**K K Wagh Institute of Engineering Education & Research Nashik**

**Chemical Engineering Department**

**NEWSLETTER**

**(January 2021 - June 2021)**

The Department of Chemical Engineering was established in the year of 1999 with an objective of creating center of excellence for Chemical Engineering and the annual intake of students initially was 60. The department is accredited twice by National Board of Accreditation (NBA), AICTE, New Delhi. The department has proven faculty members having several years of experience in academics and veteran supporting staffs having strong research interests in conventional & emerging areas of Chemical Engineering. The department believes in continuous upgradation of the knowledge of the faculty and has been sponsoring the faculty for the post-graduation and research programme from last few years. It is well equipped with state-of-the-art infrastructure and laboratories as per the university syllabus. The department has adequate number of computers with latest configuration and internet facilities. The department also provides excellent computational facilities including professional software such as UNISIM, CHEMCAD, ZWCAD, ESPOIR SMART INTERVIEW SIMULATOR and MATLAB to the faculty and the students. In addition to this, the department has its own library offering reference books for all subjects and also Chemical Engineering encyclopedia.

The department has a good track of record of academic results. Students have secured top ranks at university examinations & achieved success in GATE, GRE & other examinations. Students have been recruited in the top National & International Chemical industries. Apart from the focus on basic sciences and engineering subjects, we motivates the students to participate in various national events such as Project Exhibition, Paper Presentation, Model Making and Sports Competition.

Association of Chemical Engineering Students (ACES), a student’s association, functions in the department and provides strong platform for overall development of the students. The students get a chance to interact in Seminars, Workshops, Cultural Programmes, Expert Lectures on various topics like Personality Development, Preparation for Competitive Examination, study abroad etc through ACES. The department is proactive for good industry institute interaction. Department has signed MoUs with various industries for mutual benefit. Various experts from the industry are invited and industrial visits are organized every year regularly to bridge the gap between theory and practice. The department organizes in plant training for all second & third year students every year in various eminent industries such as BPCL, HPCL, IOCL, Reliance, RCF, Biocon and other private sector industries available around. Most of the final year projects get sponsorship from industry.

# Department Staff

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| --- | --- | --- | --- | --- |
| **Sr.****No.** | **Name** | **Qualification** | **Area of specialization** | **Designation** |
| 1. | Prof. Dr.Venkat S. Mane | Ph.D. | Chemical Engineering | Professor &Head of Department |
| 2. | Prof. Dr. Suyog N. Jain | Ph.D | ChemicalEngineering | Associate Professor |
| 3. | Prof. Vijay N. Mawal | M.Tech,Ph. D Pursuing | ChemicalEngineering | Assistant Professor |
| 4. | Prof. Dr. Gaurav B. Daware | Ph.D | ChemicalEngineering | Assistant Professor |
| 5. | Prof. Sandeep N. Derle | M.Tech,Ph. D Pursuing | ChemicalEngineering | Assistant Professor |
| 6. | Prof. Piyush P. Joshi | M.Tech | ChemicalEngineering | Assistant Professor |
| 7. | Prof. Zameer K. Deshmukh | M.Tech | ChemicalEngineering | Assistant Professor |
| 8. | Prof. Tejmal B. Mahale | M.Tech | ChemicalEngineering | Assistant Professor |
| 9. | Prof. Varsha Parashar | M.Tech | ChemicalEngineering | Assistant Professor |
| 10. | Prof. Dr. Sumisha A | Ph.D | ChemicalEngineering | Assistant Professor |
| 11. | Prof. Dr. Rajesh Yennam | Ph.D | ChemicalEngineering | Assistant Professor |

**Details of publications by the Faculty**

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| --- | --- | --- | --- | --- |
| **Sr.****No.** | **Name of****staff** | **Title of paper** | **Journal Details** | **Academic****Year** |
|  | Prof. Dr. G. B. Daware | Removal of pyridine using ultrasound assisted and conventional batch adsorption based on tea waste residue as biosorbent | [Environmental Technology & Innovation](https://www.sciencedirect.com/science/journal/23521864) | 2020-2021 |
|  | Prof. Dr. Sumisha A | Energy Generation and Iron Removal in Batch and Continuous Single‐Chamber Microbial Fuel Cells |  Chemical Engineering & Technology | 2020-2021 |
|  | Prof. Dr. Sumisha A | A Study on Polythiophene Modified Carbon Cloth as Anode in Microbial Fuel Cell for Lead Removal | Arabian journal for science and technology | 2020-2021 |

