DR. SANDEEP WATEGAONKAR

Assistant Professor

Skilled Researcher enthusiastic about supporting advancements in knowledge of novel nanostructured materials for **energy related applications**. Passionate about increasing knowledge to drive growth and needed improvements. Ready to apply knowledge and **9** years of experience in research.

Work History

2024-01 To Present
Assistant Professor
Kisan Veer Mahavidyalaya, Wai

2022-10 To 2024-01
Research Director (i/c) & Associate Dean R & D
D. Y. Patil Agriculture & Technical University, India

2013-06 To 2023-09
Lecturer in Chemistry, Head of the Department (Basic Sciences & Humanities)
Sanjay Ghodawat Group of Institution's Polytechnic, Kolhapur

2010-07 To 2013-05
Assistant Professor in Chemistry
Rajarambapu Institute of Technology, Islampur

Education

2022-03
Chemistry (Materials Science), Doctor of Philosophy (Ph.D.)
Shivaji University, Kolhapur, India

2010-06
Chemistry, Master of Science
Dr.Babasaheb Ambedkar Marathwada University, Aurangabad, India

2006-05
Chemistry, Bachelor of Science
Shivaji University, Kolhapur, India

Awards

2020-03
Honored by 'Best Paper Award' at 4th International Conference on Advances in Materials Sciences (ICAMS-2020) organized by Raje Ramrao Mahavidyalaya, Jath, India

2013-03
Honored by ' Best Performance Award' by RIT, Rajamanagar, India

Research Expertise

Research Area

Solar Cells, DSSCs, Gas Sensing, Super capacitors, OER etc.

Analytical and Instrumental Knowledge

Excellent Synthesis lab Skills, Solar simulator, AFM, FE-SEM and EDAX, XPS, Micro Raman Spectrometer, TG-DTA, XRD and BET analysis

Scientific Writing

Research Proposals and articles

Personal Info

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+91 9922448786
+91 7499125063

Address
65, Borgaon, Maharashtra, India, 415413

Citizenship
Indian

Date of Birth
1985-06-27

Linkedin
https://www.linkedin.com/in/sandeep-wategaonkar-27119328

Skills

Good Laboratory Practices

Experiment Design

Documentation Expertise

Research Program Planning

Data Collection and Organization

Quality Assurance Controls

Material Analysis

Good Communication Skill

Publications

1.	**Ion-by-ion adsorption process and reaction for the synthesis of hierarchical manganese tungstate (MnWO4) microflowers as an energy-efficient electrode for supercapacitor** Umesh Shembade, **S.B. Wategaonkar***, A. V. Moholkar, Namira Ambi ***ACS Applied Engineering Materials,*** (2024) Publisher: **ACS.**
2.	**Tailoring the multifunctional properties of hydrothermally synthesized reduced graphene oxide/tungsten oxide supported nanorods to enhance the asymmetric electrochemical and water-splitting activities** Umesh Shembade , **S.B. Wategaonkar***, A. V. Moholkar, Prathapan K Pillai, Jayendra. A. Khot ***Ceramics International,*** (2024) Publisher: **Elsevier, I.F. (5.2)**
3.	**Exploring the synergistic effect of temperature on hydrothermally synthesized tungsten oxide (WO3) nanostructures and its role in asymmetric liquid-state hybrid supercapacitors** Umesh Shembade , **S.B. Wategaonkar**, A. V. Moholkar ***Colloids and Surfaces A: Physicochemical and Engineering Aspects,*** 682 (2024) 132916 Publisher: **Elsevier, I.F. (5.2)**
4.	**Chemically synthesized graphene oxide nanosheet (GONs) is an efficient electrode material for supercapacitor: Effects of current collectors** Umesh Shembade , **S.B. Wategaonkar**, A. V. Moholkar, H. H. Park ***Diamond and Related Material,*** 141 (2024) 110602 Publisher: **Elsevier, I.F. (4)**
5.	**Hydrothermal synthesis of graphene oxide interspersed in non-uniform tungsten oxide nanorod and its performance towards highly efficient hybrid supercapacitor** Umesh Shembade , Sunny Gurav, **S.B. Wategaonkar**, A. V. Moholkar, J. H. KIm ***Ceramics International,*** 50, (2024) 340-350 Publisher: **Elsevier, I.F. (5.2)**
6.	**Investigating the effect of electrolyte and its concentration dependence on WO_3 nanosheet as an efficient electrode for supercapacitors: Effect of Redox Additive** Umesh Shembade , Sunny Gurav, **S.B. Wategaonkar**, A. V. Moholkar, H. H. Park ***Journal of Physics and Chemistry of Solids,*** 183, (2023) 111609 Publisher: **Elsevier, I.F. (4.1)**
7.	**Acid substitutions for WO_3 nanostructures synthesis by the hydrothermal route and its effect on physio-chemical and electrochemical properties for supercapacitors** Umesh Shembade , Sunny Gurav, **S.B. Wategaonkar**, A. V. Moholkar, H. H. Park ***Journal of energy Storage,*** 72, (2023) 108432 Publisher: **Elsevier,I.F. (9.4)**
8.	**Structural, morphological, and optical studies of hydrothermally synthesized Nb-added TiO_2 for DSSC application** **S. B. Wategaonkar,** V. G. Parale, R. P. Pawar, S. S. Mali, C. K. Hong, R. R. Powar, A. V. Moholkar, H. H. Park, B. M. Sargar*, R. K. Mane* ***Ceramics International,*** 47 (18) (2021) 25580-25592. Publisher: **Elsevier, I.F. (5.2)**
9.	**Influence of Tin Doped TiO_2 Nanorods on Dye Sensitized Solar Cells** **S. B. Wategaonkar,** V. G. Parale, S. S. Mali, C. K. Hong, R. P. Pawar, P. S. Maldar, A. V. Moholkar, H. H. Park, B. M. Sargar*, R. K. Mane* ***Materials,*** 14 (21) (2021) 6282. Publisher: **MDPI, I.F. (3.6)**

