

BIODATA BRIEF INFORMATION

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Vidwan profile URL: <https://vidwan.inflibnet.ac.in//profile/399809>

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1. Educational Qualification:

First class from Xth (1981) to M. Sc. (1990), B. Ed. (1991), Ph. D. (2009)

2. **Teaching experience:** Teaching Physics to B. Sc. (UG) – 26years.

3. **No. of UG Books Authored:** 09

4. **Interest:** In discussion with students and love them, Teaching Physics and reading Marathi literature especially philosophical, playing volley ball, carrom and chess. Also, in singing and one act play.

5. Doctorate:

Ph. D. from Institute of Science, Nagpur, in Oct. 2009 under the guidance of Prof. V. A. Tabhane, Dept. of Physics, Pune University.

Topic: "STUDY OF THERMODYNAMIC AND ELECTRICAL PROPERTIES OF COMPOSITES OF SOME CONDUCTING POLYMERS"

Awarded by RTM Nagpur University – Oct. 2009

6. **Field of Research and subject:** Material Science

Research Interest in Conducting Polymer Composites/Nanocomposites: - Synthesis, Spectroscopic and Morphological Characterization, Electrical, Magnetic and Thermal Study, Making thin films to expertise their basic role in the field of photovoltaic, capacitor, supercapacitor and optoelectronic.

7. Research Project (UGC):

One UGC Research Project (MRP) has been completed. Grant issued of Rs. 2, 00,000/-

8. Research Publications:

8.1. Number of papers published in peer reviewed journals: 22

8.2. Number of papers published in conferences/seminars/symposium:

National: 10

International: 30

8.3. Conferences/seminars/symposiums attended

National Conferences/seminars/symposiums attended: 12

International Conferences/seminars/symposiums attended: 20

8.4. Total No. of Book Authored: 09

Book- single authored on basic research: "Basic of Nanoscience, Nanomaterials and Nanotechnology" - published by BP international, Landon (UK) and Tarkeshwar (India).

Book - single authored, titled as : "Basics of Special Theory of Relativity" - published by BP international, Landon (UK) and Tarkeshwar (India).

8.5. Chapter in research Book: 03

8.6. Books Edited:

Title of Book: NCRTMSC 2009 "Recent Trends in Material Synthesis and Characterization"

9. Guide / Supervisor on the panel of RTMNU, Nagpur:

Ph. D. Students Registered: 04

Ph. D. Awarded: 03

10. Research Profile/Membership:

orcid ID: <https://orcid.org/0000-0002-0211-5544>

Scopus Author ID: 36481603500 h-index 2

Research Gate ID: <https://www.researchgate.net/profile/Upendra-Mahatme> h-index 3

Google Scholar ID: kLB_pSYAAAAJ h-index 3

ResearcherID: HOF-8509-2023 h-index 2

Vidwan profile URL: <https://vidwan.inflibnet.ac.in//profile/399809>

11. Highest number of reads:

12,632 reads for research articles on Research Gate within three years from becoming the member of research gate up to 2 Dec 2023.

12. Reviewer:

Working as reviewer of *Elsevier Journals* for research article/papers

UGC care listed journals:

Journal of Advances in Microbiology

Journal of Geography, Environment and Earth Science International

Asian Journal of Pure and Applied Mathematics

13. Working as referee/reviewer of Ph. D. thesis - For universities of other states

14. Guest lecture delivered:

In other colleges/institutes: 10

In teacher's training: 03

15. Blood donation: 07

16. Award and Honor:

- Letter of honor by All India Shri Gurudev Seva Mandal regarding the numerous social services by following the thoughts and philosophy of Rashtrasant Tukdoji Maharaj.
- Awarded as Leading Scientist of The World – 2013, by IBC, Cambridge (Landon).
- Best presentation award *on the occasion of "100th year of Institute of Science, Nagpur"*
- Best micro teaching award on topic "THE TIME" *in refresher course at Shimala.*

17. Nominations:

Nominated as "Best of 100 International Researchers" and other 11 research nominations by *International Biographical Centre, Cambridge, England.*

18. Membership of Institute/National/ International Professional Bodies:

- Life member of NUTA, R T M Nagpur University
- College LMC (CDC)
- Life member: MRSI - Material Research Society of India
CRSI - Chemical Research Society of India
IAPT - Indian Association of Physics Teachers
IPA - Indian Physics Association
SSI - Semiconductor Society of India
- Former Coordinator of Study center: YCMOU, Nashik, INDIA
- Former Member of Board of Study – Physics, RTMNU

19. Social Work:

In CORONA Pandemic for 105 days and, always ready to help with soft corner for the BPL strugglers and students.

