## **CURRICULUM VITAE**



Dr. Prashant B. Koli

(Assistant Professor (Chemistry)

(M. Sc. (Inorganic Chemistry SET, Ph.D.)

**Department of Chemistry,** 

MVP'S Arts, Commerce and Science College,

Satana, Nashik, MS, India, Pin-423301

**Objective:** To work in the institution where I can make best use of my experience, talent and expand my skills besides enhancing my knowledge while being resourceful, innovative& flexible.

|                        | Details   |  |  |
|------------------------|---|--|--|
| Full Name              | Dr. Prashant Bhimrao Koli   |  |  |
| Designation            | Assistant Professor in  |  |  |
|                        | Chemistry Department of   |  |  |
|                        | Chemistry,  |  |  |
|                        | MVP'S   |  |  |
|                        | Arts, Commerce and Science  |  |  |
|                        | College, Satana, Nashik, MS,  |  |  |
|                        | India, Pin-423106   |  |  |
| Date of Birth          | 05.10.1983  |  |  |
| Academic Qualification | M.Sc., Inorganic Chemistry, SET, Ph.D.  |  |  |
| Teaching Experience    | 12 years teaching experience ( UG and PG)   |  |  |
| Work experience on     | ❖ IQAC Co-ordinator, ACS college Satana(2022)                                       |  |  |
| various Committees     | ❖ ARC Co-ordinator, ACS college Satana(2022)  |  |  |
|                        | <ul> <li>Science Association co-ordinator ACS College, Satana. (2021-22)</li> </ul> |  |  |
|                        | Placement officer, ACS college, Nandgaon(2019-2020)                                 |  |  |
|                        | ❖ IQAC Co-ordinator, ACS college Nandgaon(2020)                                     |  |  |

|                                 | Member of planning board at ACS ,College ,Nandgaon  |  |
|---------------------------------|---|--|
|                                 | <ul> <li>Co-ordinator for UGC proposal and grant utilization committee, ACS</li> </ul>  |  |
|                                 | ACS college, Nandgaon (2020)  |  |
| Ph.D.                           | Synthesis, Characterization of doped semiconducting nanomaterials and their applications in gas sensing and effluent treatment                              |  |
| Patent (Indian)                 | Reported synthesis of novel molecule Mn <sub>2</sub> CeO <sub>6</sub> nanoparticles, Application number: 201921032508 A, date of filing patent: 10.08.2019, |  |
|                                 | Date of publication : 08.11.2019  |  |
| Achievements                    | Stood second in M.Sc. [Inorganic Chemistry] Kavayitri Bahinabai   |  |
|                                 | Chaudhari north Maharashtra university, Jalgaon in the year 2008  |  |
|                                 | ❖ Cleared SET Examination in September 2015   |  |
|                                 | <ul> <li>Completed Ph.D. from KBC-NMU, Jalgaon – 7 April 2021</li> </ul>  |  |
| Instrument Handling             | ❖ UV –Spectrophotometer (Shimadzu)  |  |
|                                 | ❖ FT –IR (THERMO 2000)  |  |
|                                 | ❖ Gas Chromatograph (Shimadzu)  |  |
|                                 | ❖ Flame Emission Spectrophotometer ( Systronics)  |  |
| Resource Person and examination | <ul> <li>Deliver lecture as a resource person for UG Chemistry students on 7 april-</li> <li>2022</li> </ul>  |  |
|                                 | Deliver lecture as a resource person in the SET/NET WORKSHOP conducted by LVH College, Nashik. 24 August 2021   |  |
|                                 | <ul> <li>❖ Deliver lecture as a resource person in the SET/NET WORKSHOP</li> </ul>  |  |
|                                 | conducted by KBC-NMU, Jalgaon. 21 July 2021   |  |
|                                 | Delivered lecture as a resource person in the SET/NET WORKSHOP  |  |
|                                 | conducted by Arts, Science and Commerce College, Nandurbar  |  |
|                                 | Delivered lecture as a resource person in the SET/NET WORKSHOP conducted by Arts, Science and Commerce College, Nashik                                      |  |
|                                 | <ul> <li>Delivered lecture as a resource person in the SET/NET WORKSHOP</li> </ul>  |  |
|                                 | conducted by Arts, Science and Commerce College, Manmad   |  |
|                                 | Delivered lecture as a resource person for PG students (M.Sc. Inorganic   |  |
|                                 | Chemistry) at Arts, Science and Commerce College, Saikheda  |  |
|                                 | ❖ Delivered lecture as a resource person in the SET/NET ONLINE  |  |
|                                 | WORKSHOP conducted by Arts, Science and Commerce College, Manmad  |  |
|                                 | ❖ Worked as a Paper Setter for M.Sc. I Chemistry ( Chemistry Paper II   |  |
|                                 | ) at Sandip University , Nashik   |  |
|                                 | <ul> <li>Worked as a Paper Setter for M.Sc. II Chemistry ( Chemistry Paper II ) at</li> </ul>   |  |
|                                 |   |  |
|                                 | Sandip University , Nashik  |  |

