

Name of the Faculty: Dr. Sawant Rajashri Bhimraj

Designation: Assistant Professor

Name of the department: Chemistry

Email: rajashriahire@gmail.com

Qualification: M.Sc., B.Ed., M.Phil., Ph.D.

Administrative Experience: Head, Department of Chemistry

Teaching Experience: 17 years

Research Guidance for: Ph. D

Research Projects: 01



| Funding agency | Title of Project | Amount sanctioned | Duration | Completed/ on going |
|----------------|---|-------------------|------------|---------------------|
| UGC | New Synthetic Methodology for Conversion of Nitro Group to Amines as well as Ring Opening of Isoxazolidine Ring by Using Molybdenum Metal | 405000/- | 2017- 2019 | Completed |

Research paper published:

| Sr. No. | Name of the Author | Title of the paper | Name of the Journal | ISSN No. | Vol.- Year | National/ International /State |
|---------|---|--|--|------------------------|--------------|--------------------------------|
| 1 | Mehdi Hasan, Sawant Arun B., Sawant Rajashri B. Loke Pratibha G | Densities, viscosities, speed of sound, and IR spectroscopic studies of binary Mixtures of tert-butyl acetate with benzene, methylbenzene, ethylbenzene at T= (298.15 and 308.15)K | J. Chem. Thermodynamics | 0021-9614 | 43(1) , 2011 | International |
| 2 | Ahire Kailas S, SawantRajashri B. | Wiener Index and Wiener Polynomials in Isomers of organic Compounds | Bull. Marathwada Mathematical Society | 0976-6049 | 14(2), 2013 | International |
| 3 | V R Bagul R B Sawant A V Gajbhiye | New Prospective of Nano-material in Surface Coating | Souvenir National Seminar on Advances in Nano Structured Materials and TheirApplications | ISBN 978-93-82414-43-4 | Jan. 2013 | State |

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|----|--------------------------------------|---|---|-------------|--------------------------------|---------------|
| 4 | SawantRajashri B | Human Values: Higher Education | ScholarsWorld MAAZ Publication | E-2320-3145 | X(Special issue) 2016 | International |
| 5 | Ahire Kailas S, Sawant Rajashri B | Hyper-Wiener Index, Hyper-HosoyaPolynomial For Tree of Isomers of Pentane | International Journal of Mathematics And Computer Research | 2320-7167 | 4(1) 2016 | International |
| 6 | Sawant Rajashri B | Renewable Energy Sources | Scholar's World | 2319-5789 | 6Special Issue VI, 2016 | International |
| 7 | Sawant Rajashri B | Molecular Interaction and IR, NMR Spectroscopic Studies of Binary Mixtures of Tert-Butyl Acetate with aromatic Hydrocarbons at T=(303.15 and 313.15) K. | Research Journey MAAZ Publication | 2348-7143 | Special issue-I, 2016 | International |
| 8 | Sawant Rajashri B | Molecular Interaction and NMR studies of Binary Mixtures of Tert-Butyl Acetate with Isopropylbenzene, isobutylbenzene and Methoxybenzene at T=(303.15 and 313.15)K | Researchers World Edu.Research Multimedia and Publications India | 2231-4172 | 4(4), VII2016 | International |
| 9 | Ahire Kailas S, Sawant Rajashri B | On The Minimum Atom bond Connectivity Index and Geometric Arithmetic Index and Laplacian matrix for Chemical Trees of Isomers | Researchers World Edu. Research Multimedia and Publi.India | 2231-4172 | 4(5), VII2016 | International |
| 10 | Sawant Rajashri B | Volumetric, Viscometric, Acoustic and IR Spectroscopic Studies of Binary Mixtures of Tert-butyl Acetate with Isopropylbenzene, Isobutylbenzene, and Methoxybenzene at T= 298.15 and 308.15 K | Journal of Physical Chemistry & Biophysics | 2161-0398 | 6(4), 2016 | International |
| 11 | Sawant Rajashri B | Waste Water Treatment by Oxidation Technology at Ambient Conditions | Research Journey Academic Book publication | 2348-7143 | 12Special Issue 12, 2017 | International |
| 12 | Sawant Rajashri Bhimraj | Volumetric, Viscometric and Speed of Sound Studies of Binary Mixtures of Tert-butyl Acetate with Fluorobenzene, Chlorobenzene and Bromobenzene at (298.15 and 308.15) K and at Atmospheric Pressure 0.087 MPa | Journal of Solution Chemistry | 0095-9782 | 47(4), 2018 | International |
| 13 | Rajashri B | Innovations in Teaching and | Vidya Warta | 2319-9318 | Oct to | International |

