

Chemical Engineering Department

PhD Completed between 2011-2017

| S N | Supervisor | Year | Student Name | Thesis Title | Co-Supervisor |
|-----|---------------|---------|-------------------------|--|---------------|
| 1 | A S Chaurasia | 2016-17 | Ruta Dhanram Khonde | Biomass Gasification: Experimental And Computational Studies on Two-Stage Fixed Bed Downdraft Gasifier to Optimize Tar Cracking and Syngas Production | |
| 2 | D Z Shende | 2016-17 | Kalpana Rajesh Yeole | Study on Reactive Separations | |
| 3 | K L Wasewar | 2011-12 | Diwakar Shende | Study on reactive Extraction of carboxylic Acids | |
| 4 | K L Wasewar | 2013-14 | Suchita B Rai | Study on Neutralization Techniques of Red Mud and It's Utilization | |
| 5 | K L Wasewar | 2013-14 | Kalpana Singh | Study on Adsorptive Treatment of Fluoride from Aqueous Solution by Using Low Cost Adsorbents | D H Lataye |
| 6 | K L Wasewar | 2013-14 | Ajit P Rathod | Study on Pervaporation Reactor | |
| 7 | K L Wasewar | 2014-15 | Swapnil A Dharaskar | Synthesis Characterization and Application of Ionic Liquids for Desulfurization of Liquid Fuels | |
| 8 | K L Wasewar | 2014-15 | Mangesh D Waghmare | Study on Separation of Carboxylic Acids | S S Sonawane |
| 9 | K L Wasewar | 2015-16 | Abdul Waheed A Deshmukh | Study of Drying of Food Materials | M N Verma |
| 10 | K L Wasewar | 2015-16 | Kanti Kumar Athankar | Reactive Separation of Carboxylic Acids | M N Verma |
| 11 | K L Wasewar | 2016-17 | Sapana Sonmath Madan | Controlled Synthesis and Application of CaO ₂ Nanoparticles as an Adsorbent for Batch and Continuous Removal of α -Toluic Acid from Aqueous Solution | |

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|----|----------------|---------|-----------------------|--|--------------|
| 12 | M N Verma | 2015-16 | Antaram N Sarve | Improvement in Biodiesel Synthesis from Edible & Non-Edible Oils | S S Sonawane |
| 13 | S A Mandavgane | 2015-16 | Sunil K Deokar | Studies on the Removal of Selected Pesticides from Aqueous Solution using Aooripriate Agro based Materials | |
| 14 | S A Mandavgane | 2015-16 | Pranav D Pathak | Fruit Peel Waste:- A Useful Bioresource | |
| 15 | S A Mandavgane | 2016-17 | Sonali Prakash Tajane | Development and Characterization of Micro Neem Biopesticide | |
| 16 | S S Sonawane | 2013-14 | Rohit S Khedkar | Studies on Synthesis of Nanofluids and its Application in Chemical Engineering | K L Wasewar |
| 17 | S S Sonawane | 2015-16 | Abhijit A Gadhe | Studion Biofuel Production from Waste Resources | M N Verma |
| 18 | S S Sonawane | 2016-17 | Ghanshyam Barman | Study on Polyamide 6 Nanocomposites | K L Wasewar |

PhD Ongoing

| Sr No | Student Name | Supervisor |
|--------------|----------------------------------|--------------------|
| 1 | SARITA JAGDISH CHARDE | S Sonawane |
| 2 | SHYAM PRAKASHRAO TEKADE | D Z Shende |
| 3 | KHUDSANGE CHANDRAKANT RAMKRUSHNA | K L Wasewar |
| 4 | POOJA SUNIL JAISWAL | Mahesh Varma |
| 5 | VISHAL SURESH CHANDANE | Wasewar + Rathod |
| 6 | PRAVIN RAVINDRA SONARKAR | A S Chaurasia |
| 7 | ANJU INGLE | Shende +Wasewar |
| 8 | MANISHA GUNDERAO KAMBLE | Sachin Mandavgane |
| 9 | NISHANT KUMAR | S S Sonawane |
| 10 | ATULKUMAR NATTHUJI RAUT | Pradeep Dhamole |
| 11 | HRUSHIKESH MADHUSUDAN GADE | P P Wanjari |
| 12 | ROHIT ASHOK LADE | K L Wasewar |
| 13 | VIJAY JUWAR | A P Rathod |
| 14 | SAURABH JOGLEKAR | Sachin Mandavgane |
| 15 | PREETY S GEDAM | Pradeep Dhamole |
| 16 | ASHISH GYANIRAM YEWALE | Methekar +Agrawal |
| 17 | ASHUTOSH KR CHAUDHARY | R P Vijaykumar |
| 18 | PAWAR NITIN RAMESH | Agrawal + Methekar |
| 19 | PRASHIL KHEMRAJ NARNAWARE | C Ravikumar |
| 20 | KUNJAN CHANGDEO JUNGHARE | S M Kodape |
| 21 | SHIVANAND SAHEBRAO CHAVAN | A P Gaikwad |
| 22 | ANWANI SANDEEP SURESHKUMAR | R N Methekar |