❖ Worked as a Paper Setter for F.Y.B.Sc Chemistry ( Chemistry Paper II ) at Sandip University , Nashik ❖ Delivered the lecture for XIIth Chemistry student under MGV pattern at L.V.H.College, Panchavati, Nashik, on 9/10/2017. Reviewer for journal, Journal of Optics, (Springer publications), I.F. 2.5, **Reviewer for International** September 2022 journals Reviewer for journal, Material today proceedings (Cite score 2.3, Elsevier Publications) Reviewer for journal, Journal of New journal of chemistry (NJC) Royal society of Chemistry (RSC) Aug-2022 Reviewer for journal, Journal of Magnetism and magnetic materials (I.F. 2.7, Elsevier Publications) Reviewer for journal of physics and chemistry of solids (Elsevier Publications) ISSN: 0022-3697 (SCI Journal with impact factor 2.14) Reviewer for journal of Biomass and valorization (Springer publications) ISSN: 1877-265X, IF.2.8 (2020) Reviewer of Journal Material Science Research India (MSRI, ISSN 2394-0565 online), an international peer reviewed journal. \* Reviewer of Journal Global Research and Development journals (GRD ISSN 2455-5703 online) Active Member and Reviewer of International journal of creative research Thoughts (IJCRT, ISSN:2320-2882), an international peer reviewed journal. \* Reviewer for International journal of Physical and Chemical Sciences. (IJCPS, ISSN 2319-6602), an international peer reviewed journal. Journal Bioscience biotechnology research Asia. (BBRA, ISSN 2394-0565) online) ❖ Attended International conference on "International material science **Conference and seminar** attended conference (IMSC) 18-20 March-2021 ❖ Attended national webinar on "AQAR guidelines and submission" on 7 November 2020 organized by MGVS ASC college, Manmad. ❖ Attended state level Conference on Innovative Applications of

Nashik. (24-25 jan.2020)

ACS College, Karanjali, Nashik, 14-15 jan.2020)

nanomaterials in science and technology, held at ACS College, Nandgaon,

Attended state level Conference on Applications of nanomaterials held at

- Attended the revision of syllabus (CBCS), S.Y.B.Sc. at MVPS, SVKT college, Nashik (25 Feb.2020)
- ❖ Attended workshop on IQAC at KTHM college, Nashik on 3 feb.2020
- Presented Research paper on Nanosized semiconducting stannous oxide thick films gas sensors for some selective oxidizing & reducing gases at International Conference on Innovations in nanomaterials and their applications(ICINA 2018) held at L.V.H.College, Panchavati, Nashik.(18-20 jan.2018)
- Attended State Level seminar on Applications of material Science at HPT Arts and RYK Science college, Nashik on 03 February 2018
- Attended one day workshop on "Advances in Chromatography and Spectroscopy" Held at K.K.Wagh college of Agriculture, Nashik on 13 January 2018
- Attended a National Conference Emerging Trends in Chemistry and Nanoscience (ETCN-2017) held at Loknete Vyankatrao Hiray Arts, Science and Commerce College, Panchavati, Nashik on 20-21 January 2017
- Presented Research paper on "Synthesis characterization and Gas sensitivity Performance of LaCrO<sub>3</sub> Thick films in presence of Ethanol Atmosphere" at International Conference on Pure and Applied Sciences 2016 (ICPAS-2016) held at MSG Arts, Science and Commerce College, Malegaon on 12-14 December 2016.
- Attended International conference at S.N.Arts, D.J.Malpani Commerce and B.N.Sarda Science College Sangamner on "Recent Trends in Chemical and Environmental Sciences", held on 12<sup>th</sup> and 13 <sup>th</sup> February 2016
- Attended National conference at G.T.Patil Arts, Commerce and Science College, Nandurbar on "Chemical Synthesis of Nanomaterials and their Applications in Environment" held on 8-9 February 2016

| S.N | Title of Research Paper | Journal Name | Month and Year of publication/ Communication |
|-----|-------------------------|--------------|--|
|     |                         |              |  |

