## **FACULTY PROFILE**

1.	Name	Dr. Pratapsingh Vijaysingh Gaikwad
2.	Department	Chemistry
3.	Qualification	M.Sc. B Ed. Ph.D. (Chemistry)
4.	Title of Thesis	Synthesis and Characterization of Mixed Metal
		Ferrites for Catalytic Studies
5.	Designation	Assistant Professor
6.	Specialization	Analytical Chemistry
7.	Mobile No	9923117607
8.	Date of Birth	11/03/1986
9.	Email	pratapsinghgaikwad@gmail.com
10.	Teaching Experience	14yrs
11.	Research Experience	10yrs
12.	Membership in University	Nil
13.	Membership in College	i) Member of NAAC- Criterion IX ii) Member of NEP 2.0 Committee iii) Member of Annual Prize Distribution committee
14.	Membership of professional bodies	<ul><li>i) Member of Shivaji University Teachers Association (SUTA)</li><li>ii) Member of International society for research &amp; development</li></ul>
15.	Awards received	Nil
16.	Orientation/Refresher Courses	<ul> <li>Orientation/Refresher Course</li> <li>FDP on Polymer Composites and Nanocomposites, 7th to 11th August 2023, NITTR, Kolkata</li> <li>FDP on Bio-electrochemistry, Jan-Feb 2023, NPTEL-AICTE, IIT, Madras,</li> <li>Recent Trends in Material Science and Engineering, 12th to 16th Sept 2022, Daynanda Sagar Academy of Technology &amp; Management, Banglore</li> <li>One week online FDP on "Emerging Trends in Applied Chemistry: A Step towards Sustainable Development", 30th May to 4th June 2022, SGT University, Gurugam-New Delhi-NCR</li> <li>"Sophisticated Analytical Instruments: Principles and Applications to Chemical and</li> </ul>

Material Sciences" 21st July to 25th 2020, Sinhgad College of Engineering, Pune "Managing online classes and co-creating MOOCS:2.0", Fifteen Days, 18th May to 03<sup>rd</sup> June 2020, Ministry of Human Resource Development and Ramanujan College, University of Delhi • NAAC Awareness Program, 08<sup>th</sup> to 14<sup>th</sup> may 2020, MMIT, Lohgaon One Week STTP on 'Recent Trends In Interdisciplinary Research In Material Sciences', 26th to 30th December 2017, ADCET, Ashta  $11^{th}$ 17. Seminars/colloquium/workshop/c International Conference on onferences-Attended/Participated Transformations in Engineering Education, 2<sup>nd</sup> to 4<sup>th</sup> January 2024, IUCEE and KLE technological University, Huballi. Research Publication, Copyright and Patents in Science and Technology, 03rd to 07th July 2023, P. R. Pote Patil College of Engineering & Management, Amravati. Seven day workshop on Data Analysis for Multidisciplinary Research 2.0 (Online Mode), 24<sup>th</sup> to 30<sup>th</sup> June 2023, VIT, Vellore. 10<sup>th</sup> International Conference Transformations in Engineering Education, 5<sup>th</sup> to 8th January 2023, IUCEE and VVCE, Mysuru National Conference on Environmental Sustainability, 19th to 20th Dec 2022, Koneru Laxmaih Educational Foundation, Vaddeshwaram. 2<sup>nd</sup> Indo-Korean virtual conference "Development of Advanced Materials for Future Technology" (DAMFT-2021), 14th &

- 15<sup>th</sup> May 2021, KAIST, South Korea & VIT, Chennai.
- National Virtual Conference on, "Advanced Nanomaterials And Applications for Futuristic Development", 5<sup>th</sup> & 6<sup>th</sup> September 2020, Dhenkanal Autonomus College, Dhenkanal.
- Recent Trends in Nanomaterials Synthesis & Applications, 16<sup>th</sup> & 18<sup>th</sup> July 2020, Madanapalle Institute of Technology & Science, AP, India".
- International Conference, Development of Advanced Materials for Future Technology"
   9<sup>th</sup> & 10<sup>th</sup> July 2020, Jeounbk National University, South Korea & VIT, Chennai
- Fifth International Conference on Advances in Materials Science (Online), 06<sup>th</sup> & 07<sup>th</sup> June 2020, Raje Ramrao College, Jath
- Virtual Conference on "Materials for Energy Harvesting and Catalysis", 1<sup>st</sup> to 3<sup>rd</sup> May 2020, Tata Institute of Fundamental Research (TIFR), Mumbai.
- International Conference on Advances in Pure and Applied Sciences (ICAPS-2019), 5<sup>th</sup> & 6<sup>th</sup>
   Jan 2019, Balwant College, Vita
- National Conference on Innovative Research in Physical, Chemical and Life Sciences" (NCIRS-2018), 24<sup>th</sup> Feb 2018, M. H. Shinde, Mahavidyalaya, Tisangi, Venue- SUK
- International Conference on Contemporary Research in Chemical and Life Sciences, 22<sup>nd</sup> to 23<sup>rd</sup> April 2015, SGM College Karad.
- National Level Seminar on Prospectus and Opportunities in Chemical Sciences, 29<sup>th</sup> to