20. Low falls: Angry, short tempered, doubting others and tobacco addiction.

PATENT PUBLISHED

PATENT PUBLISHED - 2024: Dr. U. B. Mahatme

TITLE OF PATENTS	DETAILS OF PATENT	PUBLISHED DATE
Design to "BREAST CANCER DETECTION DEVICE USING MICRO CALCIFICATION"	Registration of Design Serial No.: 166513 Design No.: 410094-001 Patent number: 166513 (Govt of India)	11/03/2024

PUBLISHED RESEARCH ARTICLES AND BOOKS

PAPERS PUBLISHED IN PEER RIEWED JOURNALS: Dr. U. B. Mahatme

After 2017-18

Sr No.	Title of paper and Link	Name of journal	ISSN number	Year
1	Loading effect of hematite on morphology and conductivity of PPY/A-Fe ₂ O ₃ Nanocomposites https://www.researchgate.net/publication/327107744	Review of Research, 7, 9 (2018) 1-5	2249-894X	2018
2	Frequency response of room temperature AC conductivity and morphology of PPY/V2O5 https://www.researchgate.net/publication/327107746	Research Direction, 5, 12 (2018) 1-5	2321-5488	2018
3	Sulfonated Polyaniline-20%MgO Nanocomposites: Possible Biomedical Material https://www.researchgate.net/publication/316883696	Imperial journal of interdisciplinary research Vol-3, Issue-5, 2017	ISSN: 2454-1362	2017
4	Effect of oxydent, dopant and MO additive loading on morphology, conductivity and dielectric constant of 3D conducting polymer PPy/a-Fe ₂ O ₃ Nanocomposites https://aip.scitation.org/doi/abs/10.1063/1.5100375 Volume 2104, Issue 1, 7 May 2019 https://doi.org/10.1063/1.5100375	AIP,2104/02007 (2019) AIP Conference Proceedings Impact Factor - 0.41		2019
5	Dielectric study of polyaniline in the low frequency range at room temperature and 70 0C respectively http://shabdbooks.com/gallery/328-may2020.pdf	Mukt Shabd Journal	2347-3150	2020

6	Preparation of UV, LASER and white light sensitive conducting polymer poly (3, 4-ethylenedioxythio phenepedot nanoparticles https://doi.org/10.1016/j.matpr.2021.09.083	Materials Today: Proceedings Impact Factor 1.5	ISSN: 2214-7853	2021
7	Magnetic Susceptibility and frequency dependence ac conductivity of PPY/PANI/V2O5 nanosheets https://doi.org/10.1016/j.matpr.2021.09.481	Materials Today: Proceedings Impact Factor 1.5	ISSN: 2214-7853	2021
8	Effect of oxidants and dopant on morphology, crystallinity and optical absorbance of nano structural polyindole https://doi.org/10.1016/j.matpr.2021.09.084	Materials Today: Proceedings Impact Factor 1.5	ISSN: 2214-7853	2021
9	Effects of Plasma Nitriding Process on AISI 304 Stainless Steel https://doi.org/10.1051/e3sconf/202339101110	E3S Web of Conferences Scopus indexed Journal Impact factor 0.5	eISSN: 2267-1242	2023
10	Effects of Salt Bath Nitriding Process on AISI 309 Stainless Steel https://doi.org/10.1051/e3sconf/202339101109	E3S Web of Conferences Scopus indexed Journal Impact factor 0.5	eISSN: 2267-1242	2023
11	Assessment of Wear Properties on Treated AISI 410 Martensitic Stainless Steel by Annealing Process https://doi.org/10.1051/e3sconf/202339101108	E3S Web of Conferences Scopus indexed Journal Impact factor 0.5	eISSN: 2267-1242	2023
12	A synthesis, Characterization and Dielectric Behaviour Studies of Polyaniline/Ba(OH) ₂ .8H ₂ O In process	AIP conference proceedings Scopus indexed Journal Real-Time Journal's	ISSN: 0094-243X	2024

