

BIODATA



1. Name and full correspondence address DR. FOZIA ZIA HAQUE, Associate Professor
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m:9300687943,O: 755 405 1596
3. Institution: Maulana Azad National Institute of Technology, Bhopal MP
4. Gender (M/F/T) :F
5. Category Gen/SC/ST/OBC : GEN
6. Whether differently abled (Yes/No) : No
7. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Title of Thesis	Guide Name	Institute/Organization/University	Date of thesis submission	Date of Award
Studies on alkali ion active solid superionic conductors	Professor H.B. Lal,	Department of Physics, D.D.U. Gorakhpur Univ. Gorakhpur UP	26/12/2006	10/09/2007

8. Work experience (in chronological order).

Institute/University	Post	Duration		Experience		AGP Pay	Temp/Regular/Permanent
		From	To	Y	M		
M.A.N.I.T. Bhopal	Associate Professor	28.12.2018	Till date	1	5	95000AGP	Permanent
M.A.N.I.T. Bhopal	Assistant Professor	15.7. 2011	10.7.2017	6	-	8000 AGP	Permanent
M.A.N.I.T. Bhopal	Assistant Professor	15.7. 2008	14.7.2011	3	-	7000 AGP	Permanent
M.A.N.I.T. Bhopal	Lecturer	15.7. 2005	14.7.2008	3	-	6000 AGP	Permanent

D.D.U Gorakhpur University	Lecturer	1.6.2000	28.2.03	2	8	-	Temp
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9. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

Awards	Organization	Description
International	Standford University	Top 2% most influencial Scientists of the World for the year 2020, 2021, 2022,2023, 2024 and 2025 (all 6 time)
International	SAE Aero Design East (International) USA	The Aero-Astro@manit team was finalized in best 75 team throughout the world in this Competition organized in Lakeland, Florida, USA, 13 March 2015. For the competition, the team proposed a design of a remote controlled unmanned aircraft having different specifications like very small tube to house the plane and to assemble it, making it worth to fly and fly it with load in given short period of time.
National	UGC-CSIR-NET	JRF in a DRDO research project
National	AYUSH Arogya Sansad	Naari Shakti Samman 2023
State Level	MPCST Bhopal, MP	First Prize in Physics, 31 st MP Young Scientist Award - 2016, for a paper on” Facile Synthesis and Characterization of Pristine and Na ⁺ doped CuO Nanostructures for Light-Harvesting Applications”

10. Publications (*List of papers published in SCI/Scopus Journals only, in year wise descending order*).

S.No	Title	Authors Position out of Total Number of Authors	Supervisor/ Corresponding author Yes/No	Name Of Journal	Volume, & Page Number	Year
1.	Effect of doping of lignin on the structural and optical properties of green synthesised cerium oxide nanoparticles	3/3	Yes	Ceramics International	V51, Issue 28, Part A, November 2025, pp 56760-56772	2025
2.	Navigating ionic highways: electrical transport in sodium superionic solid (Na ₂ MoO ₄)	2/3	No	Phase Transitions (Taylor & Francis)	V 98, Issue 8, pp 573-582	2025
3.	Li-substituted ZnO nanoparticles exhibiting room temperature optical gas sensing for NO ₂ with swift response and recovery.	4/4	Yes	Optical and Quantum Electronics	V. 57, issue 62, doi.org/10.1007/s11082-024-07980-6	2025
4.	Studies Of Phase Transition Of Some Superionic Solids. <i>J Opt</i> (2025). https://	3/3	No	Journal of Optics	doi.org/10.1007/s12596-025-02451-x	2025
5.	Charge And Mass Movement In Lithium Metaborate (LiBO ₂)	3/3	Yes	Journal of Optics	doi.org/10.1007/s12596-025-	2025

