

# NAAC

## Teacher Profile

### A] Personal Details :

Name of the Teacher : Dr. Vinayak Vasant Ganbavle

Date of Birth : April 18, 1984

Educational Qualification : M.Sc., Ph.D.

Designation : Assistant Professor

Name of Dept. : Physics

Email : vinayakganbavale@gmail.com

Mobile : 9960073358



### B] Awards : 2009-17

**University Grants Commission Basic Scientific Research (UGC-BSR) Junior Research Fellowship (22-03-2013 to 21-03-2015)**

**University Grants Commission Basic Scientific Research (UGC-BSR) Senior Research Fellowship (21-03-2015 to 27-10-2015)**

### C] Co-curricular Activities : NA

| Sr.No. | Refresher/Orientation/Training completed. | Rank | Year | Place |
|--------|---|------|------|-------|
| 1      |   |      |      |       |
| 2      |   |      |      |       |

| Sr. No. | Lecture delivered to  | Topic   | Date       | Place        |
|---------|---|---|------------|--------------|
| 1       | Faculty of Shri Vijaysinha Yadav Arts and Science College, Peth Vadgaon | Understanding Quality Measuring Tools for Productivity of Research Publications | 14-10-2106 | Peth Vadgaon |

| Sr. No. | Major/Minor Research Project (Title, Funding Agency) | Duration | Year | Status    |         |                    | Amount (Lakh) |            |
|---------|--|----------|------|-----------|---------|--------------------|---------------|------------|
|         |  |          |      | Completed | Ongoing | Proposal Submitted | Received      | Sanctioned |
|         |  |          |      |           |         |                    |               |            |

| Sr. No. | Research Guide for M.Phil/Ph.D. | Number of students |         |
|---------|---------------------------------|--------------------|---------|
| 1       |                                 | Registered         | Awarded |
| Total=  |                                 |                    |         |

**Details of the Seminar, Conferences, Workshops : Participation, Presentations etc.**

| <b>Sr. No</b> | <b>Author Name</b>                          | <b>Participated/ Paper Presented/ Chairperson/ Resource Person</b> | <b>Title</b>   | <b>Date</b>               | <b>Place</b>   | <b>Status(National/ International/State)</b>   |
|---------------|---|--|--|---------------------------|--|--|
| 1             | V. V. Ganbavle, V. S. Sawant, K. Y. Rajpure | Paper Presented  | Physico-chemical, electrical and dielectric properties of the spray deposited WO <sub>3</sub> films for gas sensor application | 21-25 Nov 2012            | K.S.Rangasamy College of Technology, Coimbatore, Tamil Nadu        | 6th International symposium on macro and supramolecular architectures and materials                            |
| 2             | V.V. Ganbavle, K. Y. Rajpure                | Paper Presented  | Structural, optical and electrical properties of WO <sub>3</sub> thin films  | 3-4 Jan 2013              | Shivaji University, Kolhapur                                       | National seminar on physics of material and material based device fabrication (NSPMMDF-2013)                   |
| 3             | V. V. Ganbavle, S.K. Patil, K. Y. Rajpure   | Paper Presented  | NO <sub>2</sub> , and SO <sub>2</sub> sensing properties of sprayed WO <sub>3</sub> films                                      | Jan 2014                  | Shivaji University, Kolhapur                                       | 2nd International conference on Physics of material and material based device fabrication (ICPMMDF-2014),13-15 |
| 4             | V.V. Ganbavle, K.Y. Rajpure                 | Paper Presented  | Structural, morphological and gas sensing properties of spray deposited Co:ZnO films   | 15th - 16th, January 2014 | Gopal Krishna Gokhale College, Kolhapur-416012, (MS) India during. | International Conference on Advanced and Applied Material Science (ICAAMS-2014)                                |
| 5             | V.V. Ganbavle, S.V. Mohite, K.Y. Rajpure    | Paper Presented  | Structural, morphological and gas sensing properties for spray deposited Ni:ZnO films  | 10 -11 January 2014       | Yashwantrao Chavan Institute of Science, Satara during.            | International Conference on Innovation in Energy, Polymer and  |

