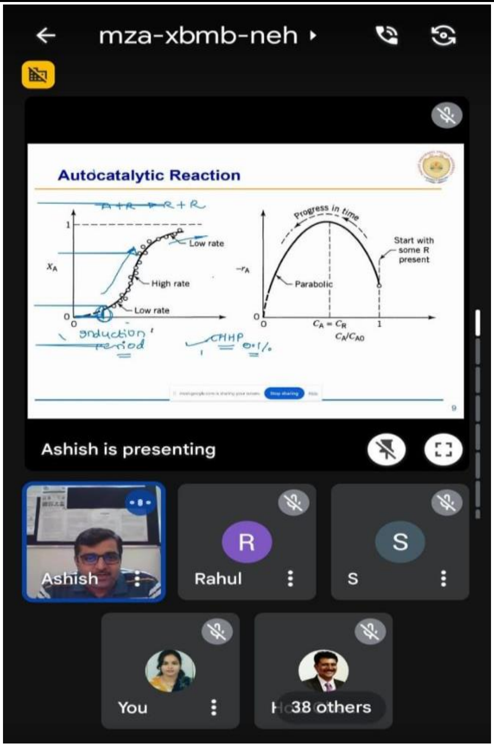
Name of the event: Expert Talk on Recent Trends of Homogeneous Catalytic Reactions for Chemical Reaction Engineering

Purpose: To motivate Bright Students in Core Subject area with technical industry based knowledge.

Faculty Incharge: Mrs. Anjali Kurve-Bangre







Remarks/Conclusion:

Department of Chemical Engineering organized the Expert Talk on Recent Trends of Homogeneous Catalytic Reactions for Chemical Reaction Engineering by Dr.Ashish Unnarkat (Assistant Professor in Chemical Engineering Department, School of Technology, Pandit Deendayal Petroleum University (PDPU), Gandhinagar, Gujarat) with https://meet.google.com/mza-xbmb-neh link on 2nd September, 2024 from 4 to 5 pm.

This Expert Talk held on Google meet platform for students; who were beneficiated with technical engineering knowledge based on industrial recent trends in catalysis. Mrs.Anjali Kurve-Bangre (CRE-I Subject Incharge) organized this Expert talk for Bright students as well as all interested students.

Students enriched with catalyst review, autocatalytic reactions knowledge with its recent trends out of the bookish knowledge and resolved their doubt regarding Chemical Reaction Engineering-I Subject.

Mrs.Anjali Kurve-Bangre	Dr. Vivek Bhange
(CRE-I Subject Incharge)	Head, Dept. Of Chemical Engg.

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Organized by: Department of Chemical Engineering (Subject Specific)

Participated by: V Semester slow learners Students

Mode of Conduction: Offline

Name of the event Action Taken (Personal Counselling) for slow learners in Chemical Reaction Engineering-I

Purpose: To motivate Weak Students in Core Subject area and to clear their doubts regarding subject.

Faculty Incharge: Mrs. Anjali Kurve-Bangre

Glimpses of Action Taken for Slow Learners:

Remarks/Conclusion:

Subjects Incharge conducted personal counselling of every weak / slow learner student to motivate him or her in particular subject and to clear their doubts regarding subject.

This personal counselling held in Cabin for students who scored less than 45% marks in Chemical Reaction Engineering–I Subject. Mrs.Anjali Kurve-Bangre (CRE-I Subject Incharge) conducted this personal counselling for Weak students as well as other students too.

Students beneficiated with technical knowledge and resolved their doubt regarding Chemical Reaction Engineering-I Subject.

Mrs.Anjali Kurve-Bangre
(CRE-I Subject Incharge)

Dr. Vivek Bhange
Head, Dept. Of Chemical Engg.

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Topic beyond syllabus /Personal grooming to Encourage Advance Learners

Subject: Chemical Reaction Engineering-I **Semester: V**

Venue: Personal Cabin (HT Lab) **Time: 4pm -5pm**

Resource person: Prof.Anjali Kurve-Bangre

Mrs.Anjali Kurve-Bangre

(CRE-I Subject Incharge)

Dr. Vivek Bhange

Head, Dept. Of Chemical Engg.