					02452-w	
6.	Room temperature optical gas sensing properties of Na-doped zinc oxide nanoparticles: improving response and recovery time	7/7	Yes	Journal of Optics	1-14 Doi: https://doi.org/10.1007/s12596-024-02217-x	2024
7.	Tailoring the structural and electro-optical properties of visible-light emitting BaZrO ₃ photocatalyst: integrating DFT and comprehensive experimental analysis		No	Nanoscale	V.16, no. 38, pp 18086-18107.	2024
8.	Defects and oxygen vacancies modified properties of transition metal doped CeO ₂ . 95X0. 05O ₂ (X= Fe, Co, Ni) nanoparticles	6/7	No	Materials Science and Engineering: B	288, 116154	2023
9.	Exploring structural, vibrational, optical and photoluminescence characteristic of tetragonal-tungsten bronze Ba ₄ Bi ₂ Fe ₂ Nb ₈ O ₃₀ compound	6/7	No	Journal of Materials Science: Materials in Electronics	Volume 34, Issue 36, Pages 2312	2023
10.	Structure and Thermal Behaviour of different concentration PEG loaded PVA Nanofibers Journal: Proceedings of the Institution of Mechanical Engineers, Part N:	4/4	Supervisor	Journal of Nanomaterials, Nanoengineering and Nanosystems	2023;0(0). doi:10.1177/23977914231195757	2023
11.	Influence of Nano Silica on Improvement of Mechanical Properties of Banana- Sisal Fibre Epoxy Hybrid Composites Archana Nigralwal	3/3	Supervisor	Eur. Chem. Bull.	12(10), 3150-3154	2023
12.	Enhancement in Mechanical Properties on addition of Bamboo Powder in Wood Dust Powder filled Polyester Composites for Fibre Board Applications	3/3	Supervisor	Journal Eur. Chem. Bull. June 2023 ISSN 2063-534 6	2023,12(7) , 1104-1112	2023
13.	Synthesis of titania/silica nanocomposite for enhanced photodegradation of methylene blue and methyl orange dyes under uv and mercury lights	4/4	Supervisor	ES Materials & Manufacturing	16, 78-88	2022
14.	Natural Fibre based Bio Composites and Their Applications,	2/2	Supervisor	Oriental Journal of chemistry ISSN : 0970 - 020X,	Volume 38, Number 2	2022
15.	High ionic conductivity and UV blocking in nanosized Li ₃ (1-x)Na _{3x} VO ₄ superionic conductors	4/4	Supervisor	Emerging Materials Research	10 (4), 387-397	2021
16.	UV shielding and transparency of K ⁺ -doped Li ₃ VO ₄ nanostructured superionic conductors		Supervisor	Emerging Materials Research	9 (4), 1103-1112	2020
17.	Biosynthesis of Flower-Shaped CuO Nanostructures and Assessing Their Photocatalytic and Antibacterial Activities,	3/3	Supervisor	Nano-Micro Letters (Springer)	Vol.12, no. 1 ;29	2020
18.	Designing high-performance thermally stable repeaters for nano-interconnects,	3/3	Supervisor	J Comput Electron., (Springer)	Vol.18, pages53–64(2019)	2020
19.	Utility of copper oxide nanoparticles (CuO-NPs) as efficient electron donor material in bulk-heterojunction solar cells with enhanced power conversion efficiency	5/5	Yes	Journal of Science: Advanced Materials and Devices (Elsevier)		2020
20.	Combined parametric optimization of P ₃ HT: PC 70 BM films for efficient	5/5	Yes	Journal of Solid State Electrochemistry	Vol.23, no. 12, 3267-	2019

	bulk-heterojunction solar cells.			(Springer)	3274	
21.	Study of luminescence properties of dysprosium-doped $\text{CaAl}_{12}\text{O}_{19}$ phosphor for white light-emitting diodes	6/7	No	Luminescence: the journal of biological and chemical luminescence, Wiley	Vol.34-8, 804-811	2019
22.	New-insight into the physical properties of $\text{Zn}_{1-x}\text{B}_x\text{O}$ two-dimensional hexagonal nanodisks: An efficient material for dye sensitized solar cells	5/5	Yes	Materials Letters (Elsevier)	Vol.238, 194-197	2019
23.	Designing ultra low power high speed repeaters for performance optimization of VLSI interconnects at 32nm.	3/3	Supervisor	Numerical Modelling: Electronic Networks, Devices and Fields (Wiley)	Vol.32, I2 e2516	2019
24.	The effect of La^{3+} ion doping on the crystallographic, optical and electronic properties of CuO nanorods	8/8	Yes	Materials Letters (Elsevier)	Vol. 234 (2019): pp 228	2019
25.	Energy transfer from Ce^{3+} to Dy^{3+} ions for white light emission in $\text{Sr}_2\text{MgAl}_2\text{O}_6$: Ce^{3+} , Dy^{3+} phosphor	5/7	Yes	Journal of Luminescence (Elsevier)	Volume 306, 2, Pages 380-385	2019
26.	Evolution of ZnO Nanostructures as Hexagonal Disk: Implementation as Photoanode Material and Efficiency Enhancement in Al: ZnO Based Dye Sensitized Solar Cells	6/6	Yes	Applied Surface Science (Elsevier)	doi.org/10.1016/j.apsusc.2018.11.077	2018
27.	Formation of nanostructured surface layer induced by surface mechanical attrition treatment (SMAT) in spring steel	3/3	Yes	Materials Focus (American Scientific Publishers)	In Press	2018
28.	Highly sensitive optical ammonia gas sensor based on Sn Doped V_2O_5 Nanoparticles	6/6	Yes	Materials Research Bulletin (Elsevier)	Volume 108, 12, Pages 266-274	2018
29.	Well-Ordered α - MoO_3 Thin Films Through Galvanostatic Deposition for High Performance Supercapacitors	3/3	Yes	Materials Focus (American Scientific Publishers)	Volume 7, Issue 5, Pp 640-644	2018
30.	Studies of structural, optical, and electrical properties associated with defects in sodium-doped copper oxide (CuO/Na) nanostructures	5/5	Yes	Journal Of Materials Science (Springer)	Volume 53, Issue 1 2, pp 8826–8843	2018
31.	Structural and optical properties of Li substituted CuO nanoparticles	4/4	Yes	Optical And Quantum Electronics (Springer US)	50: 260, 2018	2018
32.	Effect of Solvent Mixing and Calcination Temperature on the Growth of TiO_2 Nanoparticle Prepared via Sol–Gel Method	3/3	Yes	Materials Focus (American Scientific Publishers)	Volume 7, Number 2, pp. 232-241 (10)	2018
33.	Optimization of process parameters and its effect on structure and morphology of CuO nanoparticle synthesized via the sol–gel technique	3/3	Yes	Journal Of Sol-Gel Science And Technology (Springer US)	https://doi.org/10.1007/s10971-018-4663-5	2018
34.	Evaluating photodegradation properties of anatase and rutile TiO_2 nanoparticles for organic compounds,	1/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	128 (V) 191-200,	2017
35.	pH-Dependent Single-Step Rapid Synthesis of CuO Nanoparticles and Their Optical Behavior	3/3	Yes	Journal Of Optics And Spectroscopy (Springer)	Volume 123, Issue 6, pp 903–912	2017
36.	Effects of Annealing Temperature	3/4	Yes	Journal Of Materials	28 (V)	2017