|   |   |                                     |   |                 |   |  |
|---|---|-------------------------------------|---|-----------------|---|--|
|   |   |                                     |   |                 |   | Environmental Sciences (IEPES-2014) held at  |
| 6 | V. V. Ganbavle, S.K. Patil, K. Y. Rajpure | Paper Presented                     | NO <sub>2</sub> , and SO <sub>2</sub> sensing properties of sprayed WO <sub>3</sub> films     | 13-15 Jan. 2014 | Department of Physics, Shivaji University, Kolhapur | 2nd International Conference on Physics of Materials and Materials based Device Fabrication (ICPM MDF-2014), |
| 7 | V.V. Ganbavle, K.Y. Rajpure               | Paper Presented                     | Fast response, highly selective NO <sub>2</sub> sensor: Effect of Ni doping                   | 19-20 Dec 2014  | Shivaji University, Kolhapur                        | 3rd National seminar on physics of material and material based device fabrication (NSPM-MDF-2014)            |
| 8 | V. V. Ganbavle                            | Paper Presented (Oral presentation) | Enhanced NO <sub>2</sub> Sensing Properties of WO <sub>3</sub> Thin Film on Alumina Substrate | 7-8 Dec 2016    | Raje Ramrao, College, Jath                          | International Conference on Advances in Materials Science  |

**Publication of Research paper in Seminar/Conference/ Workshop/Symposium Proceedings .**

| <b>Sr. No .</b> | <b>Author/s Name</b> | <b>Title of the Paper</b> | <b>Title of The Seminar, Conference, Workshop/Symposium</b> | <b>Date</b> | <b>Place</b> | <b>Status(National/ International/State)</b> | <b>ISSN/ISBN Number</b> |
|-----------------|----------------------|---------------------------|---|-------------|--------------|--|-------------------------|
| 1               |                      |                           |   |             |              |  |                         |
| 2               |                      |                           |   |             |              |  |                         |
| 3               |                      |                           |   |             |              |  |                         |
| 4               |                      |                           |   |             |              |  |                         |

## F) Publications of Books :

| Sr. No. | Subject                    | Author/s   | Title                      | Class | Publisher                   | Year | With ISBN         | Without ISBN |
|---------|----------------------------|--|----------------------------|-------|-----------------------------|------|-------------------|--------------|
| 1.      | ZnO based UV photodetector | Sumayya I<br>Inamdar<br>kesu Y<br>Rajpure<br>Vinayak V<br>ganbavle | ZnO based UV photodetector |       | Limbort publisher, Germany. | 2016 | 978-3-659-94168-9 |              |

## G]1. Paper and Articles publications in International Journals

| Sr.No | Title of The Paper  | Author/s  | With ISSN Number   | Impact Factor | Year | Peer/Non-peer reviewed /e-Journal etc. |
|-------|---|---|--|---------------|------|--|
| 1.    | Assessment of structural, morphological, magnetic and gas sensing properties of CoFe <sub>2</sub> O <sub>4</sub> thin films   | AA Bagade, VV Ganbavle, SV Mohite, TD Dongale, BB Sinha, KY Rajpure   | Journal of Colloid and Interface Science 497, 181-192<br>ISSN: 0021-9797 | 3.782         | 2017 | Peer reviewed                          |
| 2.    | Photoelectrocatalytic activity of immobilized Yb doped WO <sub>3</sub> photocatalyst for degradation of methyl orange dye   | SV Mohite, VV Ganbavle, KY Rajpure                                    | Journal of Energy Chemistry  |               | 2017 | Peer reviewed                          |
| 3.    | Facile Chemical Bath Deposition Method for Interconnected Nanofibrous Polythiophene Thin Films and Their Use for Highly Efficient Room Temperature NO <sub>2</sub> Sensor Application | DB Kamble, AK Sharma, JB Yadav, VB Patil, RS Devan, AA Jatratkar, ... | Sensors and Actuators B: Chemical  |               | 2017 | Peer reviewed                          |
| 4.    | Photoelectrocatalytic degradation of benzoic acid using immobilized tungsten trioxide photocatalyst   | SV Mohite, VV Ganbavle, VV Patil, KY Rajpure<br>Materials             | Chemistry and Physics 183, 439-446                                       |               | 2016 | Peer reviewed                          |