Software

Microsoft Office ★★★★★

Origin ★★★★★

Chemdraw ★★★★★

Chemsketch ★★★★★

Languages

English ★★★★★

Hindi ★★★★★

Marathi ★★★★★

Korean ★★☆☆☆

Hobbies

Singing

Writing

Swimming

Certificates

2003-07

Maharashtra State Certificate in Information Technology

References

Dr. K. Prathapan

Vice Chancellor, D. Y. Patil Agriculture & Technical University

Prof. Dr. P. S. Patil

Pro-Vice Chancellor, Shivaji University, Kolhapur, India

Dr. A. V. Moholkar

Scientist, Shivaji University

Prof. Dr. J. A. Khot

Registrar, DYP-ATU

10	**Nanocrystalline spinel zinc-substituted cobalt ferrite thick film an efficient ethanol sensor** R. R. Powar, V. G. Parale, V. D. Phadtare, **S. B. Wategaonkar,** R. K. Mane, J. L. Gunjkar, D. R. Patil, P. B. Piste, H. H. Park, D. N. Zambare ***Materials today chemistry,*** 22 (2021) 100607. Publisher: **Elsevier, I.F. (7.3)**
11	**Synthesis of rutile TiO_2 nanostructures by single step hydrothermal route and its characterization** **S. B. Wategaonkar,** R. P. Pawar, V. G. Parale, D. P. Nade, B. M. Sargar*, R. K. Mane* ***Materials Today: Proceedings***, 23 (2) (2020) 444-451. Publisher: **Elsevier, I.F. (1.24)**
12	**Synthesis and Characterizations of 3D TiO_2 Nanoflowers Thin Film: Hydrothermal Method** **S. B. Wategaonkar,** R. P. Pawar, V. G. Parale, K. S. Pakhare, B. M. Sargar*, R. K. Mane* ***Macromolecular Symposia,*** 393 (2020) 2000040. Publisher: **Wiley, I.F. (0.85)**
13	**Facile Synthesis and Characterization of CdO-ZnO Nanocomposite for Gas Sensor** K. S. Pakhare, B. M. Sargar, **S. B. Wategaonkar,** R. K. Mane ***Macromolecular Symposia,*** 393 (2020) 2000084. Publisher: **Wiley, I.F. (0.85)**
14	**Studies on hydrothermal synthesis and characterization of TiO_2 nanorods** **S. B. Wategaonkar,** B. M. Sargar*, R. K. Mane* ***International Journal of Research and Analytical Reviews (IJRAR)*** 1 (2019) 307-311
15	**Dip coated superhydrophobic and anticorrosive silica coatings** V. G. Parale, D. B. Mahadik, V. D. Phadtare, A. A. Pisal, H. H. Park, **S. B. Wategaonkar** ***International Journal of Materials Science and Engineering,*** 4 (2016) 60-68.
16	**A Review - Biogas Production from Kitchen Waste** Vinayak Pavate, **S. B.Wategaonkar** ***International journal of engineering science and computing,*** 12 (2022) 29693-29698
17	**Jaggery Making Reforms, Value Addition and Preservation: A Comprehensive Review** Pravin Ukey, Vikramsinh Ingale, **S. B.Wategaonkar** ***International Journal of Biochemical Research*** (2024)

Software

Microsoft Office ★★★★★

Origin ★★★★★

Chemdraw ★★★★★

Chemsketch ★★★★★

Languages

English ★★★★★

Hindi ★★★★★

Marathi ★★★★★

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