

## Curriculum Vitae

### Dr. (Mrs.) Babita Agrawal

Associate Professor  
Department of Chemistry  
CMP College, University of Allahabad,  
Prayagraj-211002.



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Email: [babitaprashantagrawal@gmail.com](mailto:babitaprashantagrawal@gmail.com)

### Personal detail:

Date of Birth	4 <sup>th</sup> November, 1966
Addresses for correspondence	14 – A bank Road, Allahabad – 211002

**Educational Qualification:** M.Sc., D.Phil.

**D. Phil. Topic:** “Structural Studies of some Plant Constituents”

**Research Specialization:** Natural Products/Medicinal Chemistry

**Teaching experience:** 27 years

### Publications:

#### (I) Books:

- (i) **"CHEM-WORLD (2020-22)" Chemistry Department Activity Book**, Published by First Print Publication, Prayagraj, Editors: **Babita Agrawal**, Sunanda Das. ISBN : 978-93-93647-09-2 (2022)
- (ii) **"Insights in Chemistry and Applied Sciences"** Published by First Print Publication, Prayagraj, Editors: Archana Pandey, **Babita Agrawal** and Santosh Kumar Srivastava. ISBN : 978-93-93647-07-8 (2022)
- (iii) **“Advances in Chemical and Applied Sciences- vol 1”** Published by First Print Publication, Allahabad, Editors: Arti Gupta, Sunanda Das, **Babita Agrawal**. ISBN : 978-81-9350520-5.(2018)

- (iv) **“Role of Antioxidants in Health and Disease Prevention”** Published by Anubhav Publishing House, Allahabad, Editors: Archana Pandey & **Babita Agrawal**, ISBN : 978-93-80134-75-8. (2016).
- (v) **“Saundarya Prasadhanon ka Rasayan Vigyan (Chemistry of Cosmetics)”** published Under the Anusrijan Scheme by AISECT University Bhopal, Madhya Pradesh, ISBN : 978-93-81358-32-0. (2015)
- (vi) **“Sugandhit Paudhe (Aromatic Plants)”** published by Anant Prakashan, 426/18 Bakshikhurd, Daraganj, Allahabad, ISBN :978-93-82957-02-7. (2015). This book Awarded by **“Uttar Pradesh Hindi Sansthan, Lucknow”** as **“ACHARYA RAGHUVIR PRASAD TRIVEDI SARJANA PURASKAR”** Rs.20,000/.Sept 14, 2016.
- (vii) **“Vigyan, Kala evam Sahitya Ki Triveni Dr. Bipin Kumar Agarwal”** a special publication of Vigyan Parishad Prayag, Allahabad, on Sentenary year of Vigyan Magazine, editor: Dr. Sheo Gopal Mishra, Co-editor: Dr. Babita Agrawal,2014.

## (II) Research Papers:

1. Sakshi Singh, Ashwani Sharma, Archana Pandey, **Babita Agrawal\***. 'Comparative studies on antioxidant activity of flowers, leaves, bark, fruits and heartwood of the nyctanthes arbor- tristis l', J. of emerging Technologies and Innovative Research, JETIR March 2023, Volume 10, Issue 3. P. a679-690. www.jetir.org (ISSN-2349-5162) **UGC approved Journal no.63975**,
2. **Babita Agrawal** , "Saundarya Prasadhanon me Upasthit Jantu Utpad" VIGYAN Published by Vigyan Parishad Prayag , July 2022, 108(04) p.6-7. (ISSN : 373-1200) ( UGC listed no. 47221).
3. Siddharth Agrawal and **Babita Agrawal** 'Anticancer activity of inner transition metal complexes: A Review", The Research Journal of Hindi Science Academy "Vigyan Parishad Anusandhan Patrika,2022; 65 (1-2) p. 41-48. ISSN:0505-5806. (Peer Reviewed)
4. Siddharth Agrawal and **Babita Agrawal** 'Antioxidant Potential of Essential Trace Metal Selenium- A Review', The Research Journal of Hindi Science Academy "Vigyan Parishad Anusandhan Patrika, 2021; 64 (1-4) p. 25-33. ISSN:0505-5806. (Peer Reviewed)
5. **Babita Agrawal**, 'Borewell punarchakran: varsha Jal Sanchayan, VIGYAN Published by Vigyan Parishad Prayag , 2021 May-June-July, 107(02-3-4) p.36-37. (ISSN : 373-1200) ( UGC listed no. 47221).
6. SK Srivastava, **Babita Agrawal**, Akhilesh Kumar & Archana Pandey, “Phytochemicals of Azardirachta indica Source of Active Medicinal Constituents used for Cure of Various Diseases”, J. of Scientific Research, 2020; vol 64(1):285-290. (UGC listed) ISSN:0447-9483, IF-1  
doi: <http://dx.doi.org/http://dx.doi.org/10.37398/JSR.2020.640153>