|     |   |   |   |       |      |               |
|-----|---|---|---|-------|------|---------------|
| 5.  | Synthesis and characterization of zinc stannate thin films prepared by spray pyrolysis technique  | M. A. Patil, S. H. Mujawar, <b>V. V. Ganbavle</b> , K. Y. Rajpure, H. P. Deshmukh | <b>Journal of Materials Science: Materials in Electronics</b> , 27 (12), 12323-12328<br>ISSN: 0957-4522 | 1.798 | 2016 | Peer reviewed |
| 6.  | Multifunctional zinc oxide thin films for high performance UV photodetector and nitrogen dioxide gas sensor   | S. K. Shaikh, <b>V. V. Ganbavle</b> , S. I. Inamdar, K. Y. Rajpure                | <b>RSC advances</b> , 6 (31), 25641-25650, 2016<br>ISSN:2046-2069                                       | 3.289 | 2016 | Peer reviewed |
| 7.  | Chemical bath deposited ZnO thin film based UV photoconductive detector   | S. K. Shaikh, S. I. Inamdar, <b>V. V. Ganbavle</b> , K. Y. Rajpure                | <b>Journal of Alloys and Compounds</b> , 664 (2016) 242-249<br>ISSN: 0925-8388                          | 3.014 | 2016 | Peer reviewed |
| 8.  | Synthesis of fast response, highly sensitive and selective Ni:ZnO based NO <sub>2</sub> sensor  | <b>V.V. Ganbavle</b> , S.I. Inamdar, G.L. Agawane, J.H. Kim, K.Y. Rajpure         | <b>Chemical Engineering Journal</b> , 286 (2016) 36-47<br>ISSN: 1385-8947                               | 5.310 | 2016 | Peer reviewed |
| 9.  | Solar photoelectrocatalytic activities of rhodamine-B using sprayed WO <sub>3</sub> photoelectrode  | S.V. Mohite, <b>V.V. Ganbavle</b> , K.Y. Rajpure                                  | <b>Journal of Alloys and Compounds</b> , 655 (2016) 106-113<br>ISSN: 0925-8388                          | 3.014 | 2016 | Peer reviewed |
| 10. | Effect of solution concentration on physicochemical and gas sensing properties of sprayed WO <sub>3</sub> thin films  | <b>V.V. Ganbavle</b> , S.V. Mohite, J.H. Kim, K.Y. Rajpure                        | <b>Current Applied Physics</b> , 15 (2) (2015) 84-93<br>ISSN: 1567-1739                                 | 2.144 | 2015 | Peer reviewed |
| 11. | Effect of Substrate Temperature on the Properties of Sprayed WO <sub>3</sub> Thin Films Using Peroxotungstic Acid and Ammonium Tungstate: A Comparative Study | <b>V.V. Ganbavle</b> , J.H. Kim, K.Y. Rajpure                                     | <b>Journal of Electronic Materials</b> , 44 (3) (2015) 874-885<br>ISSN: 0361-5235                       | 1.491 | 2015 | Peer reviewed |
| 12. | Effect of the buffer layer on the metal–semiconductor–metal UV  | S.I. Inamdar, <b>V.V. Ganbavle</b> , S.A. Shaikh,                                 | <b>Physica Status Solidi (a)</b> , 212 (8) (2015) 1704–1712   | 1.648 | 2015 | Peer reviewed |

|     |  |  |  |       |      |               |
|-----|--|--|--|-------|------|---------------|
|     | photodetector based on Al doped and undoped ZnO thin films with different device structures  | K.Y. Rajpure   | ISSN: 1862-6319  |       |      |               |
| 13. | Nitrogen dioxide sensing properties of sprayed tungsten oxide thin film sensor: Effect of film thickness   | <b><u>V.V. Ganbavle</u></b> , S.V. Mohite, G.L. Agawane, J.H. Kim, K.Y. Rajpure                | <i>Journal of Colloid and Interface Science</i> , 451 (2015) 245-254<br>ISSN: 0021-9797              | 3.782 | 2015 | Peer reviewed |
| 14. | Physicochemical properties of sprayed V <sub>2</sub> O <sub>5</sub> thin films: Effect of substrate temperature  | A.A. Mane, <b><u>V.V. Ganbavle</u></b> , M.A. Gaikwad, S.S. Nikam, K.Y. Rajpure, A.V. Moholkar | <i>Journal of Analytical and Applied Pyrolysis</i> , 115 (2015) 57-65<br>ISSN: 0165-2370             | 3.652 | 2015 | Peer reviewed |
| 15. | Physicochemical Properties of Spray-Deposited CoFe <sub>2</sub> O <sub>4</sub> Thin Films  | A.A. Bagade, <b><u>V.V. Ganbavle</u></b> , K.Y. Rajpure  | <i>Journal of Materials Engineering and Performance</i> , 23 (8) (2014) 2787-2794<br>ISSN: 1544-1024 | 1.094 | 2014 | Peer reviewed |
| 16. | Development of Zn <sub>2</sub> SnO <sub>4</sub> thin films deposited by spray pyrolysis method and their utility for NO <sub>2</sub> gas sensors at moderate operating temperature | <b><u>V.V. Ganbavle</u></b> , M.A. Patil, H.P. Deshmukh, K.Y. Rajpure                          | <i>Journal of Analytical and Applied Pyrolysis</i> , 107 (2014) 233-241<br>ISSN: 0165-2370           | 3.652 | 2014 | Peer reviewed |
| 17. | Structural, optical, electrical, and dielectric properties of the spray-deposited WO <sub>3</sub> thin films   | <b><u>V.V. Ganbavle</u></b> , G.L. Agawane, A.V. Moholkar, J.H. Kim, K.Y. Rajpure              | <i>Journal of Materials Engineering and Performance</i> , 23 (4) (2014) 1204-1213<br>ISSN: 1544-1024 | 1.094 | 2014 | Peer reviewed |