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LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Encouraging bright students

Discussing the GATE in Classroom and in Cabin:

Sr.No	Sem	Name of Student	Subject /Topic discuss	GATE/ I.E.S	signature
1	V	Prachi G Patel	CRE- I & II		
2	V	Sonali P. Zode	CRE- I & II		
3	V	Himanshu Gonnade	CRE- I & II	GATE 2023 Q.17, Q-20, Q-47, Q-58, Q-59, Q-60, Q-61	
4	V	Sanket Bagmare	CRE- I & II		
5	V	Mansi Kathoke	CRE- I & II		
6	V	Piyush M. Chawade	CRE- I & II		
7	V	Sahil Boldhane	CRE- I & II		
8	V	Ved Chacharkar	CRE- I & II	GATE 2022 Q.26, Q-27, Q-50, Q-62, Q-63, Q-64, Q-65	
9	V	Aman Kakde	CRE- I & II		
10	V		CRE- I & II		
11	V		CRE- I & II		
12	V		CRE- I & II		

GATE 2020

GATE 2021

GATE 2022 QP

GATE 2023

Glimpses

Mrs.Anjali Kurve-Bangre

(CRE-I Subject Incharge)

Dr. Vivek Bhange

Head, Dept. Of Chemical Engg.

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Interaction in Library with Bright Students to Encourage

Subject:	**Chemical Reaction Engineering-I**
Topic / Area:	**Kinetics of the Chemical Reaction** **Batch Vs Semi Batch Vs Flow reactors**
Sub topic:	• **Designing Parameters of Industrial Reactors** • **Desired Product selectivity & maximization**
Faculty facilitators:	**Prof. (Mrs) Anjali Kurve-Bangre**
Venue:	**Library reading room**
Semester:	**V Sem**
Date :	**06/09/2024**

Books referred:

Sr. No.	Name of Book	Author	Topic	Page No
1.	Elements of Chemical Reaction Engineering, 3 rd Edition, PHI, 2002.	H. S. Fogler		
2.	Reaction Kinetics for Chemical Engineers, McGraw Hill, 1959.	S. M. Walas		

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Extra class for topic beyond syllabus to Encourage Advance Learners

Sem: V **Date: 06/09/2024**

Subject: Chemical Reaction Engineering-I **Venue: Library**

Resource person: Prof.Anjali Kurve-Bangre **Time: 4pm -5pm**

Subject teacher (Student Forum Coordinator)

Prof.Anjali Kurve-Bangre
Subject Teacher
Deptt. Chemical Engg.

Dr. V. P. Bhange
Head,
Deptt. Chemical Engg.

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Interacting with alumni who is working in particular area in which the student is interested.

Prof. Snehal Deshmukh (Alumni Coordinator)

Mrs.Anjali Kurve-Bangre (Subject Incharge)

Sr.No	Sem	Name of Student	**Subject/Topic**	**Name of Alumni/batch**	**Designation/Name of Industry /Specialized area of Alumni**
1	VI	Aarjavi Manoj Joshi	Preparing students for diffrent competative exam	Mr. Vivek Jangade (2006-2010)	Executive Director, (Project) Ecologique Science Technik Pvt.Ltd. Committed to Planet, Nagpur.
2	VI	Gauri S. Deshpande			
3	VI	Kirti Sunil Raut			
4	VI	Mansi P. Kathoke			
5	VI	Prachi Gunwant Patel			
6	VI	Sonali P. Zode			
7	VI	Suhani Dilip Korde			
8	VI	Vividha D Parate			
9	VI	Abbas Khilchipurwala			
10	VI	Aditya Swamy			
11	VI	Piyush Moreshwar Chawade			
12	VI	Rajesh Vijay Patil			
13	VI	Ved Chacharkar			

Mr Vivek Jangde was one of the Project Associate in CSIR-NEERI, Nagpur and also Completed M.E.by Research from VNIT,Nagpur in association with CSIR-NEERI,Nagpur.