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**Publications** 

Ferrosso-Ferric oxide (Fe<sub>3</sub>O<sub>4</sub>) embedded g-C<sub>3</sub>N<sub>4</sub> nanocomposite sensor material fabricated by photolithographic technique for environmental, industrial pollutant gas sensing and humidity sensing charcarteristics

| 2 | The augmentation of nanotechnology era: A concise review on fundamental concepts of nanotechnology and applications in material science and technology   | Results in Chemistry   | Communicated<br>( July-2022) |
|---|--|--|------------------------------|
| 3 | Exploration of photocatalytic performance of TiO <sub>2</sub> , Ni-doped TiO <sub>2</sub> , and Fe-doped TiO <sub>2</sub> for degradation of eosine blue dye: comparative study                                | Results in Chemistry   | August- 2022                 |
| 4 | Fe <sup>3+</sup> modified zinc oxide nanomaterial as an efficient, multifaceted material for photocatalytic degradation of MB dye and ethanol gas sensor as part of environmental rectification                | Inorganic chemistry<br>communication<br>(I.F.3.4) Elsevier<br>Publications         | June-2022                    |
| 5 | Designing of LaCrO <sub>3</sub> – TiO <sub>2</sub> nanocomposites<br>p: n heterojunction-based sensor material for<br>the selective detection of volatile petrol<br>vapors (PV) and CO <sub>2</sub> gas vapors | Journal of the Indian<br>chemical society<br>(I.F. 0.243)<br>Elsevier Publications | March -2022                  |
| 6 | Synthesis and Characterization of ZnO/CuO Nanocomposites as an Effective Photocatalyst and Gas Sensor for Environmental Remediation  | Journal of Inorganic and<br>Organometallic Polymers<br>and Materials               | November-2021                |
| 7 | Transition metal incorporated, modified bismuth oxide (Bi <sub>2</sub> O <sub>3</sub> ) nano photo catalyst for deterioration of Rosaniline hydrochloride dye as resource for environmental rehabilitation     | Journal of the Indian<br>chemical society<br>(I.F. 0.243)<br>Elsevier Publications | November-2021                |
| 8 | Enhanced Photocatalytic Activity of Two Dimensional Graphitic carbon nitride: C3N4@Co3O4 Core shell nanocomposite for Discriminatory Organic transformation of CF dye under Hg-vapor reactor                   | Material science research India (Enviro reerach Pub.) ISSN: 0973-3469              | September -2021              |
| 9 | Microwave prompted solvent-free synthesis of new series of heterocyclic tagged 7-arylidene indanone hybrids and their  | Bioorganic<br>Chemistry<br>(Elsevier: I.F. 5.4)<br>ISSN 0045-2068                  | (August -2021)               |