	Optimization on the Efficiency of ZnO Nanoparticles Photoanode Based Dye Sensitized Solar Cells			Science: Materials In Electronics (Springer)	1537-1545,	
37.	Enhancement in Structural and Optical Properties of Boron Doped ZnO Nanostructures Synthesized by Simple Aqueous Solution Growth Technique,	3/3	Yes	Journal Of Advanced Physics (American Scientific Publishers)	6 (V) 358-366,	2017
38.	SnO ₂ , SnO ₂ :Mg and SnO ₂ :Ni Nanoparticles Based Luminescence Ammonia Sensors	4/4	Yes	Materials Focus (American Scientific Publishers)	6 (V) 359-363,	2017
39.	Application of TiO ₂ /SnO ₂ nanoparticles in photoluminescence based fast ammonia gas sensing	5/5	Yes	Journal Of Optics (Springer)	46 (V) 199–203,	2017
40.	Electrochemical synthesis of MoS ₂ quantum dots embedded nanostructured porous silicon with enhanced electroluminescence property	6/6	Yes	Optical Materials (Elsevier)	73 (V), 763-771	2017
41.	Effect of Different Acids and Solvents on Optical Properties of SiO ₂ Nanoparticles Prepared by Sol-Gel Process	1/5	Yes	Silicon (Springer)	DOI:10.1007/s12633-016-9464-2,	2016
42.	Synthesis of zinc oxide nanoparticles with different pH by aqueous solution growth technique	2/2	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	127 (V) 174–177,	2016
43.	Surfactant assisted wet chemical synthesis of copper oxide (CuO) nanostructures and their spectroscopic analysis, Pages 2740–2747	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	127 (V) 2740–2747,	2016
44.	Valuation of copper oxide (CuO) nanoflakes for its suitability as an absorbing material in solar cells fabrication, Pp 3713–3717	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	127 (V) 3713–3717,	2016
45.	Development and optical study of hexagonal multi-linked ZnO micro-rods grown using hexamine as capping agent, 1188–1191	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	124 (V) 1188–1191,	2016
46.	Effect of Copper Precursor Salts: Facile and Sustainable Synthesis of Controlled Shaped Copper Oxide Nanoparticles,	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	127 (V) 4726–4730,	2016
47.	Hexamine (HMT) assisted wet chemically synthesized CuO nanostructures with controlled morphology and adjustable optical behaviour	3/3	Yes	Optical And Quantum Electronics (Springer)	49 (V) , pp. 1-5	2016
48.	Synthesis of SnO ₂ nanoparticles and its Application in Sensing Ammonia Gas through Photoluminescence	4/4	Yes	Journal Of Advanced Physics (American Scientific Publishers)	5 (V) 1-5,	2016
49.	Photoluminescence properties of ZnO micro/nanostructures capped with various surfactants, Journal of Advanced Physics	4/4	Yes	Journal Of Advanced Physics (American Scientific Publishers)	5 (V) 184-189,	2016
50.	Photoluminescence based fast detection of Ammonia Gas through TiO ₂ Nanoparticles	4/4	Yes	Journal Of Advanced Physics (American Scientific Publishers)	5 (V) 220-224,	2016
51.	Study of low weight % Filler on Dielectric Properties of MWCNT-Epoxy Nanocomposites	5/5	Yes	Journal Of Advanced Dielectrics (World Scientific)	6 (V) 16-24,	2016
52.	Effect of carbon nanotubes implantation on electrical properties of	4/6	Yes	Composite Interfaces (Taylor & Francis)	24 (V) 1-7,	2016