7. Priyanka Chawla, Himanshu Gaur, Mamta Tripathi, Mridula Tripathi, **Babita Agrawal** and Archana Pandey, "Synergistic Antioxidant Activity of Lipoic , Ferulic and Ellagic Acid", International Journal of Pharmaceutical Sciences and Research, 2015; vol. 6(6): 2551-2556. DOI: 10.13040/ijpsr.0975-8232.6(6).2551-56. ISSN: 0975-8232. Impact Factor:2.44, 1.23
8. Ritika Singh, Reena Lawrence, Kapil Lawrence, **Babita Agrawal**, Ravindra kumar Gupta and Sikandar Dar, "Antioxidant and Antibacterial Activity of Syzigium Aromaticum,Zingiber Officinale and Cinnamomum Zeylanicum Essential Oil", Chemical Science Transaction, 2015, 4(1), 239-245. DOI:10.7598/cst2015.930. ISSN: Online2278-3318 Print 2278-3458, Impact Factor-.6068 Scientific Journal Impact Factor- 3.727
9. Archana pandey, Ravindra Kumar Gupta, Santosh Kumar Srivastava **Babita Agrawal**, "New method of isolation of piperine from piper retrofractum vahl." Journal of Indian Chemical Society, Vol 90, May 2013,pp 677-678.ISSN: 0019-4522(Impact factor 0.150)
10. Archana Pandey, **Babita Agarwal**, Shikha Rai, A.K.Pathak and A.K. Rai ." LIBS: Analysis of Plants of Piperaceae Family", Journal of Laser and Optical Science. (2012).2(1):9-11.ISSN:2231-0959
11. **Babita Agrawal**, "Toxic heavy Metals: Health Hazard and Environmental Risk", Journal of Peace Security and Development,Vol. XVIII, 2012,pp 146-151. ISSN 2229-6069.
12. Archana pandey, Ravindra Kumar Gupta, Anudita Bhargava and **Babita Agrawal**, Antibacterial Activities of Curcumin Bioconjugates. International Journal of Pharmacology. 7 (8): 874-879. 2011, ISSN 1811-7775/ DOI:10.3923/ijp.2011.874.879.(IF: .765)
13. **Babita Agrawal**, Sunanda Das & Archana Pandey,"Boerhaavia diffusa Linn.: A Review on its Phytochemical and Pharmacological Profile ",Asian Journal of Applied Sciences, 4(7): 663-684,2011, DOI: 3923/ajaps.2011.663-684.(Cited by 25).Impact Factor1.4, ISSN: 1996-3343
14. **Babita Agrawal** & J. Singh, "Two new phenyl propanoid glycosides from the heartwood of Cassia javanica" , J. Indian Chem. Soc., Vol. 87 , Sept.2010 , pp.1143-1144. ISSN: 0019-4522(Impact factor 0.150)
15. Archana Pandey , **Babita Agrawal** & Santosh K. Srivastava , "Antioxidants: significant antiaging phytochemicals" , J. Chemtracks , 12(1),2010 , pp 243-254. ISSN :0973-239X  
Linking ISSN (ISSN-L): 0973-239X
16. **Babita Agrawal** & Archana Pandey, "Isolation of an anthraquinone from the heartwood of Cassia javanica", J. of Natural Resource and Development, 3(1):49-51, 2008.ISSN:0974-5033.
17. **Babita Agrawal** & J. Singh, "Triterpenoid-O-β-D Glucoside from Cassia javanica", Proceedings of the National Conference on Application of Material Science in the Service of Society, Feb. 2008, p-119-122.

18. Hemlata, J. Singh & **Babita Agrawal**, "New triterpenoid glycoside and anthraquinone from *Cassia siamea*, *Int. J. of Pharmacognosy*, 32, 1994, p 65-68. Pages 65-68 | Accepted 03 Jun 1993, Published online: 27 Sep 2008, cited by-7, <https://doi.org/10.3109/13880209409082974>  
ISSN:2348-3962(print).2394-5583(online)  
<https://doi.org/10.3109/13880209409082974>
19. **Babita Agrawal**, Hemlata & J. Singh, Two new flavone Glycosides from *Pongamia pinnata*, *Int. J. of Pharmacognosy*, 31, 1993, p 305-310. *International Journal of pharmacognosy.*, 01 Oct 1993, 31(4):305-310. Published online: 27 Sep 2008, DOI: [10.3109/13880209309082958](https://doi.org/10.3109/13880209309082958) AGR: IND20357213 .ISSN: 2348-3962(print). 2394-5583(online)