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LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Organized by: Department of Chemical Engineering (Subject Specific)

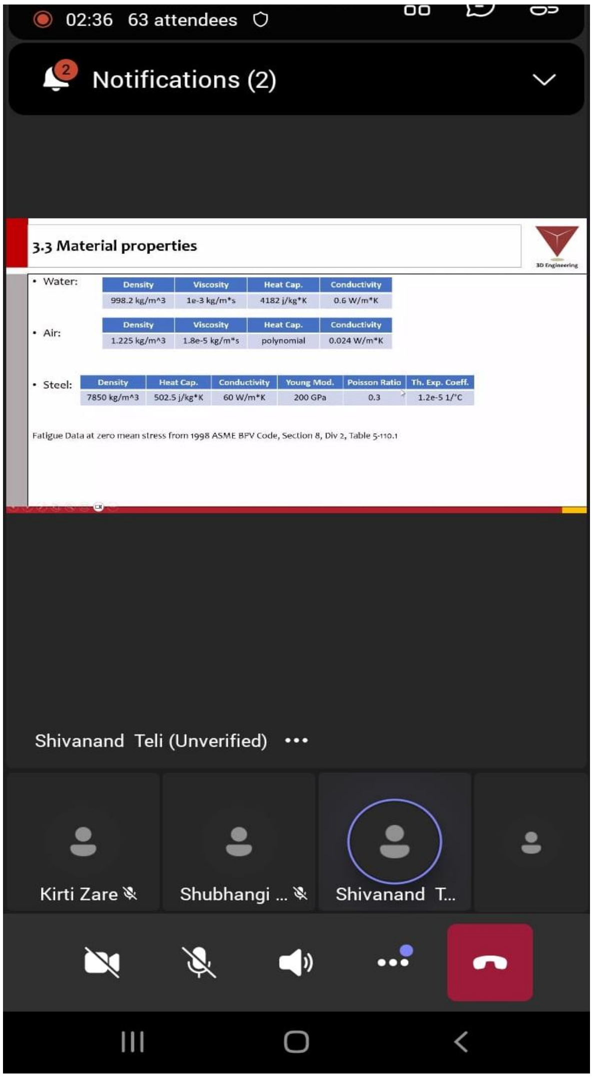
Participated by: VII Semester Students

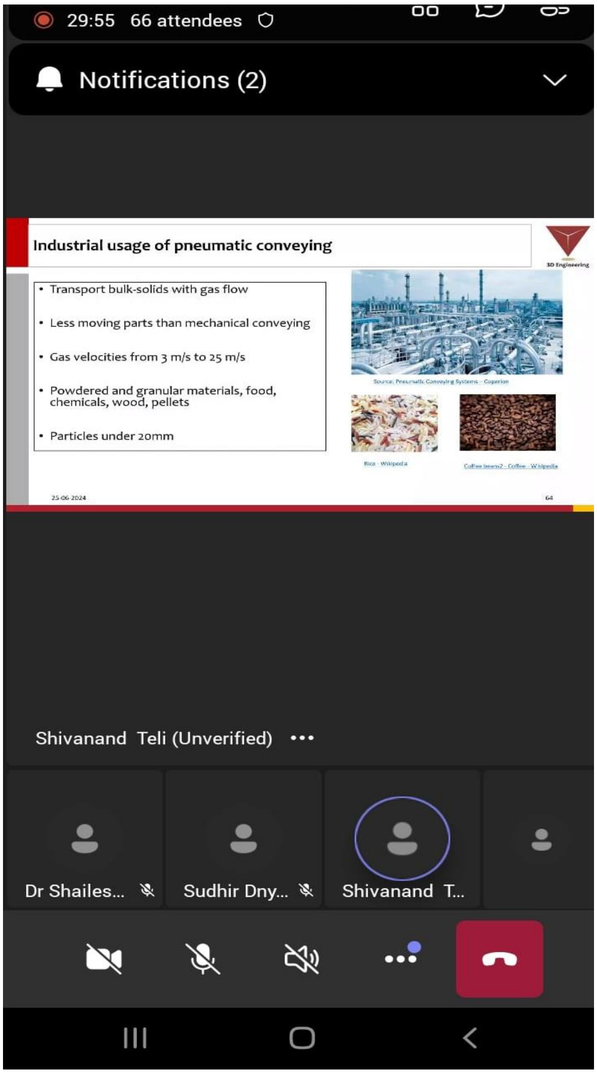
Mode of Conduction: Online **Date:** 31st August, 2024

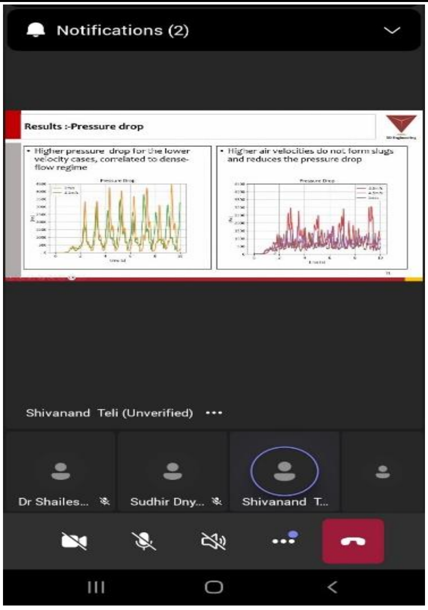
Name of the event: Expert Talk on Recent Trends in Industrial Piping Engineering

Purpose: To motivate Bright Students in Core Elective Subject area with technical industry based knowledge.