	sisal fibre-epoxy pp. 1-17					
53.	Controlled hydrothermal synthesis, structural and optical analysis of nanometer-sized ZnO spheres, Pages 301-303	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	126 (V) 301-303,	2015
54.	Poly (Ethylene Glycol) (PEG)-Assisted Shape-Controlled Synthesis of One-Dimensional ZnO Nanorods Pages 1562–1566	2/2	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	126 (V) 1562–1566,	2015
55.	Structural, diffused reflectance and photoluminescence study of Cerium doped ZnO nanoparticles synthesized through simple sol-gel method, Pp 3310–3315	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	126 (V) 3310–3315,	2015
56.	Optical investigation of various morphologies of ZnO nanostructures prepared by PVP-assisted wet chemical method,	2/2	Yes	Journal Of Optics And Spectroscopy (Springer)	118(V) 765-772,	2015
57.	Controlled Synthesis of Flower Like Zinc Oxide Nanostructures Using Ionic Liquid Through a Simple Alkaline Aqueous Solution Growth Technique,	2/2	Yes	Journal Of Optics And Spectroscopy (Springer)	118(V) 756-764,	2015
58.	Rare earth ion (La, Ce and Eu) doped ZnO nanoparticles synthesized via sol-gel method: Application in dye sensitized solar cells,	3/3	Yes	Journal Of Optics And Spectroscopy (Springer)	119(V) 666-671,	2015
59.	Optical study and Ruthenizer (II) N3 dye-sensitized solar cell application of ZnO nanorod-arrays synthesized by combine two-step process	2/2	Yes	Journal Of Optics And Spectroscopy (Springer)	119 (V) 672-681,	2015
60.	PVP Assisted Shape-Controlled Synthesis of Self-Assembled 1D ZnO and 3D CuO Nanostructures	1/7	Yes	Journal Of Optics And Spectroscopy (Springer)	120 (V) 408–414,	2015
61.	Effect of Curing on Activation Energy and Dielectric Properties of Carbon Black-Epoxy Composites at Different Temperatures	3/5	Yes	Journal Of Non-Crystalline Solids (Elsevier)	421 (V) 1-13,	2015
62.	Synthesis of ultrafine SiO ₂ Nanoparticles through Ultrasonication-Assisted Sol-Gel Technique	2/2	Yes	Journal Of Advanced Physics	4 (V) 15-18,	2015
63.	Synthesis and spectroscopic characterization of coumarin 440 dye doped silica gel rods	1/2	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	125 (V) 2308–2312,	2014
64.	Structural and optical properties of Poly-vinylpyrrolidone modified ZnO Nanorods synthesized through simple hydrothermal process,	2/2	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	125 (V) 4629-4632,	2014
65.	One-step, Template-free Hydrothermal Synthesis of CuO Tetrapods,	3/3	Yes	OPTIK: International Journal Of Light And Electron Optics (Elsevier)	125 (V) 4663-4667,	2014
66.	Preparation of TiO ₂ /SiO ₂ nanocomposite with non-ionic surfactants via sol-gel process and their photocatalytic study,	4/4	Yes	Oriental Journal Of Chemistry	30 (V) 1577-1584,	2014

