

## Dr. AMANULLAKHAN A. PATHAN

- M.Sc., Ph.D. (Chemistry)
- GSET-2018

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(Gujarat)

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### ❖ CAREER OBJECTIVE

To be a part of the organization that gives me the scope to enhance **knowledge, professional and Research skill** amongst students with extreme determination, dedication, and hard work.

### ❖ SCHOLASTICS

#### Ph.D. in Chemistry (Full Time) with JRF (MANF Fellowship):

(Guide Name: - Prof. C. P. Bhasin, Department of Chemistry, H.N.G. University, Patan)

**Title of Thesis:** "USE OF NANOTECHNOLOGY FOR REMOVAL OF DYES FROM AQUEOUS SOLUTIONS"

Department of Chemistry, Hemchandracharya North Gujarat University, Patan-384265

Subject Area- **Nanoscience**.

#### M.Sc. in Organic Chemistry

Department of Chemistry,  
Bhavnagar University  
2011-2013

**68%**

#### B.Sc. in Chemistry

Sir P. P. Institute of Science,  
Bhavnagar University  
2008-2011

**60%**

### ❖ WORK EXPERIENCE: (Total Teaching Experience: - 7 years)

1. **Assistant Professor** 03/11/2020 to Present  
Shri Sarvajani Science College (PG),  
Mehsana-384001
2. **Teaching Assistant** 01/09/2019 to 24/04/2020 and  
31/08/2020 to 02/11/2020  
Department of Chemistry  
H.N.G. University, Patan-384265
3. **Remedial Lecturer** 01/03/2015 to 01/06/2018  
Department of Chemistry  
H.N.G. University, Patan-384265
4. **Excel Crop Care Ltd. (R & D Chemist)** 01/08/2013 to 14/01/2015  
Ruvapari road,  
Bhavnagar- 364001

## ❖ PUBLICATIONS:

1. **Amanullakhan A. Pathan**, Kavita R. Desai and C.P. Bhasin, "Improved Photocatalytic Properties of NiS Nanocomposites prepared by Displacement Method for Removal of Rose Bengal Dye", *Current nanomaterials* (Bentham Science), 2(3), (2018).
2. **Amanullakhan A. Pathan**, Kavita R. Desai, Shailesh Vajapara and C.P. Bhasin, "Conditional Optimization of Solution Combustion synthesis for pioneered La<sub>2</sub>O<sub>3</sub> nanostructures to Application as Future CMOS and NVMs generations", *Advances in nanoparticles* (SCIRP), 7, (2018), 28-35.
3. **Amanullakhan A. Pathan**, Kavita R. Desai and C.P. Bhasin, "Synthesis of La<sub>2</sub>O<sub>3</sub> Nanoparticles using Glutaric acid and Propylene glycol for Future CMOS Applications", *Int. J. Nano. Chem.*, 3(2), (2017), 1-9.
4. Jayadeep Tejani, Rahul Shah, Hiral Vaghela, Trupti Kukadiya and **Amanullakhan A. Pathan**, "Conditional Optimization of Displacement Synthesis for Pioneered ZnS Nanostructures", *J. Nanotech Adv. Mater*, 6 (1), (2018), 1-7.
5. Jayadeep Tejani, Rahul Shah, Hiral Vaghela, Shailesh Vajapara and **Amanullakhan A. Pathan**, "Controlled Synthesis and Characterization of Lanthanum Nanorods", *International Journal of Thin Films Science and Technology*, 9(2), (2020), 119-125.
6. Kavita R. Desai, **Amanullakhan A. Pathan** and C.P. Bhasin, "Synthesis, Characterization of Cadmium Sulphide nanoparticles and its Application as Photocatalytic degradation of Congored", *int. J. Nano. Chem.*, 3(2), (2017), 21-25.
7. Rahul Shah, **Amanullakhan Pathan**, Hiral Vaghela, S. C. Ameta And Kokila Parmar, "Green Synthesis and Characterization of Copper Nanoparticles Using Mixture (Zingiber officinale, Piper nigrum and Piper longum) Extract and its Antimicrobial Activity", *Chemical Science Transactions*, 7(4), (2019).
8. Jyotindra Mahyavanshi, Maharshi Shukla, **Amanullakhan Pathan**, Rahul Shah and Jayesh Jadhav, "Synthesis, Structural Elucidation and Anti-Microbial Screening of Benzimidazole Incorporated S-Triazinyl Derivatives", *Chemical Science Transactions*, 6(2), (2017), 235-242.
9. Hiral Vaghela, Kokila A. Parmar, **Amanullakhan Pathan**, Kavita Desai, Jayesh Jadhav and Rahul Shah, "Synthesis of Biogenic Silver Nanoparticles from Medicinal Plant and It's Antibacterial Activity", *IOSR Journal of Applied Chemistry (IOSR-JAC)*, 9, (2016), 29-33.
10. Hiral Vaghela, Rahul Shah and **Amanullakhan Pathan**, "Palladium Nanoparticles Mediated through Bauhinia variegata: Potent In vitro Anticancer Activity Against MCF-7 Cell Lines and Antimicrobial Assay", *Current nanomaterials* (Bentham Science), 3, (2018), 168-177.
11. Rahul Shah, Hiral Vaghela and **Amanullakhan Pathan**, "Synthesis and Characterization of Biogenic Gold Nanoparticles Using Aegle marmelos Extracts: Antibacterial Assay", *Biosc.Biotech.Research Communication* 13 (1), (2020) 307-312.