30<sup>th</sup> January 2015, BJS Arts, Commerce, Science College, Wagholi, Pune. National conference on, Recent trends in Interdisciplinary Research in Material Sciences, 26<sup>th</sup> to 27<sup>th</sup> December, 2014, Annasaheb Dange College of Engineering and Technology, Ashta. 17<sup>th</sup> International Conference on Expanding Horizons in Chemical and Biological Sciences, 21st to 24th January 2012, School of Solapur University, Chemical Sciences, Solapur 18. **Publications** D Vhanmore, 1. Bandopant Swapnali Rajmane, Shivaji B Sadale, Sandip D Patil, Harish M Shinde, Ravi J Kamble, Pratapsingh V Gaikwad, Kalyani Y Khandale, Mansing V Takale, Combined effect of absorption coefficient, polarization modes and decentred parameter on self-focusing of cosh-Gaussian laser beams with collisionless magnetized plasma, Journal of Nonlinear Optical Physics & Materials, (2025) 2. Pratapsingh Gaikwad, D. D. Bobalade, M. B. Mandale, Umesh Bhujakkanavar, Sandip Patange, S. R. Sabale, Enactment and impact analysis of active learning strategies utilized for the basic science courses in the evaluation engineering students, Journal Engineering Education Transformations, (2024) 37, 939-946. 3. S.D. Zimur, Pratapsingh Gaikwad, A.V. Mali, Amit Prakash Patil, S.H. Burungale, P. D. Kamble, Magnetic and structural characterization of Sn doped cobalt ferrites; A light-driven photocatalysts visible degradation of rhodamine-B and modeling the process by artificial intelligence tools, Journal of Alloys and Compounds (Elsevier), 947 169572. (2023)doi-

- https://doi.org/10.1016/j.jallcom.2023.16957 2.
- 4. P.V. Gaikwad, R.M. Kurane, "Implementation of Project Based Learning and Think-Group-Share for Enhancing Student's Active Learning in Engineering Chemistry", Journal of Engineering Education Transformations, (2023) 36, 400-404, doi-10.16920/jeet/2023/v36is2/23060.
- P.V. Gaikwad, S.R. Sabale, R.M. Kurane, B.A. Kakade, H.B. Parase, P.D. Kamble, Magneto-Structural Properties and reliability of (Mn/Ni/Zn) Substituted Cobalt-Copper Ferrite Heterogeneous Catalyst for Selective and Efficient Oxidation of Aryl Alcohols, Inorganic and Nano-Metal Chemistry (Taylor & Francis), (2023), 53, 52-65, doihttps://doi.org/10.1080/24701556.2021.19800 36
- R.J. Kamble, P.V. Gaikwad, K.M. Garadkar, S.R. Sabale, V.R. Puri, S.S. Mahajan, Photocatalytic Degradation of Malachite Green using Hydrothermally Synthesized Cobalt-doped TiO<sub>2</sub> Nanoparticles, Journal of the Iranian Chemical Society (Springer), (2022), 19, 303-312, doi-https://doi.org/10.1007/s13738-021-02303-y.
- 7. R.J. Kamble, P.V. Gaikwad, Peroxy titanium complex derived Fe-doped TiO2 Nanoparticles: Synthesis, properties and antibacterial activity, Materials Today Proceedings (Elsevier) (2020) 45 (2021), 3784-3788.
- 8. Pratapsingh Gaikwad, Sachin Zimur, Sandip Sabale, Prakash Kamble, Co<sup>2+</sup> Substituted ZnCuFe<sub>2</sub>O<sub>4</sub> (0.0 ≤ x ≤ 0.5) Ferrites: Synthesis, Magneto-structural and Optical Properties for Their Photocatalytic Performance. Journal of Superconductivity and Novel Magnetism (Springer), 32 (2019) 2551-2558, ISSN: 1557-1939 (print version), ISSN: 1557-1947 (electronic version), doi-https://doi.org/10.1007/s10948-018-4982-3