67.	Aqueous chemical route synthesis and the effect of calcination temperature on the structural and optical properties of ZnO nanoparticles	2/2	Yes	Journal Of Materials Research And Technology (Elsevier)	28 (V) 363-369,	2014
68.	Effects of Non-ionic Surfactants poly(ethylene glycol) and Tritonx100 on the preparation of SiO ₂ nanoparticles by sol-gel process	3/3	Yes	Journal Of Advanced Physics	3 (V) 141-145	2014
69.	Optical Studies of Europium-Doped ZnO Nanoparticles Prepared by Sol-Gel Technique	3/3	Yes	Journal Of Advanced Physics	3 (V) 1-7,	2014
70.	Optical, Dielectric And Impedance Studies Of SiO ₂ /MWCNT Nanocomposite Synthesized Through In-Situ Ultrasonication-Assisted Sol-Gel Method,	4/4	Yes	Journal Of Advanced Physics	3 (V) 194-204,	2014
71.	Effect of Silver Coating on Electrical Properties of Sisal Fibre-Epoxy Composites	4/6	Yes	Polymer Bulletin (Springer)	V70: (2013) 3501-3517,	2013
72.	Development and optical study of hexagonal multi-linked ZnO micro-rods grown using hexamine as capping agent,	3/3	Yes	OPTIK:(Elsevier)	124 (V) 1188-1191,	2013
73.	Study of Zinc Oxide nano/micro rods grown on ITO and glass substrates, Pages	1/4	Yes	OPTIK: (Elsevier)	124 (V) 4167–4171,	2013
74.	Synthesis And Spectroscopic Characterization Of Nile Blue Dye Doped Silica Gel Rods, pp.	1/3	Yes	OPTIK: (Elsevier)	124 (V) 4287-4291,	2013
75.	Chemical Hazards of Nanoparticles to Human and environment	1/1	Yes	Oriental Journal Of Chemistry	29(V) 1399-1408	2013
76.	Synthesis And Spectroscopic Characterization Of Kiton Red- 620 Dye Doped Silica Gel Rods,	1/3	Yes	OPTIK: (Elsevier)	123 (V) 1010-1014	,2012
77.	Effect of heat and time-period on the growth of ZnO nanorods by Sol-Gel technique	3/3	Yes	OPTIK (Elsevier)	123 (V) 1340-1342.	2012
78.	A Review: Synthesis, Characterization and cell performance of Cu ₂ O based material for Solar cells:	4/4	Yes	Oriental Journal Of Chemistry	28(V) 1533-1545,	2012
79.	Preparation and characterization of polyether based polyurethane dolomite composite	3/5	Yes	Journal Of Applied Polymer Science	103 (V) pp 2337-2342,	2006
80.	Ionic and Electronic conductivity of some alkali vanadates	3/3	Yes	Solid State Ionics (Elsevier)	167 (V) 137-146,	2004

* Remaining 21 Research papers are published in reputed Non-SCI/Non Scopus journals.

11. Detail of patents

Sl. No.	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/Country	Status
1.	Sample Holder for optical gas sensing	Dr Fozia Z Haque	373922	05-8-2021	INDIA	Granted
2.	Composition For Sustainable Fine Aggregate Concrete In Buildings Using PVA Nano	Dr. Archana Sharma Nigrawal, Dr Arun Kumar Sharma, Dr Abhinav	2023051 5192054 00DE	07-06-2023	Germany	Granted

	Calcium Carbonate Powder And Soy Husk	Bhargav, Dr Fozia Z Haque				
3.	Tiles Made From Waste Cooking Oil	Dr Archana Sharma Nigrawal Dr Arun Kumar Sharma, Dr Fozia Z Haque	6295952	20 -07-2023	UK	Granted
4.	Roof Tiles For Eco-Friendly Rooftop Prepared By Cooking Waste Oil	Dr Arun Kumar Sharma,Dr Archana Sharma Nigrawal,Dr Prashant Baredar ,Dr Fozia Z Haque	384262-001	Journal No is 02/2025 and Journal Date is 10/01/2025	INDIA	Granted
5.	Soy Husk Hybrid Combined With Other Husk ,Bamboo Powder Filled Polymeric Composites For Thermal Insulation Panel In Walls”	Dr Archana Sharma Nigrawal Dr Arun Kumar Sharma, Dr Fozia Z Haque	2023	-	India	Filed

12. Books/Reports/Chapters/General articles etc.

Sl. No.	Title of Books/Chapter/ Article	Author	Publication	ISBN (if any)
1.	Essential of Quantum Mechanics	Fozia Z. Haque, Ravish Kumar	Asian Publication, Jan- 2008	ISBN 81-8412-068-0
2.	Book Chapter: Gas Sensing Through Photoluminescence And Chemoresistive Methods: A Comparative Study Using V ₂ O ₅ Nanostructures For NH ₃ in Book -Advanced Microscopy: A strong analytical tool in material science,	N Singh, N Singh, J Bamne, Km Mishra, V Chandel, Fozia Z Haque	Apple Academic Press (CRC Press), Taylor & Francis Group	eBook ISBN978100328204 4 Pp 143-166
3.	Book Chapter: Assessment Of ZnO Thin Films For Its Suitability As A Transparent Conducting Layer In DSSC Fabrication in Book -Advanced Microscopy: A strong analytical tool in material science	MR Parra, H Siddiqui, P Pandey, J Bamne, Fozia Z Haque	Apple Academic Press (CRC Press), Taylor & Francis Group	eBook ISBN978100328204 4 Pp 91-120
4.	Book Chapter: The Effect Of Surfactant Triton X-100 And Y ³⁺ Doping On Anatase Phase Of TiO ₂ Noparticles in Book -Advanced Microscopy: A strong analytical tool in material science	Jyoti Bamne, Nitu Singh, Arvind Mittal, Kajol Taiwade, P. K. Sharma, Fozia Z. Haque	Apple Academic Press (CRC Press), Taylor & Francis Group	eBook ISBN978100328204 4
5.	Book Chapter: Photoluminescence and Chemoresistive Gas Sensing: A Comparative Study Using V ₂ O ₅ Nanostructures for NH ₃ , Book: Emerging Trends in Nanotechnology	N Singh, J Bamne, KM Mishra, N Singh, Fozia Z. Haque	Springer Nature	Print ISBN978-981-15-9903-3 Online ISBN978-981-15-9904-0
6.	Book Chapter: Sisal Fibre Based Polymeric Composites: Book Name: Fiber-Reinforced Plastics	Archana Nigrawal, AK Sharma, FZ Haque	Intech Open DOI: 10.5772/intechopen.101107	ISBN 978-1-80355-076-3 Print ISBN 978-1-80355-075-6
7.	Book Chapter: Chapter Title : Study on Thermal and Electrical Conduction Properties of Nano Zinc Particle-Reinforced Polyester-Graded Composites. Book: Recent Advances in Materials and Manufacturing Technology.	Archana Nigrawal, AK Sharma, FZ Haque	Springer Nature International conference on Advances in Materials and Manufacturing	pp 973–979 ISBN: 9789819929207 ;
8.	Book chapter Title: metal oxide nanoparticles; synthesis and applications for renewable energy and environmental remediation Book: Nanotechnology : A Multidisciplinary Approach	Fozia Z. Haque	Springer- Nature	to be published