|    | computational, antifungal, antioxidant, and cytotoxicity study  |   |                |
|----|---|---|----------------|
| 10 | Transition metals Fe <sup>3+</sup> , Ni <sup>2+</sup> modified titanium dioxide (TiO <sub>2</sub> ) film sensors fabricated by CPT method to sense some toxic environmental pollutant gases                     | Journal of the Indian<br>chemical society<br>(Elsevier)<br>ISSN: 0019-4522                              | (August -2021) |
| 11 | Design, Fabrication, Antitubercular,<br>Antibacterial, Antifungal and Antioxidant<br>Study of Silver Doped ZnO and CuO Nano<br>Candidates: A Comparative Pharmacological<br>Study                               | Current Research in Green and Sustainable Chemistry (Elsevier Publications) ISSN: 2666-0865             | (July -2021)   |
| 12 | Stannous Oxide Thick Film Nanosensors Design by Screen Printing Technology: Structural, Electrical Parameters and H <sub>2</sub> s Gas Detection Study  | Material science research<br>India<br>(peer reviewed<br>international journal)                          | March-2021     |
| 13 | The binary oxide NiO-CuO nanocomposite based thick film sensor for the acute detection of Hydrogen Sulphide gas vapors  | Material science research<br>India<br>(peer reviewed<br>international journal)                          | December-2020  |
| 14 | Sol-gel fabricated, spin coated Transition metal modified Perovskite LaCrO <sub>3</sub> thin films sensors for perceiving Atmospheric pollutant, greenhouse gases and relative humidity sensing characteristics | Environmental Challenges<br>(Elsevier)<br>ISSN:2267-0100<br>I.F. 4.077                                  | February-2021  |
| 15 | Screen printed constructed modified zinc oxide thick film sensors for the monitoration of environmental and industrial pollutant gases  | Oriental journal of<br>chemistry<br>ISSN :2192-8865   | December-2020  |
| 16 | Computational Insights on Molecular Structure, Electronic Properties, and Chemical Reactivity of ( <i>E</i> )-3-(4-Chlorophenyl)-1-(2-Hydroxyphenyl)Prop-2-en-1-One   | Material science research India (peer reviewed international journal)                                   | July-2020      |
| 17 | Screen print fabricated In <sup>3+</sup> decorated perovskite lanthanum chromium oxide thick film sensors for selective detection of volatile petrol vapors   | Journal of Inorganic and organometallic polymers and materials (JIOPM) I.F. 3.5 (Springer publications) | July-2020      |
|    | Sol-Gel Fabricated Transition Metal Cr <sup>3+</sup> ,<br>Co <sup>2+</sup> Doped Lanthanum Ferric Oxide (LFO-   | Material science research<br>India  | April-2020     |

| 40  |  |                             |                         |
|-----|--|-----------------------------|-------------------------|
| 18  | LaFeO <sub>3</sub> )Thin Film Sensors for the Detection          | (peer reviewed              |                         |
|     | of Toxic, Flammable Gases: A Comparative                         | international journal)      |                         |
|     | Study  |                             |                         |
|     |  |                             |                         |
|     | Transition metal decorated Ferrosoferric                         | Journal of Environmental    | August -2019            |
| 19  | oxide (Fe <sub>3</sub> O <sub>4</sub> ): An expeditious          | Chemical Engineering        |                         |
|     | catalyst for photodegradation of Carbol                          | (Elsevier)                  |                         |
|     | Fuchsin in environmental   | I.F.4.3, Cite score 6.7     |                         |
|     | remediation  | ISSN:2213-3437              |                         |
| 20  |  |                             | A 11 2010               |
| 20  | Fabrication of nanocrystalline modified                          | Journal of Nanostructure In | April-2019              |
|     | nickel ferrite films as cost effective gas                       | Chemistry (Springer)        |                         |
|     | sensors for industrial and environmental gas                     | ISSN: 2193-                 |                         |
|     | pollutant detection  | 8865 (electronic version)   |                         |
|     |  |                             |                         |
| 21  | Effect of firing temperature on structural and                   | SN Applied Sciences         | 7 March-2019            |
|     | electrical parameters of synthesized CeO <sub>2</sub>            | (Springer)                  |                         |
|     | thick films  | ISSN: 2523-                 |                         |
|     |  | 3971(electronic version)    |                         |
| 22  | Exploration of catalytic performance of                          | Journal of Nanostructure In | February-2019           |
|     | nano-La <sub>2</sub> O <sub>3</sub> as an efficient catalyst for | Chemistry (Springer)        | 1 Col ual y-2017        |
|     | dihydropyrimidinone/thione synthesis and                         | ISSN: 2193-                 |                         |
|     |  |                             |                         |
| 22  | gas sensing  | 8865 (electronic version)   | 26 N. 1 2040            |
| 23  | Fabrication, Characterization of Pure And                        |                             | <b>26 November 2018</b> |
|     | Modified Co <sub>3</sub> O <sub>4</sub> Nanocatalyst And Their   |                             |                         |
|     | Application For Photocatalytic Degradation                       |                             |                         |
|     | Of Eosine Blue Dye: A Comparative Study                          | 8865 (electronic version)   |                         |
|     |  |                             |                         |
|     |  |                             |                         |
| 24  | Study of Physico-chemical Properties,                            | Applied water Science       | 02 Oct -2018            |
|     | detection and Toxicity study of organic                          | (Springer)                  |                         |
|     | compounds from effluent of MIDC Thane                            |                             |                         |
|     | and GIDC Ankleshwar Industrial Zone                              |                             |                         |
|     | 22211112   |                             |                         |
| 25  | Antibacterial potential of silver nanoparticles                  | Microbial Pathogenesis      | May -2018               |
| 23  | synthesized using <i>Madhuca Longifolia</i> as a                 | ELSEVIER, Impact factor     | Way -2010               |
|     |  |                             |                         |
|     | green resource   | :2.3                        |                         |
| 0.1 |  | ISSN: 0882-4010             | 3.6. 0040               |
| 26  | Nanosized semiconducting Stannous oxide                          | Researchers World -         | <b>Mar-2018</b>         |
|     | thick films gas sensors for some selective                       | International Refereed      |                         |
|     | oxidizing & reducing gases                                       | Research Journal            |                         |
|     |  | ISSN 2231-4172              |                         |
|     |  |                             |                         |
| 27  | Sensing behavior of screen printed                               | Researchers World -         | Mar-2018                |
|     | nanocrystalline copper oxide thick films in                      | International Refereed      |                         |
|     | presence of H <sub>2</sub> S atmosphere                          | Research Journal            |                         |
|     |  | ISSN 2231-4172              |                         |
|     |  | 1001 1201 11/2              |                         |
| 28  | Synthesis and Characterization of LaCrO <sub>3</sub>             | Researchers World -         | Mar-2018                |
| 40  |  | International Refereed      | 14141-2010              |
|     | doped with Y by sol-gel method.                                  |                             |                         |
|     |  | Research Journal            |                         |
|     |  | ISSN 2231-4172              |                         |
|     |  |                             |                         |