Faculty Incharge: Mrs. Anjali Kurve-Bangre







Remarks/Conclusion:

Department of Chemical Engineering organized the Expert Talk on Recent Trends in Industrial Piping Engineering by Dr. Shivanand Mallappa Teli (Ph.D. in Chemical Engineering Expertise in Computational Fluid Dynamic Multiphase Reactor Design, Transport Phenomenon) with https://teams.microsoft.com/l/meetupjoin/19%3ameeting_NTQxM2NkOGMtYmYyMy00YTljLTg1MzAtMWI4ZDFhYjM3OGJl%40thread.v2/0?context=%7b%22Tid%22%3a%223a3cd3f3-9917-40dc-91e0 85146eaf5d55%22%2c%22Oid%22%3a% 22d75de4d8-c086-4442-84ea-da702bef49cc%22%7d link on 31st August, 2024 from 2 to 3 pm.

This Expert Talk held on Google meet platform for students; who were beneficiated with technical engineering knowledge based on industrial recent trends in catalysis. Mrs.Anjali Kurve-Bangre ((Piping Engineering Subject Incharge) organized this Expert talk for Bright students as well as all interested students.

Students enriched with catalyst review, autocatalytic reactions knowledge with its recent trends out of the bookish knowledge and resolved their doubt regarding Piping Engineering Subject.

Mrs.Anjali Kurve-Bangre
(Piping Engineering Subject Incharge)

Dr.V.P.Bhange
Head, Dept. Of Chemical Engg.

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Extra class: Case Study to Encourage Slow Learners

Semester : VII **Date: 28/09/2024**

Subject: Piping Engineering **Venue: Departmental premise**

Resource person: Prof.Anjali Kurve-Bangre **Time: 4pm -5pm**

Subject teacher (Student Forum Coordinator)

Explanation of Color-codes, Material of construction, Gaskets, Valves, fittings and connections used in fire extinguisher Piping System.

Mrs.Anjali Kurve-Bangre

(Piping Engineering Subject Incharge)

Dr.V.P.Bhange

Head, Dept. Of Chemical Engg

LOKMANYA TIILAK JANKALLYAN SHIKSHAN SANSTHA

PRIYADARSHINNI COLLEGE OF ENGINEEERING, NAGPUR

ONE PAGE REPORT

Department of Chemical Engineering

Topics beyond Syllabus

Discussing the Piping Software in Classroom:

Sr.No	Name of Student	Subject /Topic discuss	signature
1.	Adityta Swamy	Software used in Piping Engineering	
2.	Gauri Deshpande	Software used in Piping Engineering	
3.	Kirti Sunil Raut	Software used in Piping Engineering	
4.	Mansi P Kathoke	Software used in Piping Engineering	
5.	Prachi G Patel	Software used in Piping Engineering	
6.	Sonali P. Zode	Software used in Piping Engineering	
7.	Himanshu Gonnade	Software used in Piping Engineering	
8.	Sanket Bagmare	Software used in Piping Engineering	
9.	Mansi Kathoke	Software used in Piping Engineering	
10.	Piyush M. Chawade	Software used in Piping Engineering	
11.	Sahil Boldhane	Software used in Piping Engineering	
12.	Ved Chacharkar	Software used in Piping Engineering	
13.	Aman Kakde	Software used in Piping Engineering	
14.	Rahul Fulambarkar	Software used in Piping Engineering	
15.	Mihir Bapat	Software used in Piping Engineering	
16.	Shreyash Manwatkar	Software used in Piping Engineering	
17.	Supriya Tabhane	Software used in Piping Engineering	

Piping Software

Isometric Drawings

Mrs.Anjali Kurve-Bangre

(Piping Engineering Subject Incharge)

Dr.V.P.Bhange

Head, Dept. Of Chemical Engg