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| Summary of Expert Talks  |
| **Sr. No** | **Date** | **Name of Expert With Designation** | **Topic of Talk** | **No. of Students Present** |
| 1 | 03/02/2021 | Dr. V. V. MahajaniSuperannuated Professor, Institute of Chemical Technology, Matunga, Mumbai | Fouling in Heat Exchanger | 177 |
| 2 | 02/03/2021 | Dr. V. V. MahajaniSuperannuated Professor, Institute of Chemical Technology, Matunga, Mumbai | Project Management Part-1 | 84 |
| 3 | 09/03/2021 | Dr. V. V. MahajaniSuperannuated Professor, Institute of Chemical Technology, Matunga, Mumbai | Project Management Part-2 | 93 |
| 4 | 15/03/2021 | Mr. C. R. Mohikar,Petro-Project Consultant, Nashik | Career and entrepreneurship development (For chemical / chemistry candidates) | 90 |
| 5 | 16/03/2021 | Raghunath B.VishrupHead- EHSHESA One Thane | EHS Role of Engineer | 121 |
| 6 | 22/03/2021 | Mr. Swapan Ghosh, Retired Professional, Asst. Vice President R&D, Reliance Industries Ltd, Jamnagar and Navi Mumbai | "Overall Petroleum refining process" | 218 |
| 7 | 23/03/2021 | Mr. C. B. More, Director, C. B. Study Abroad Consultant, Plot No:16, Vidhate Nagar, B/h Prabhu Capital Building, Nashik-422001 | Study Abroad Opportunities for Chemical Engineers | 85 |
| 8 | 24/03/2021 | Dr. K. Elaya PerumalCorrosion and Metallurgical ConsultantUnit C-20, "Melur Meadows"Kumaran Kundru VillageVadavalli-Pogalur PostMettuppalayam-Annur RoadCoimbatore DistrictTamil Nadu - 641 697 | Design of Chemical process equipments against Corrosion from Process side with case study | 165 |
| 9 | 25/03/2021 | Dr. V. V. Mahajani Superannuated Professor, Institute of Chemical Technology, Matunga, Mumbai | Membrane Processes | 130 |
| 10 | 25/03/2021 | Dr. P. V. Pathak, Rtd. Process Engg., HUL, Mumbai, Member of GEDA, Saligao, Goa | Handling of Chemical Equipment on the shopfloor | 66 |
| 11 | 26/03/2021 | Mr. Ketan Gandhi, Alumni (2020) GATE Rank:253, M.Tech. Admission Aspirant | Let's GATEit! | 92 |
| 12 | 24/05/2021 | Mr. Niraj Kulkarni, Alumni(2019), Working with Aqarius Chemicals, Pune | Let's Xcel- Sharpening skills of Graduates | 48 |
| 13 | 01/06/2021 | Mr. Niraj Kulkarni, Alumni(2019), Working with Aqarius Chemicals, Pune | Let's Xcel- Sharpening skills of Graduates | 55 |
| 14 | 25/06/2021 | Dr. V. V. Mahajani Superannuated Professor, Institute of Chemical Technology, Matunga, Mumbai | Batch Distillation | 106 |

**National / International Seminars / Conferences/ Workshop / Symposia attended**

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| **Sr. No** | **A.Y.** | **Name of Faculty / Coordinator(s)** | **Title of Conference / Event** | **Organized by** | **Date** |
| 1 | 2020-2021 | Prof. Dr. S. N. Jain | Online non-credit course on Verb Tenses and Passives | By University of California, Irvine | 09/01/2021 |
| 2 | 2020-2021 | Prof. Dr. V. S. Mane | Online non-credit course on Verb Tenses and Passives | By University of California, Irvine | 01/01/2021 |