9.	General Articles Blue LED: That led the Physics Nobel Prize 2014,	Fozia Z. Haque	MANIT News letter	Vol 01, Issue 6 Nov. 2014
10.	General Articles: Nanotechnology: A Science and Technology for Human Life,	Fozia Z. Haque	MANIT News letter	Vol 01, Issue 10, March 2015

13. Research Projects

Name of the Investigator	Title of the project and duration	Amount sanctioned	Funding Agency
Dr. Fozia z. Haque (Mentor)	Utilization of Waste Soya Bean husk and Sisal Fibre for Sustainable Building Material	Rs.34,73,544/-	DST-WOS-B
Dr. Fozia z. Haque (Co-PI)	Development, Mechanical and Electrical Characterization of UHMWPE, Titanium nano particle and Nacre filled Nano Composites for cartilage applications	Rs. 73,00,000/-	DST- WIDUSHI

14. Any other Information (maximum 500 words)

Designation and IDs	Associate Professor Scopus Author ID: 48461296600 Orcid ID: 0000-0002-4999-6887 Researcher ID is: O-7224-2016 Vidwan-ID : 62673 Google Scholar: oWO9TN0AAAAJ&hl=en Citations (20Feb 2026) h-index i10-index 3789 33 76
Experience	RESEARCH EXPERIENCE - Currently involved in the researches on Nanomaterials such as ZnO Nanocomposite and Nanorods, and Photoconducting Polymer Nanocomposites for the application in Solid State Ionics (Li-ion Battery), Solar Cells, Quantum Dot-LED, Gas Sensors and UV-Shielding, Conducting & Bio Polymer-Nanocomposite in the Department of Physics, M.A.N.I.T., Bhopal-India - Research on Solid Superionic Conductors for the award of Ph.D. - Worked as a JRF in a DRDO project New Dye Laser Materials during 2004-2005
Publication	Total 231+08 (book/ Book Chapter) (Publication)
<i>Research papers in International Journal (SCI and others)</i>	100
<i>Research papers in National Journal</i>	01
<i>Research papers in International Conferences</i>	82
<i>Research papers in National Conferences</i>	56
<i>General Articles</i>	1) Blue LED: That led the Physics Nobel Prize 2014 , MANIT News letter, Vol 01, Issue 6 Nov. 2014 2) Nanotechnology: A Science and Technology for Human Life , MANIT News letter, Vol 01, Issue 10, March 2015
Ph.D.Thesis/PG projects/ Projects/M.Phil.Thesis guided UG	PDF: 01 completed + 01 ongoing Ph.D. Thesis: 12 awarded+ 03 ongoing M.Tech thesis: 51 awarded+ 04 ongoing B.Tech.: 10 awarded [three groups] M.Phil.: 2 awarded M.Sc.(Project): 01 awarded
Foreign visits	Foreign Country/ Institute Visited USA (During June 2010)

	1. Harvard University, Boston, 2. Tilton School, Tilton NH 3. Naval Research Lab, Washington DC Travel Supported by DST's International travel support under Young Scientist ▪ Saudi Arabia (During June-July 2008) Centre of Nanotechnology, King Abdul Aziz University, Jeddah Travel supported by Centre of Nanotechnology, King Abdul Aziz University, Jeddah
Editor/ member of editorial board/ reviewer of journal	1. International Journal Nanovision (Member of editorial board) 2. International Journal of Ultra engineering (Member of editorial board) 3. Academic Journals Online (AJO Journals) (Member of editorial board) 4. Journal of Sol-Gel Science and Technology (Springer Publishers) Reviewer 5. Journal of Applied Polymer Science (Willey) Reviewer 6. Applied Biological Research Reviewer
Academic/Administrative work at MANIT and other	42- as member of various committees, warden, convener etc
Conference, workshops Attended	65 National/International Conferences/ Workshops/ Short Term Courses attended
Conference, workshops, events Organized	Conference/Workshop: 13 Students activity/Events:10
Invited Talks:	23
Research Projects	02 Completed + 01 Ongoing (Worht Rs 73.00 Lakhs)
Membership of society/position held in society	08 member, Life meber of OSA, MRSI, IEE etc