### (III) BOOK CHAPTERS:

20. **Babita Agrawal** and Apoorva Agarwal, "Therapeutic Role of *Costus igneus* and their Active Constituents in Disease Prevention and Treatment", In: "Advanced Research Trends in Chemistry (volume 1)" Published by Bright Sky Publication, New Delhi, Editors: Abha Tripathi and Supriya Yadav. P.11-27 ISBN:978-93-92804-35-9 Book DOI: <http://doi.org/10.22271/bs.book.55>
21. Sakshi Singh, Siddharth Agrawal and **Babita Agrawal**, "Pharmacological Properties of *Pistacia* species" In: "Insights in Chemistry and Applied Sciences" Published by First Print Publication, Prayagraj, Editors: Archana Pandey, Babita Agrawal and Santosh Kumar Srivastava. P.19-27 ISBN : 978-93-93647-07-8 (2022)
22. Sakshi Singh, Shweta Jaiswal, Siddharth Agrawal and **Babita Agrawal**, "Lithium Ion Battery Technology: Present and Future Perspective" In: "CHEM-WORLD (2020-22)" Published by First Print Publication, Prayagraj, Editors: Babita Agrawal, Sunanda Das. P. 17-23. ISBN: 978-93-93647-09-2.(2022)
23. **Babita Agrawal**, 'Report: Academic Activities' In: "CHEM-WORLD (2020-22)" Published by First Print Publication, Prayagraj, Editors: Babita Agrawal, Sunanda Das. P. 106-108. ISBN: 978-93-93647-09-2.(2022)
24. **Babita Agrawal**, 'Report: Social Responsibilities, Elder Care and ma ganga paushala' In: "CHEM-WORLD (2020-22)" Published by First Print Publication, Prayagraj, Editors: Babita Agrawal, Sunanda Das. P. 110-116. ISBN: 978-93-93647-09-2.(2022)
25. **Babita Agrawal**, 'Report: National Seminar "Save Ozone Layer : Save Life" In: "CHEM-WORLD (2020-22)" Published by First Print Publication, Prayagraj, Editors: Babita Agrawal, Sunanda Das. P. 130-132. ISBN: 978-93-93647-09-2.(2022)
26. Apoorva Agarwal, Muskan Kesari and **Babita Agrawal**, "Mentha :Source of Menthol and its Biological Activities" In: Emerging Trends in Agriculture, Rural and Environmental Development" Published by SBSRD Prayagraj, Editors: Hemlata