PAPERS PUBLISHED IN PEER REVIEWED JOURNALS:

Dr. U. B. Mahatme

Before 2017-18

Sr. No.	Title of paper with Volume, issue, Year and Page No.	Name of journal	ISBN/ISSN number	Year
13	“Thermal Stability of Electrically Conductive Sulphonated and Chlorinated Polyaniline: Their Spectroscopic Study” https://www.ijetae.com/files/Volume5Issue6/IJETAE_0615_71.pdf Volume 5, Issue 6, June 2015, 428-433.	International Journal of Emerging Technology and Advanced Engineering ijetae	ISSN 2250-2459, ISO 9001:2008 Certified Journal. Journal Impact Factor of 6.351 as per International Society for Research Activity.	2015
14	“Study on Ultraviolet Absorbing PANI/CuO Micro Ribbons” https://www.ijetae.com/files/Volume5Issue2/IJETAE_0215_90.pdf Volume 5, Issue 2, February 2015, 495-498.	International Journal of Emerging Technology and Advanced Engineering ijetae	ISSN 2250-2459, ISO 9001:2008 Certified Journal, Journal Impact Factor of 6.351 as per International Society for Research Activity.	2015

15	<p>"Synthesis and Characterization of Polyaniline/Silver Iodide Composite via Oxidative Polymerization"</p> <p>https://www.ijetae.com/files/Volume5Issue2/IJETAE_0215_86.pdf</p> <p>Volume 5, Issue 2, February 2015, 468-471.</p>	International Journal of Emerging Technology and Advanced Engineering ijetae	ISSN 2250-2459, ISO 9001:2008 Certified Journal, Journal Impact Factor of 6.351 as per International Society for Research Activity.	2015
16	<p>"Application of PANI/ MnO₂ Nanocomposite in Ultrasonics"</p> <p>https://www.ijsr.net/conf/ISU-2015/ISU-096.pdf</p> <p>ISU-096.pdf, 418-421</p>	International Journal of Science and Research IJSR	ISSN (Online www.ijsr.net): 2319-7064, Impact Factor (2013): 4.438 Scientific Journal <i>Impact Factor</i> : 2018: 7.426	2015
17	<p>"The Effect Ultrasonication on CdS Thin Films Deposited by Using Ultrasonic Chemical Bath Deposition (UCBD) and (CBD) Chemical Bath Deposition"</p> <p>https://www.ijsr.net/conf/ISU-2015/ISU-131.pdf</p> <p>ISU-131.pdf, 550-555</p>	International Journal of Science and Research IJSR	ISSN (Online www.ijsr.net): 2319-7064, Impact Factor (2013): 4.438 Scientific Journal <i>Impact Factor</i> : 2018: 7.426	2015
18	<p>"Ultrasonics in the Field of Conducting Polymers: A Review"</p> <p>https://www.ijsr.net/conf/ISU-2015/ISU-029.pdf</p> <p>ISU-029pdf, 145-152</p>	International Journal of Science and Research IJSR	ISSN (Online www.ijsr.net): 2319-7064, Impact Factor (2013): 4.438, Scientific Journal <i>Impact Factor</i> : 2018: 7.426	2015
19	<p>"Applications of Ultrasound in Medical Science: A Review"</p> <p>https://www.ijsr.net/conf/ISU-2015/ISU-028.pdf</p> <p>ISU-028.pdf, 134-144</p>	International Journal of Science and Research IJSR	ISSN (Online www.ijsr.net): 2319-7064, Impact Factor (2013): 4.438, Scientific Journal <i>Impact Factor</i> : 2018: 7.426	2015
20	<p>"ADDITIVES WEIGHT PERCENT DEPENDENCE MORPHOLOGY OF CONDUCTING POLYMER/METAL OXIDE NANOCOMPOSITES"</p> <p>https://ijrbat.in/upload_papers/10032014125559Mahatme%20a%20b.pdf</p> <p>Jan -2014, issue -2, V-1, 744-752.</p>	International Journal of Researches in Biosciences, Agriculture and Technology IJBAT (Online)	ISSN No.2347-517X, Cosmos Impact Factor 2015: 4.935, 2018: 3.365	2015
21	<p>"Preparation and Characterization of Polyaniline/Zinc Oxide Composites via Oxidative Polymerization"</p> <p>2014, 4(1): 14-20, ICV 2015: 75.41; ICV 2016: 88.50 h5-index: 9, h5-median: 11, [Based on Google Scholar Metrics (June 2017)]</p> <p>http://article.sapub.org/10.5923.j.cmaterials.20140401.03.html#:~:text=doi%3A10.5923/j.cmaterials.20140401.03</p>	International Journal of Composite Materials	p-ISSN: 2166-479X e-ISSN: 2166-4919	2014
22	<p>"THERMAL STUDY OF ELECTRICALLY CONDUCTIVE PANI/32% V₂O₅ POLYMER COMPOSITE"</p> <p>https://www.researchgate.net/publication/315691653</p> <p>VOL-5, 2012, NCTESEA - 2012, 33-36</p>	BIONANO FRONTIER (ONLINE)	ISSN print 0974-0678 and online 2320-9593	2012
23	<p>Studies on chemically synthesized doped poly(O-anisidine) and copoly{aniline-(O-anisidine)}</p> <p>https://doi.org/10.1142/S0217984906011517</p> <p>VOL. 20, NO. 23, 1461-1470</p>	<u>Modern Physics Letters B</u> VOL. 20, NO. 23	ISSN: 0217-9849 EISSN: 1793-6640	2006