Ph.D. THESIS SUPERVISION /PDF Mentor

S. No.	NAME OF THE CANDIDATE	TITLE	DEGREE AWARDED /YEAR
1.	Dr. Archana Sharma (PDF)	Utilization of Waste Soya Bean husk and Sisal Fibre for Sustainable Building Material	DST-WOS-B Completed
2.	Nikhat Khan	Some New Computational Models For Promotional Marketing In Banking System	2014 awarded
3.	Padmini pandey	Investigation On Rare Earth Ion Doped Zinc Oxide Nanoparticles For Dye Sensitized Solar Cell	2015 awarded
4.	Manindra trihotri	Investigations On Electrical Properties Of Polymer Nano Composites	2015 awarded
5.	Vinita Pandey	Synthesis and application of metal doped SnO ₂ nanostructures in Photoluminescence based NH ₃ gas sensor	June 2017 Awarded
6.	Ruchi Nandanwar	Synthesis and Study of Optical Properties of TiO ₂ /SiO ₂ Composite Nanostructure	2017 Awarded
7.	Hafsa Siddiqui	Investigation on Pristine and Metal Doped Copper Oxide (CuO) Nanostructures for Solar Cell Application	2017 Awarded
8.	Mohammad Ramzan Parra	Investigation on Pristine, Group-III Elements Doped ZnO and ZnO/TiO ₂ Nanostrcutres in Dye Sensitized Solar Cell	2017 Awarded
9.	Neha Singh	Studies of metal doped ZnO nanostructures for Photoluminescence based NO ₂ gas sensor	2018 Awarded
10.	Nitu Yana	Optical and Chemoresistive NH ₃ Gas Sensing Properties of Sn ⁴⁺ doped Metal Oxide Sensor	2019 Awarded
11.	Afreen Khursheed	Efficient Circuit Modeling of CNT and GNR Based Integrated On-Chip Interconnects with Buffers	2019 Awarded

12.	Rajesh Chopde	Structural and Electrical Transport Studies of Alkali Ion Doped Orthovanadates as Solid Superionic Conductors	2021 Awarded
13.	Jyoti Bamne	Oxide nanostructures for environment application	2021 Awarded
14.	Vivek Chandel	Study of cerium oxide nanoparticles with lignin for UV Shielding applications	Ongoing (RDC Completed) ...
15.	Kajol Taiwade	Study of transition metal doped Cr ₂ O ₃ nanostructures for window layer of thin film solar cells	Ongoing (RDC Completed) ...
16.	Madulika Meena	Dye Sensitized Solar Cell (area of research)	Ongoing
17.	Suhel Mohammad	Solar Cell (area of research)	Ongoing Coursework Ongoing

Membership of society/position held in society

Sr.No.	Name of Association/Society	Category
1.	The Optical Society (OSA) America	Member 1042985
2.	Society for Applied Spectroscopy	Member
3.	Optical Society of India	Member
4.	Society for Information Display , USA	Life membership 185178
5.	Metamaterials technical group (OSA)	Member
6.	Indian association of Physics Teacher, India	Life membership 9161 LM5532
7.	Sir Syed Educational& Charitable Society, India	Member
8.	American Chemical society	Member (Ex)
9.	American Physical society	Member (Ex)

Academic and Administrative Responsibilities

- Syllabus Design and Modification:**
 - Actively involved in designing the whole course of study of M.Tech. Nanotechnology program started from July 2006 in the department of Physics MANIT, Bhopal. The course of study includes more than 18 novel and core subject papers including the elective ones.
 - Design and modification of new and existing practical setup, procedure of performing and making practical/tutorial sheets for M.Tech. . Nanotechnology and B.Tech Physics UG Lab.
 - Design and modification of a course paper in IV semester B.Tech. Mat. Science.
 - Design the syllabus for Institute Entrance Test for PhD in Physics and Nanotechnology.
 - Design the syllabus for Institute Entrance Test for M.Tech. (Nanotechnology)
 - Design and development of 12 new Lab experiments for M.Tech. Nanotechnology students
 - Manual prepared for 18 B.Tech. and 06 M.Tech. Lab experiments
- Experiments added to Teaching Laboratory (with Manuals):**
 - 08 New experiments in B.Tech. UG Physics Lab
 - 08 New experiments in M.Tech. Nanotechnology Lab
 - 10 Old/existing set-ups revised
- Vision Mission 2010 report,** Prepared Vision-Mission 2010 for the Department of Physics
- Accreditation-** Self Assessment Report (SAR) submitted to NBA for M.Tech. in Nanotechnology, 2017 and 2019(updated)
- Sawchh-Bharat abhiyan 2018, 2019-** An event organized in the Department and prepared its report.
- Vigilance Week 2018:** Organized an event in the Department on preventing corruption in society and prepared its report.
- Annual Reports** Preparation of Annual report of the Department of Physics and coordinating for individual Annual report of all faculties for Institute Annual Report for 2009 to date.