12. Hiral Vaghela, Rahul Shah, Shailesh Vajapara and **Amanullakhan Pathan**, "Biosynthesized Silver Nanoparticles Using an Aqueous Root Extract of *Iris germanica* as a Reducing Agent and Its Antibacterial Efficacy", *European Journal of Medicinal Plants* 31 (7), (2020), 1-10.
13. Chetan Prajapati, **Amanullakhan Pathan** and C.P. Bhasin, "Synthesis, Characterization and Biological Screening of Alkylene Dithiophosphate Derivatives of Macrocyclic Complexes of Pb (II)", *Journal of Pharmaceuticals Research International* 33 (50B), (2021), 104-112.
14. **Amanullakhan Pathan**, Sandip H. Bhatt, Shailesh Vajapara and C. P. Bhasin, "Solar Light Induced Photo Catalytic Properties of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles for Degradation of Methylene Blue Dye", *Int. J. Thin. Film. Sci. Tec.* 11(2), (2022), 213-224.
15. **Amanullakhan Pathan**, Chetan G. Prajapati, Riddhi P. Dave and C. P. Bhasin, "Effective and Feasible Photocatalytic Degradation of Janus Green B dye in Aqueous Media using PbS/CTAB Nanocomposites", *Int. J. Thin. Film. Sci. Tec.* 11(2), (2022), 245-255.
16. Rehana Baiju Mampilly, **Amanullakhan Pathan**, Chetan G. Prajapati and C.P. Bhasin, "Iron Capped Spent Tea Leaves as Nano-Adsorbent for Removal of Eriochrome Black T from Aqueous Phase", *Asian Journal of Chemistry* 34 (7), (2022), 1814-1820.
17. Shailesh Vajapara, **Amanullakhan Pathan** and C.P. Bhasin, "Adsorption and Photocatalytic Performance of Activated Carbon and Activated Carbon-La<sub>2</sub>O<sub>3</sub> nanoparticles Composites for Malachite Green", *Int. J. Thin. Film. Sci. Tec.* 12(1), (2023), 21-37.
18. Rehana Baiju Mampilly, **Amanullakhan Pathan** and C.P. Bhasin, "Visible Light-Assisted Degradation of Malachite Green dye using Waste Tea-Mediated Zinc Nanoparticles", *Int. J. Thin. Film. Sci. Tec.* 12(1), (2023), 39-51.
19. R. V. Patel, **Amanullakhan A. Pathan** and C. P. Bhasin, "An Evaluation of Carbon Nanotube-Based and Activated Carbon-Based Nanocomposites for Fluoride and other pollutant Removal from water: A Review", *Current nanomaterials* 8(4), 2023.
20. Tanvi Nayak and **Amanullakhan A. Pathan**, "Environmental Remediation and Application of Carbon-based Nanomaterials in the Treatment of Heavy Metal-Contaminated Water: A Review", *Materials Today: Proceedings* (Elsevier), 2023, **(Accepted)**.

❖ **List of research paper presented (oral or poster) in Conferences:**

No.	Title of Research Paper	Date	Name of conference	Place	Remarks
1	"Synthesis, Characterization and Application of Cadmium Sulfide Nanostructures as Hydrogen Sulfide Sensing Agent"	7-10 Dec. 2015	International Conference on Nanomaterials And Nanotechnology	Tiruchengode (Chennai)	International
2	"Photo degradation of some dyes using Nanotechnology: A Review"	21 March 2015	State conference on One Day State Level Seminar, Curriculum Conclave-2015 & CTA Meet (SLS-CC-CTA)	Patan	State
3	"Cadmium sulfide nanostructures as hydrogen Sulfide sensing agent"	6-7 Feb. 2016	State conference on Challenges For science And Technology Education During Coming Decades: Preparing For A Sustainable Gujarat	K.S.K.V Kachchh University, Bhuj	National
4	"Synthesis of La <sub>2</sub> O <sub>3</sub> nanoparticles using Glutaric acid and Propylene glycol for future CMOS applications"	22-24 Dec 2016	35th Annual National conference on "Indian Council of Chemists (ICC-16)	H.V. Desai College, Pune	National
5	"Synthesis, Characterization of La <sub>2</sub> O <sub>3</sub> nanoparticles and their applications as CMOS"	10-12 Feb 2017	International conference on Nanostructures Materials and Nanocomposites (ICNM-2017)	Mahatma Gandhi University, Kottayam, (Kerala)	International
6	"Improved Photocatalytic properties of NiS Nanocomposites prepared by Displacement Method for degrading Rose Bengal"	26-28 Dec 2017	36 <sup>th</sup> Annual National conference on Indian Council of Chemists (ICC-17)	School of Chemistry, Andhra University, Visakhapatnam (Andhra Pradesh)	National
7	"Improved Photocatalytic properties of PbS Nanocomposites For removal of Janus green B Dye from waste water"	3-5 July 2019	Indo-UK Workshop	Panjab university Chandigarh & University of Hull, UK	International
8	"Photocatalytic properties of PbS Nanocomposites prepared by Displacement Method For removal of Janus green B Dye from waste water"	14-16 Nov 2019	56 <sup>th</sup> Annual Convention of Chemists & International Conference on Recent Trends in Chemical Sciences	School of studies in Chemistry, Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh.	International

9	"Low-cost Synthesis of Waste Tea-Mediated CuO Nanoparticles for Visible-Light Driven Photocatalytic Degradation of Rhodamine B Dye"	27-29 Dec 2022	41 <sup>st</sup> Annual National conference on Indian Council of Chemists (ICC-2023)	Department of Chemistry, Institute of Basic Sciences, Khandari, Dr. Bhimrao Ambedkar University, Agra.	National
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❖ List of Attended Conference / Workshop	
International	National
2	25

## REFERENCES

### Prof. C.P. Bhasin

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### Dr. Bhavesh R. Shah

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## AFFIRMATION

I hereby declare that all the given details of the curriculum are fair and true as per best of my knowledge.

(Amanullakhan A. Pathan)