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|-----|---|---|--|-----------|----------------|---------------|
| | Sawant | Learning Methods of Chemistry | | | Dec.2018 | |
| 14 | Ahire Kailas S, Sawant Rajashri B | THE SCHULTZ Index, Modified Schultz Index And Geometric Arithmetic Index , Theoretical Bond Length And Bond Angle Of Chemical Trees of Pentane Isomers | International Journal of Engineering, Science and Mathematics | 2320-0294 | 8(2), 2019 | International |
| 15 | Rajashri Sawant Dinesh Shirude, UjjanKadam | Densities, viscosities, speed of sound, and IR spectroscopic studies of binarybinary Mixtures of tert-butyl acetate with Fluorobenzene, Chlorobenzene and bromobenzene at T= (303.15 and 313.15)K and at Atmospheric Pressure 0.087MPa. | Journal of Emerging Technologies and Innovative Research | 2349-5162 | 7(11) Nov.2020 | International |
| 16. | Kailas S Ahire Rajashri BSawant | The Topological Indices and Physical Properties of n-heptane Isomers | International Journal of Application or Innovation in Engineering & Management | 2319-4847 | 10 (6) 2021 | International |
| 17 | Sawant Rajashri B Depre Jaydeep | Environmentally Safe Approaches for the Biosynthesis of Silver Nanoparticles and their Applications | World Journal of Current Scientific Research | | 1(1) 2021 | International |
| 18 | Rajeshri B Sawant | Hand Sanitizers: A review on its formulation preventive measures | Vidyavarta | 2319-9318 | 2022 | International |

Book/ Chapter in Book/ Editor

| Sr. No. | Name of the Author | Title of the Book | Name of the Chapter | ISBN No. | Year | National/ International/ State/ Other | Name of the Publisher |
|---------|--------------------|------------------------|--|------------------|-----------|---------------------------------------|---------------------------|
| 1 | R. B. Sawant | Role of Women in India | Women's Participation in Indian Politics | 978-81927005-5-7 | Oct. 2013 | National | MAAZ Publication Malegaon |

Research paper Presented

| Sr. No. | Title of the Paper | Theme of Conference/ Seminar/Workshop | Duration | Organizers | National/ International/ State/ Other |
|---------|--|--|-----------------|---|--|
| 1 | Green Methodology in Nanotechnology: Novel Development of Metal Nanostructures and Its Applications as Catalyst: A review | Current Research In Chemistry and Nano-sciences | 18-20 Jan. 2022 | L.V.H. College, Panchavati, Nashik | International e- conference |
| 2. | Study of IR , NMR with density, viscosity and speed of sound of tertiary-butyl acetate with benzenes | Innovations in Nano materials and their Applications | 18-20 Jan. 2018 | L.V.H College, Panchavati (Nashik) | International |
| 3 | Waste water Treatment by Oxidation Technology at Ambient Conditions | Role of Environmental Chemistry in Our Life | 03 Feb. 2017 | S.P.H.Mahila Mahavidyalaya, Malegaon camp | State |
| 4 | Molecular Interaction and Studies of Binary Mixtures of tert-butyl acetate with Isopropyl benzene, Isobutyl benzene, and Methoxy benzene at T= 303.15 and 313.15 K | International Conference On Pure and Applied Sciences 2016 | 12-14 Dec. 2016 | M.S.G.College Malegaon-camp | International |
| 5 | Molecular Interaction and IR, NMR Spectroscopic Studies of Binary Mixtures of tert-butyl acetate with Aromatic Hydrocarbons at T= 303.15 and 313.15 K | Emerging Trends and Issue in Research & Development | 17-18 Feb. 2016 | M.S.G.College Malegaon-camp | International |
| 6 | Human Values: Higher Education | Human Values and Role of Higher Education | 12-13 Feb. 2016 | S.P.H.Mahila Mahavidyalaya, Malegaon camp | National |
| 7 | Renewable Energy Sources, Solution to Energy Crises | Eco-Restoration, Environmental Conservation and Management | 06-07 Feb.2015 | M.S.G.College, Malegaon - Camp | National |
| 8 | Women's Participation In Indian Plotics | Women Empowerment" | 23-24 Oct. 2013 | S.P.H.Mahila Mahavidyalaya, Malegaon camp | National |
| 9 | New Perspective of Nano Material in Surface | Advances in Nano-structured Materials & their Applications | 22-23 Jan. 2013 | Arts, Comm. & Sci. College, Taloda.Nandurba | National |

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| | Coating | | | r | |
| 10 | Wiener Index in Isomers of Organic compounds | Recent Developments in Mathematics & Statistics | 14 -16 Feb. 2013 | T. C.College, Baramati | National |

Conference / Seminar/ Workshop organized

| Name of the Seminar | Level | Funding Agency | Nature of Contributions | Date |
|---|---------------------|----------------|-------------------------|--------------|
| Role of Environmental Chemistry in Our Life | State level Seminar | BCUD Pune Uni. | Coordinator | 03 Feb. 2017 |