|    | Methanol Gas Sensing Properties of   | Pharmaceutical Research     | Feb - 2017        |
|----|--|-----------------------------|-------------------|
|    | <u> </u>   | ( JOCPR)                    | reb - 2017        |
|    | Perovskite LaFeO3 Nanoparticles Doped by Transition Metals Cr <sup>3+</sup> and Co <sup>2+</sup> |                             |                   |
|    |  | ISSN: 0975-7384             | D 4016            |
|    | Synthesis, characterization and gas  | Researchers World -         | Dec-2016          |
|    | sensitivity performance of LaCrO <sub>3</sub> thick  | International Refereed      |                   |
|    | films in presence of ethanol atmosphere  | Research Journal            |                   |
|    |  | ISSN 2231-4172              |                   |
| 31 | Synthesis, characterization and gas sensing  | International Journal of    | Dec-2016          |
|    | properties Co <sub>3</sub> O <sub>4</sub> and NiO nanoparticles by                               | Research in Engineering     |                   |
|    | thick films fabrication  | and Applied                 |                   |
|    |  | Sciences(IJREAS),           |                   |
|    |  | ISSN :2249-3905             |                   |
| 32 | Synthesis of Nanocomposites zinc and cobalt  | World Journal of            | Sept-2016         |
|    | ferrite- polyaniline by polymerization   | Pharmaceutical              |                   |
|    | method, their characterization and bio assay.  | Research(WJPR)              |                   |
|    | and their entirectorization and oro assay.   | ISSN 2277-7105              |                   |
| 33 | Green synthesis and characterization of SnO <sub>2</sub>   | Der Chemica Sinica          | Feb-2016          |
|    | and ZnO nanoparticles: Study their electrical  | ( Pelagia Research Library) | FCD-2010          |
|    | conductivity and gas sensing properties  | ISSN: 0976-8505             |                   |
|    | Heavy metals analysis Study by EDS from  | International Journal of    | A 2015            |
| 34 |  |                             | August -2015      |
|    | Ayurvedic antacids drugs   | Research in Engineering     |                   |
|    |  | and Applied                 |                   |
|    |  | Sciences(IJREAS)            |                   |
|    |  | ISSN :2249-3905             |                   |
|    | Estimation of metals like Zn, Ni, Cd, & Fe   | International Journal Of    | <b>June -2015</b> |
|    | from "TOBACCO" (1) AND   | Current Research (IJCR)     |                   |
|    | "PANMASALA" (2) by spectral analysis: A  | ISSN: 0975- 833X            |                   |
|    | review   |                             |                   |
|    |  |                             |                   |
|    | Synthesis, Characterization& Antimicrobial   | International Journal of    | January -2015     |
|    | Activity of Mixed Metal Oxides of Iron   | Chemical and Physical       |                   |
|    | Cobalt Nickel and Zinc.  | Sciences                    |                   |
|    |  | ( IJCPS)                    |                   |
|    |  | ISSN:2319-6602              |                   |

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