Sr. No.	Title of Book/Chapter	Year	ISSN/ISBN No.	Publisher	Link
1	Text Book: Solid State Devices and Electronics	2012	ISBN 978-81-926159-2-9	G. C. publishers, Nagpur (India)	
2	Chapter: 5 Quantization of molecular Energy Book - Solid State Electronics and Molecular Physics	2015	ISBN 978-93-82962-53-3	G. C. Publishers, Nagpur (India)	
3	Chapter: 3, 4 Ultrasonic and Power Supply. Book: Sound Waves, Applied Acoustic, Ultrasonic and Power Supply.	2016	ISBN 978-81-932578-5-2	Central Techno Publications, Nagpur (India)	
4	Chapter 08: Book: <i>Advanced Aspects of Engineering Research Vol 6</i>	2021	ISBN-13 (05) 978-93-90888-02-3 (Print) 978-93-90888-10-8 (eBook)	B. P. International	https://doi.org/10.9734/bpi/aaer/v6/7756D
5	Chapter 14: Book: <i>Recent Trends in Chemical and Material Sciences Vol. 2</i>	2021	ISBN-13 (15) 978-93-91473-41-9 (Print) 978-93-91473-49-5 (eBook)	B. P. International	https://doi.org/10.9734/bpi/rtcms/v2/1789C
6	Book: Basics of Nanoscience, Nanomaterials and Nanotechnology	2021	ISBN 978-93-91595-12-8 (Print) 978-93-91473-03-7 (eBook)	B. P. International	https://doi.org/10.9734/bpi/mono/978-93-91473-03-7
7	Book: Basics of Special Theory of Relativity	2023	ISBN 978-81-967401-1-5 (Print) 978-81-967401-0-8 (eBook)	B. P. International	https://doi.org/10.9734/bpi/mono/978-81-967401-1-5
8	Chapter 04: Fundamentals of Molecular Physics Book: Current Perspective to Physical Science Research Vol. 4	2023	ISBN 978-81-967723-4-5 (Print) 978-81-967723-3-8 (eBook)	B. P. International	https://doi.org/10.9734/bpi/cpps/v4/6395C
9	Book: Introduction to Ultrasonics and Power Supply	2023		B. P. International	In Process