Conference / Seminar/ Workshop attended

| Sr. No. | Title of Conference/ Seminar/ Workshop | Name of organization | Conference/ Seminar/ Workshop | Duration | National/ International/ State/ Other |
|---------|---|---|-------------------------------|-----------------|---------------------------------------|
| 1 | Chemical Pesticides and Impact on Environment and Human Health | Arts, Sci. & Comm. College, Manmad | Conference | 06-07- Jan.2020 | State |
| 2 | Recent Applications of Mathematics and Statistics | S.P.H.Mahila Mahavidyalaya, Malegaon camp | Conference | 03 Feb. 2018 | State |
| 3 | E-Content Development On Higher Education | M.S.G. College, Malegaon camp | Workshop | 12-13 Dec. 2019 | State |
| 4 | Innovations in Nano materials and their Applications | L.V.H College, Panchavati (Nashik) | Conference | 18-20 Jan. 2018 | International |
| 5 | Emerging Trends and Innovative Practices in Teaching Chemistry | Arts, Sci., and Comm. College, Manmad | Conference | 10-11 Jan. 2018 | State |
| 6 | Water Resources Management: Thrust and Challenges | Arts, Sci., and Comm. College, Surgana | Conference | 08 Feb. 2017 | State |
| 7 | Role of Environmental Chemistry in Our Life | S.P.H.MahilaMahavidyalaya, Malegaon camp | Seminar | 03 Feb. 2017 | State |
| 8 | New Research Trends in Chemistry and Its Application in Environmental Science | Arts, Sci. & Com. College, Chandwad | Conference | 26-27 Feb. 2016 | State |
| 9 | Emerging Trends and Issue in Research & Development | M.S.G.College Malegaon-camp | Conference | 17-18 Feb. 2016 | International |
| 10 | Human Values and Role of Higher Education | S.P.H.MahilaMahavidyalaya, Malegaon camp | Conference | 12-13 Feb. 2016 | National |
| 11 | International Conference On Pure and Applied Sciences 2016 | M.S.G.College, Malegaon -Camp | Conference | 12-14 Dec. 2016 | International |
| 12 | Eco-Restoration, Environmental Conservation and Management | M.S.G.College Malegaon -Camp | Conference | 06-07 Feb.2015 | National |
| 13 | “Women Empowerment” | S.P.H.MahilaMahavidyalaya, Malegaon camp | Conference | 23-24 Oct. 2013 | National |

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|----|--|---|------------|------------------|----------|
| 14 | Advanced Analytical Techniques in Chemistry & Pharmacy | M.S.G.College, Malegaon-camp | Conference | 8-9 Oct. 2013 | National |
| 15 | Recent Developments in Mathematics & Statistics | T. C.College, Baramati | Conference | 14 -16 Feb. 2013 | National |
| 16 | Advances in Nano-structured Materials & their Applications | Arts, Comm. & Sci. College,Taloda.Nandurbar | Seminar | 22-23 Jan. 2013 | National |
| 17 | Interdisciplinary Seminar on Recent Advances in Biodiversity | S.P.H.MahilaMahavidyalaya, Malegaon camp | Seminar | 10-11 Feb. 2012 | State |
| 18 | Interdisciplinary Applications of Nanotechnology | S.P.H.MahilaMahavidyalaya Malegaon-Camp | Seminar | 24-25 Feb. 2011 | State |
| 19 | Biodiversity & Pollution Control | Arts, Sci. & Comm. College, Nampur | Seminar | 3-4 Feb. 2011 | State |
| 20 | Preparation of Nonmaterial's & Their Applications | Arts,Comm. & Sci. College, Nandgaon | Seminar | 20-22 Feb. 2010 | National |
| 21 | Environmental Crisis | S.P.H.Mahila,Mahavidyalaya, Malegaon-Camp | Seminar | 30 Jan. 2009 | State |
| 22 | Advanced Trends in Chemistry | M.S.G. College, Malegaon-Camp, | Seminar | 22-23 Sept. 2008 | State |
| 23 | One Day Workshop in Chemistry for Post –Graduate Teachers | M.S.G. College, Malegaon-Camp | Workshop | 19 Dec. 2006 | State |
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Experience as resource person: 01

| Sr. No. | Title of Conference/Seminar/ Symposium/Workshop | Name of the Organization/Institute/ College/University | Date |
|---------|---|--|-----------------|
| 1 | Ph.D. Course work | M.S.G. College ,Malegaon camp | 12 -26 May 2019 |

E-content Developed: Only PPT link.

1. https://drive.google.com/file/d/1VqTRjAfkEoN1doT_cp26E5tpWSoe0ld7/view?usp=sharing
2. https://drive.google.com/file/d/1FQfGti66fdAmvdUnjD6_1_yGTFsbaXqL/view?usp=sharing
3. <https://drive.google.com/file/d/1Mk7FDI4AZHIQcgaEBuNSDJRoMMggMaCk/view?usp=sharing>
4. https://drive.google.com/file/d/1_ijBSZraUcdhiozJ0cjuFNdNafXM8bAF/view?usp=sharing
5. https://drive.google.com/file/d/1KfAxzdJKAw4KCB_A2kxpaxRvHkYj6ME5/view?usp=sharing
6. <https://drive.google.com/file/d/1BFnYKfNjEJyxnF15pNUj4tBh83idJ4p/view?usp=sharing>

YouTube link: 1. <https://youtu.be/430w4klwKtg>

2. <https://youtu.be/KGMGIGRbWR4>