- 9. P. V. Gaikwad, R.J. Kamble, S.J. Mane Gavade, S.R. Sabale, P.D. Kamble, 2018 Magneto-structural properties and photocatalytic performance of sol-gel synthesized cobalt substituted Ni-Cu ferrites for degradation of methylene blue under sunlight, Physica B: Physics of Condensed Matter. (Elsevier), 554, 79-85, doihttps://doi.org/10.1016/j.physb.2018.11.032
- 10. S. D. Zimur, P. D. Kamble, P. V. Gaikwad, A. V. Mali, December-2018, Effect of Sn Substitution on Structural, Electrical and Magnetic Properties of Copper Ferrites Synthesized by Sol-gel auto Combustion Method, International Journal of Research And Analytical Reviews (IJRAR), Volume 5, Issue 4, PP-139-148, December 2018. Doi-http://ijrar.org/papers/IJRAR1944238.pdf
- 11. S. D. Zimur, P. D. Kamble, M. R. Kadam, P. V. Gaikwad, Feburary-2018, Effect of Tin (Sn) Substitution on the structural properties of Co ferrite Nano Particle synthesized Via Sol-Gel Route, Aarhat Multidisciplinary International Educational Research Journal (AMIERJ), UGC Approved Journal No 48178, 48818, ISSN 2278-5655, Volume-VII, Special Issue- IX, PP-179
- 12. P.V. Gaikwad, P.D. Kamble, Feburary-2018, Effect of Sn doping on Structural Properties of Cobalt Ferrites Synthesized by Sol Gel Method, Aarhat Multidisciplinary International Educational Research Journal (AMIERJ), UGC Approved Journal No 48178, 48818, ISSN 2278-5655, Volume-VII, Special Issue- IX, PP-179.
- 13. P. V. Gaikwad, P. D. Kamble, M. R. Kadam, S. D. Zimur, 2017, Effect of Co Content on Structural & Magnetic Properties of Manganese Copper Ferrites Synthesized by Sol Gel Auto Combustion Method, International Journal of Current Engineering and Scientific Research, ISSN (PRINT):

		2393-8374, (ONLINE): 2394-0697,
		VOLUME-4, ISSUE-9, 23.
		14. Published a text-book on, "Applied
		Chemistry" Wiley Publication, (ISBN 978-81-
		265-7617-3), 1 <sup>st</sup> Edition, 2018.
		15. A book chapter in book Phytonanotechnology,
		Phytonanotechnological Approach for Silver
		Nanoparticles: Mechanistic Aspect,
		Properties, and Reliable Heavy Metal Ion
		Sensing, Springer, Singapore (978-981-19-
		4811-4), 161-179, (2022),
		https://doi.org/10.1007/978-981-19-4811-4_8
19.	Invited Talk	Nil
20.	Conference/seminar/workshop/ex	i) One Week STTP on 'Innovations in Physics &
	hibition organized	Chemistry' 18 <sup>th</sup> May to 23 <sup>rd</sup> May 2021, Online
		Mode, ADCET, Ashta.
		ii) One Week STTP on 'Recent Trends in
		Interdisciplinary Research in Material
		Sciences' (Under Lead College Scheme of Shivaji
		University, Kolhapur), $26^{th}$ to $30^{th}$ Dec 2017,
		ADCET, Ashta.
	Projects	Nil
	Student Supervision	Nil
	Other contributions	Nil
	Consultancy	Nil
	Co-curricular activities	i) Examiner - B.Sc. I, II, theory
		ii) Expert - B.Sc. I, II, III practical
		examination.
		iii) Paper setter – B.Sc. I
		iv) Worked as reviewer for Asian Journal of
		Education and Social Studies, 2024,
		https://dashboard.peerreviewcentral.com
		v) Worked as reviewer for 11 <sup>th</sup> International
		Conference on Transformations in
		Engineering Education, 2 <sup>nd</sup> to 4 <sup>th</sup> January 2024, IUCEE and KLE technological
		University, Huballi.
		vi) NPTEL, SWAYAM courses- Total <b>06</b>