8. **Academic Audit Report:** Preparation of Academic Audit Report of the Department of Physics 2011.
9. **Report on R&D Status:** Physics Department, 2012-13
10. Actively involved in installation and demonstration of various R&D instruments and lab equipments for experiments.
11. **Entrance Tests syllabus and test papers**
 - i. Design and set the question papers of all the three Institute Entrance Test for M.Tech. (Nanotechnology) since its instigation.
 - ii. Design and set the question papers for Institute Entrance Test for PhD in Physics

Administrative work at Institute level, (MANIT Bhopal)

1. **HOD, Department of Physics (Jan 2021-Dec 23) 3Years**
2. **Professor Incharge Research, 2020 till date**
3. **Convener, IPR Cell 2020 till date**
4. **Warden:** Girls Hostel (2008-2012)
5. **Professor Incharge:** Horticulture Section (January 2014 September 2016)
6. **Chairman,** Committee for up gradation/MACP/DPC of Horticulture Section (2015)
7. **Inchrge** Institute Timetable for B.Tech. First year (I & II sem) all branches (Continuing since January 2012)
8. **Convener** of write-off committee of Girls` Hostel
9. **Coordinator,** Aero-Astro Technical Society (January 2013 July 2019)
10. **Coordinator,** PURGE Environment Awareness Society (Continuing since August 2015)
11. **Co-coordinator,** IPR cell (Continuing since July 2011)
12. **Coordinator** of M.Tech. Nanotechnology course (2006-2012)
13. **Co-Incharge** Xray and SEM Lab at central research facility (2006-2009).
14. **Member** of Editorial board of International Journal of frontier, M.A.N.I.T
15. **Member** of Women and Girls Care Cell(Continuing since March 2015)
16. **Chairman** of Women and Girls Care Cell as and when required (in the absence of Chairman)
17. **Coordinator,** institute Golden jubilee monument design committee 2010
18. **Co coordinator** of Academic Audit 2011 for Department Physics, Chemistry and Maths
19. **Coordinator (group) stock verification committee** of Central library
20. **Incharge** HOD Physics as and when required
21. **Member** of Anti Ragging committee (Continuing since January 2006)
22. **Member** of Convocation Registration committee 2010, 2011, 2013, 2014
23. **Member** of Fresher Nite organizing committee 2008, 2009, and 2010
24. **Member** of Institute Museum cell 2007-2011
25. **Member** of Institute purchase committee 2006-2009
26. **Member** of Techfest organizing committee 2008, 2009, 2010
27. **Member** PG Admission Committee
28. **Member** proctorial board (2008-2012)
29. **Member** reservation rosters committee (2008)
30. **Member** Tutor Guardian committee, 2010, 2011
31. **Member,** institute Golden jubilee Celebration committee 2010
32. **Member,** Techfest organizing committee (Continuing since August 2008)
33. **Member,** academic reform committee 2012-2013
34. **Member,** stock verification committee of (Mechanical Department)

Administrative work at Department level

35. **Member** BOS of Physics (Continuing since August 2005)
36. **Departmental coordinator** of Institute Entrance Test for M.Tech. (Nanotechnology) (2007-2009)
37. **Department coordinator** to Training and placement cell (2008-2010)
38. **Department coordinator** to Central library (Continuing since August 2007)
39. **Department coordinator** to TEQIP-II (Since July 2013)
40. **Department coordinator** for Annual Reports (Continuing since August 2008)
41. **Departmental Exam coordinator** of B.Tech., M.Tech. and PhD coursework exams (Continuing since November 2005)
42. **Department coordinator,** Accreditation of M.Tech Nanotechnology
43. **Incharge** B.Tech. UG Physics Lab (Continuing since August 2005)
44. **Incharge** M.Tech. Nanotechnology Lab (2006-2011)
45. **Incharge** stores of Physics Department (2006-2013)
46. **Convener** departmental committee for M.Tech Nano technology curriculum development
47. **Convener** of Departmental Instruments purchase committee, 2006
48. **Member** of internal assessment review committee of Physics Department
49. **Member** of write-off committee of Physics Department

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50. **Member** of Departmental Instruments purchase committee (Continuing since August 2005)
 51. **Departmental Network coordinator**
 52. **Departmental Website coordinator**