**Record of ICT usage by faculty**

**Details of Udemy Courses**

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| **Sr. No.** | **Name of the faculty** | **Name of the course** | **Link of the Udemy course** |
| 1 | Prof. Dr V S Mane | Introduction to Heat Transfer | https://www.udemy.com/course/introduction-to-heat-transfer/?referralCode=79C8B9CC4538FD35D826 |
| 2 | Prof. V N Mawal | Process and Mechanical Design of Process Equipments I | https://www.udemy.com/course/process-and-mechanical-design-of-process-equipments-i/learn/lecture/25829886#overview |
| 3 | Prof. Dr S N Jain | Transport Phenomena\_Momentum, Energy and Mass Transfer | https://www.udemy.com/course/transport-phenomena\_momentum-energy-and-mass-transfer/?referralCode=1FE458AAE4E235BA243B |
| 4 | Prof. Dr G B Daware | Size reduction, seperation and Mixing | <https://www.udemy.com/course/size-reduction-separation-and-mixing-mechanical-operation/learn/lecture/25847680#overview> |
| 5 | Prof. S N Derle | Insights of Petrochemical Industry | <https://www.udemy.com/course/insights-of-petrochemical-industry/> |
| 6 | Prof. P P Joshi | Nanotechnology: an Introduction | https://www.udemy.com/course/nanotechnology-an-introduction/?referralCode=997AC352BED1E05668B1 |
| 7 | Prof. Z K Deshmukh | Chemical Process Safety | https://www.udemy.com/course/draft/3885156/?instructorPreviewMode=guest |
| 8 | Prof. T B Mahale | Chemical Technology I | <https://www.udemy.com/course/draft/3982918/learn/lecture/26012916/?instructorPreviewMode=student_v4#overview> |
| 9 | Prof. V Parashar | Chemical Reaction Engineering I | <https://www.udemy.com/course/chemical-reaction-engineering-i/learn/lecture/25907436#content> |
| 10 | Prof. Dr. Sumisha A | Petrochemical Engineering | <https://www.udemy.com/course/petrochemical-engineering/learn/lecture/25927904#announcements> |

**Youtube videos**

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| **Sr. No.** | **Name of the faculty** | **Subject** | **Topic** | **Video link** |
| 1. | Prof. Dr. V. S. Mane | Heat Transfer | Introduction to Evaporator | <https://youtu.be/I8Btrtg8gbs> |
| Radiation Heat Transfer | <https://youtu.be/KYWEjcmsInU> |
| 2 | Prof. V. N. Mawal | Chemical Engineering Design I | Process (Thermal) Design of Shell and Tube Heat Exchanger | <https://youtu.be/ON1XyJ5OIL0> |
| Basic Considerations and Design Aspects of Storage Vessels | <https://youtu.be/1fog0M17hog> |
| Mechanical Design of Tall Vertical Column | [https://youtu.be/ZwcZJZhKJRw 4](https://youtu.be/ZwcZJZhKJRw%204). |
| 1. Process (Thermal) Design of Shell and Tube Heat Exchanger2. Basic Considerations and Design Aspects of Storage Vessels3. Mechanical Design of Tall Vertical Column | <https://youtu.be/ON1XyJ5OIL0><https://youtu.be/1fog0M17hog>[https://youtu.be/ZwcZJZhKJRw 4.](https://youtu.be/ZwcZJZhKJRw)  |
| Mass Transfer II | Solvent Extraction: Liquid-Liquid Extraction | https://youtu.be/DYOfNV85u\_8 |
| 3 | Prof. Dr. S. N. Jain | Transport Phenomena | Transport Phenomena\_Mass transfer | <https://youtu.be/S6ZUCKRG9yE> |
| Transport Phenomena: Heat Transport | <https://youtu.be/g8OOfsqLaw8> |
| Transport Phenomena\_Momentum Transfer | <https://youtu.be/-JTYAD_yQGI> |
| 4 | Prof. Dr. G. B. Daware | Process Dynamics and control | Advance control system | <https://youtu.be/P2Cw6T-QjAg> |
| Digital control system | <https://youtu.be/rzljF1o9BHk> |
| Mechanical Operation | Size reduction | <https://studio.youtube.com/video/iUBafS4J_QI/edit> |
| Sedimentation | <https://youtu.be/sHZkFVRjVfU> |
| Fluidisation | <https://youtu.be/kfrUj2urOaU> |
| Mass Transfer | Distillation and its type | <https://youtu.be/tlQ_1ME5EXw> |
| Reflux ratio and q-line | <https://youtu.be/QpGa7O9hpRs> |
| 5 | Prof. P. P. Joshi | Process Instrumentation and Control | Fundamentals of Process Instrumentation | https://youtu.be/sZk9BhuZZWM |
| Temperature Measuring Instruments | https://youtu.be/HBwCIPkd4F8 |
| Nanotechnology | Synthesis of Nanoparticles | https://youtu.be/XZtgKG80GqU |
| Characterization of Nanomaterials | https://youtu.be/QqR9Dbehspc |

**Achievements in Department**

Prof. G.B. Daware has completed Ph.D. from Institute of chemical Technology (ICT) Mumbai under the guidance of Prof. P. R. Gogate.

Topic: Removal of pyridine Derivatives from wastewater using combination approaches involving adsorption, ultrasound and advanced oxidation.

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