|     |   |   |   |       |      |               |
|-----|---|---|---|-------|------|---------------|
| 18. | Effect of Co doping on structural, morphological and LPG sensing properties of nanocrystalline ZnO thin films   | <u>V.V. Ganbavle</u> , S.K. Patil, S. I. Inamdar, S.S. Shinde, K.Y. Rajpure | <i>Sensors and Actuators A: Physical</i> , 216 (2014) 328-334<br>ISSN: 0924-4247      | 2.201 | 2014 | Peer reviewed |
| 19. | ZnO based visible-blind UV photodetector by spray pyrolysis   | S.I. Inamdar, <u>V.V. Ganbavle</u> , K.Y. Rajpure                           | <i>Superlattices and Microstructures</i> , 76 (2014) 253-263<br>ISSN: 0749-6036       | 2.117 | 2014 | Peer reviewed |
| 20. | Self-cleaning silica coatings on glass by single step sol-gel route   | <u>V.V. Ganbavle</u> , U.K.H. Bangi, S.S. Latthe, S.A. Mahadik, A.V. Rao    | <i>Surface and Coatings Technology</i> , 205 (23) (2011) 5338-5344<br>ISSN: 0257-8972 | 2.139 | 2011 | Peer reviewed |
| 21. | Influence of preparation conditions on nanoporous structure and optical transmission of sodium silicate based ambient pressure dried aerogels employing shaking | A.V. Rao, <u>V.V. Ganbavle</u> , U.K.H. Bangi, S.L. Dhere                   | <i>Journal of Porous Materials</i> , 18 (6) (2011) 751-759<br>ISSN: 1573-4854         | 1.385 | 2011 | Peer reviewed |

#### Top 25 Hottest Articles in Various Subject Areas :

- *Current Applied Physics*, 15 (2) (2015) 84-93; Ranked **19<sup>th</sup>** on the top 25 for **July to September 2015**
- *Current Applied Physics*, 15 (2) (2015) 84-93; Ranked **20<sup>th</sup>** on the top 25 for **April to June 2015**
- *Current Applied Physics*, 15 (2) (2015) 84-93; Ranked **6<sup>th</sup>** on the top 25 for **January to March 2015**
- *Current Applied Physics*, 15 (2) (2015) 84-93; Ranked **20<sup>th</sup>** on the top 25 for **October to December 2014**
- *Sensors and Actuators A: Physical*, 216 (2014) 328-334, Ranked **13<sup>th</sup>** on the top 25 for **July to September 2014**
- *Superlattices and Microstructures*, 76 (2014) 253-263; Ranked **16<sup>th</sup>** on the top 25 for **October to December 2014**

- *Surface and Coatings Technology*, 205 (23) (2011) 5338-5344; Ranked 21<sup>th</sup> on the top 25 January to December 2011 Full Year

## 2. Paper and Articles publications in National Journals

| Sr.No. | Title of The Paper | Author/s | With ISSN Number | Without ISSN | Impact Factor | Year | Peer/Non-peer revived/e-Journal etc. |
|--------|--------------------|----------|------------------|--------------|---------------|------|--------------------------------------|
| 1      |                    |          |                  |              |               |      |                                      |

## 3. Paper and Articles publications in Other Journals

| Sr.No. | Title of The Paper | Author/s | With ISSN Number | Without ISSN | Impact Factor | Year | Peer/Non-peer revived/e-Journal etc. |
|--------|--------------------|----------|------------------|--------------|---------------|------|--------------------------------------|
| 1      |                    |          |                  |              |               |      |                                      |

4. Workshop/Conference/ Seminar Organized:

5. Acted as a Coordinator/Convener/member of working committee:

i)

ii)

iii)

6. Member of Professional Organisation :-

7. Contribution in Social Work/Extension activity.

8. Life Membership of Research Society/Journals.

9. Academic Awards :-

| Name of the Award | Regional/State/National | Agency | Year of Award |
|-------------------|-------------------------|--------|---------------|
|                   |                         |        |               |
|                   |                         |        |               |

10. Interviews on Media.



| Name of Media | Title of Interview | Year |
|---------------|--------------------|------|
|               |                    |      |
|               |                    |      |

11. Books Edited /Chapter/s -Edited in Books.

| Name of Book | Author/s | ISBN / ISSN NO. | Publisher | Year of Publication. |
|--------------|----------|-----------------|-----------|----------------------|
|              |          |                 |           |                      |
|              |          |                 |           |                      |

**Dr. Vinayak Vasant Ganbavle**