Sponsored R & D Projects Completed

| Sr No | Project Name | Co-ordinator | Dept. | Sponsoring Agency | Project Value | Sanction date | Duration (years) |
|--------------|---|---------------------|--------------|--------------------------|----------------------|----------------------|-------------------------|
| 1. | Experimental and Modeling Studies on the Ionic Liquid-Mediated Catalytic Conversion of Lignocellulosic Biomass to Fuel Products | Ashwin Gaikwad | Chemical | DST SERB | 25,33,850 | 23/09/16 | 3 years |
| 2. | Model based optimal design and fabrication of lithium-ion coin cells using spent battery | R N Methekar | Chemical | DST SERB | 33,64,060 | 01/10/16 | 3 years |
| 3. | Investigation of selective CO ₂ capture by graphene-carbon nanotube hybrid nanostructures using molecular dynamics simulations | Piyush P Wanjari | Chemical | DST SERB | 33,81,840 | | 3 years |

Sponsored R & D Projects Ongoing

| Sr No. | F Y | Name of Faculty (Principal Investigator) | Name of the Funding agency | Title of the Project | Sanctioned Order no. & Date | Total Amt of Project (In Lakhs Rs.) | Amt received in 2016-17(in words) |
|--------|---------|--|---|---|---------------------------------------|-------------------------------------|---|
| 1 | 2016-17 | Dr. Piyush P. Wanjari | SERB | Investigation of selective CO ₂ capture by graphene-carbon nanotube hybrid nanostructures using molecular dynamics simulations | ECR/2016/00126 7 2/28/2017 | 23.65 | Twenty three lakhs and sixty five thousand |
| 2 | 2016-17 | Dr. Diwakar Z. Shende, | Vipra Ferro Alloys Ltd., Nagpur | Exploring the various applications of fly ash conduction of testing of ash and other raw materials and industry based technology development | CHE/JRP/04/138 3 3/18/2014 | 2.2 | Two Lakh Twenty Thousand Only |
| 3 | 2016-17 | Dr. Kailas L. Wasewar | HEMRL, DRDO Pune | Rheological Study of Hydroxyl Terminated Polybutadiene (Htpb) – Aluminium Nanoparticle (ANP) – Ammonium Perchlorate (AP) Composite Suspension | HEMRL/CARS/ SRP/14-15 1/20/2015 | 10 | Ten lakh |
| 4 | 2016-19 | Dr. Diwakar Z. Shende | SERB DST | Developing Functionalized Properties on Hollow Ceramic Microsphere for Specific Applications | EER/2016/00083 5 12/8/2016 | 46.98 | Thirty Five Lakh Sixty Six Thousand Only |
| 5 | 2016-17 | Dr.C.Ravikumar | DST-SERB Extra Mural Research (Govt. of India) | 'Nanoparticles of different shapes conjugated with drugs to achieve enhanced therapeutic efficacy in treatment of cancer | EMR/2016/0033 20 07-03-2017 | 27.66 | Thirteen lakhs forty one thousand rupees only |
| 6 | 2016-17 | Dr. Ravi Methekar | DST -SERB | Model based optimal design and Fabrication of coin cells using spent lithium ion battery | ECR/201/000422 9/29/2016 | 33.64 | Twenty one lakhs and thirty six thousand |
| 7 | 2016-17 | Dr Sachin Mandavgane | Department of Atomic Energy- Board of Research in | Development and testing of micro fine powder bio-pesticide using Neem | No 2012/35/38/BRN S 2/27/2012 | 22.5 | Twenty two lakhs and Five thousand |
| 8 | 2016-17 | Dr Sachin Mandavgane | SERB | Removal of chlorinated herbicides from dilute aqueous solution using biomass ashes | SB/S3/CE/077/2 013 12/21/2013 | 47 | Fourty Seven lakh |

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|----|---------|-----------------------|-----------|--|---------------------------------------|-------|--|
| 9 | 2016-17 | Dr. Ashwin Gaikwad | SERB-DST | Experimental and Modeling Studies on the Ionic Liquid-mediated Catalytic Conversion of Lignocellulosic Biomass to Fuel Products | ECR/2016/00007 8 9/23/2016 | 25.33 | Twenty Five Lakhs Thirty Three Thousand |
| 10 | 2016-17 | Dr Pradip Dhamole | DST | Extractive fermentation with surfactants to enhance butanol production | 24/12/2013 24/09/2017 | 29.17 | Twenty nine lakhs and seventeen thousand |
| 11 | 2016-17 | Dr. R. P. Vijayakumar | SERB | Production of liquid hydrocarbons and carbon nanotubes using waste plastics as precursor | SB/FTP/ETA- 0235/2013 17/7/2014 | 27 | Twenty Seven lakh |
| 12 | 2016 | Dr.S.S. Sonawane | SERB/DHPH | Development of High Performance Heat Transfer Nanofluids Using Carbon Nanotubes (SWCNT & MWCNT'S) Nanoparticles and Its Applications in Double Pipe Heat Exchanger | NA | 5 | Five lakhs only |

Research Publications as under SCOPUS

[Dr. A P Rathod](#)

[Dr. A S Chaurasia](#)

[Dr. Ashwin Kannan](#)

[Dr. C Ravikumar](#)

[Dr. D Z Shende](#)

[Dr. K L Wasewar](#)

[Dr. M N Varma](#)

[Dr. P B Dhamole](#)

[Dr. S A Mandavgane](#)

[Dr. S S Sonawane](#)

[Dr. Ms. Sonali Tajane](#)