- Pant, D K Srivastava, B. Chaudhary, V. Mathur, Jyoti Varma. p 213-219. ISBN: 978-81-923535-8-6. (September 2022)
27. **Babita Agrawal** and sunanda das, “Corona Virus ke Upchar ke liye Vitamin C evam D” In: Corona: Ek Vashvik Mahamari” Published by Vigyan Parishad Prayag, Editor: Dr. Archana Pandey. p137-143. ISBN: 978-81-951765-3-3. (2021).
  28. **Babita Agrawal**, “Gymnema sylvestre- A Potential Herbal Cure of Diabetes Mellitus” In: ‘Advances in Chemical and Applied Sciences- vol III’ Published by First Print Publication, Prayagraj, Editors: Anil Kumar Shukla, Archana Pandey & Deepa Srivastava. p 106-113. ISBN : 978-93-88018-19-7. (2020).
  29. Archana Pandey and **Babita Agrawal** “ Innovation in Plantation” In: ‘Environmental Challenges & Issues in Present Scenario’ Published by First Print Publication, Prayagraj, Editors: P. K. Singh, A. Srivastava, Vishal Srivastava and R. Kumar. P 1-4. ISBN: 978-93-88018-18-0. (2019)
  30. **Babita Agrawal** “ Carbanic hydroxy yogic : Alcohol evam Phenol” In: ‘Gyan-Vigyan Shaikshic Nibandh’ Published by Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Paridrashya Prakashan Mumbai, Editor: Dr. Krishana Kumar Mishra, p 126-134. ISBN: 978-81-939877-9-7. (2019)
  31. **Babita Agrawal**, “Insulin Plant- A Medicinal Plant With Antidiabetic Potential” In: Advances in Chemical and Applied Sciences- vol 1” Published by First Print Publication, Allahabad, Editors: Arti Gupta, Sunanda Das, **Babita Agrawal**. p 149-153. ISBN : 978-81-9350520-5. (2018).
  32. Siddharth Agrawal and **Babita Agrawal**, “ Cytotoxic Activity of Lanthanide Complexes” In: Advances in Chemical and Applied Sciences- vol 1” Published by First Print Publication, Allahabad, Editors: Arti Gupta, Sunanda Das, **Babita Agrawal**. p 221-227. ISBN : 978-81-9350520-5. (2018).
  33. Siddharth Agrawal and **Babita Agrawal**, “Need of Green Synthesis of Metal Complexes for Environmental Protection” In: ‘ New Approaches in Agricultural, Environmental and Nutritional Technology- vol 2, Editors: : Hemlata Pant, M.K.Singh, D. K.Srivastava and Vandana Mathur, Published by SBSRD Allahabad, 2018, p 245-247. ISBN: 978-81-923535-3-1.
  34. Archana Pandey, **Babita Agrawal** and Santosh Kumar Srivastava, “Sacred Groves- A Method of Biodiversity Conservation” In: ‘Emerging Trends in Agriculture, Environmental & Rural Developmental Challenges and Solutions’ Editors: Hemlata Pant, K. Singh, M.K.Singh and D. Swaroop, Published by SBSRD Allahabad, 2017, p 9-15. ISBN: 978-81-923494-9-7.
  35. Siddharth Agrawal and **Babita Agrawal**, “Revolution in Agriculture & March Towards Grey Revolution” In: ‘Emerging Trends in Agriculture, Environmental & Rural Developmental Challenges and Solutions’ Editors: Hemlata Pant, K. Singh, M.K.Singh and D. Swaroop, Published by SBSRD Allahabad, 2017, p 68-72. ISBN: 978-81-923494-9-7.
  36. Archana Pandey, **Babita Agrawal** and Sunanda Das, “Baculovirus as Biological Control of Pests” In: ‘Technological Innovation in Agriculture and Rural Development’ Editors: Hemlata Pant, M.K.Singh, M. Pati and B.Chaudhari, Published by SBSRD Allahabad, 2016, p 223-227. ISBN: 978-81-923494-6-6.

37. **Babita Agrawal**, “Cymbopogon citrasus: An overview on its Antioxidant Activities” In: ‘Role of Antioxidants in Health and Disease Prevention’ Editors: Archana Pandey & **Babita Agrawal**, Published by Anubhav Publishing House, Allahabad,2016, p 51-59. ISBN No.: 978-93-80134-75-8.
38. Siddharth Agrawal and **Babita Agrawal**, “Antioxidant Minerals: Selenium, Copper and Zinc” In: ‘Role of Antioxidants in Health and Disease Prevention’ Editors: Archana Pandey & **Babita Agrawal**, Published by Anubhav Publishing House, Allahabad,2016,p 210-221. ISBN No.: 978-93-80134-75-8.
39. **Babita Agrawal**, Siddharth Agrawal and Archana Pandey , “A Review on Antidiabetic Potential of Pterocarpus marsupium” In: ‘Natural Resource Management for Sustainable Agriculture & Rural Development’, Editors: Hemlata Pant & Manoj Kumar Singh, Published by Society of Biological Sciences and Rural Development, Allahabad, 2016, p 219-225. ISBN: 978-81-923494-8-0.
40. Archana Pandey, Santosh Kumar Srivastava, Himanshu Gaur, **Babita Agrawal**,”An antioxidant Acid: Lipoic Acid” In: ‘Natural Resource Management for Sustainable Agriculture & Rural Development’, Editors: Hemlata Pant & Manoj Kumar Singh, Published by Society of Biological Sciences and Rural Development, Allahabad, 2016, p . ISBN: 978-81-923494-8-0.
41. **Babita Agrawal**, “Saundarya prasadhan evam unka rasayan vigyan”, In: Vigyan Shatabdi Smarika (1915-2015),Editor: Dr. Shiv Gopal Mishra, published by Vigyan Parishad Prayag, Allahabad, 2015, p 104-107.
42. **Babita Agrawal**, Sunanda Das and Archana Pandey, “Antimicrobial Properties of Boerhaavia diffusa Linn. : An Overview” In: ‘Innovative and modern technologies for sustainable agriculture and rural development’. Editors: A.K.Pandey, Gopal Pandey and Hemlata Pant, Published by Society of Biological Sciences and Rural Development, Allahabad,2014,p 275-285. ISBN: 978-81-923494-3-5.
43. **Babita Agrawal**, “Antibacterial Activities of the Extracts and Seed oil of Pongamia pinnata Linn: A Review”. In: Antibacterial Activity in Natural and Synthetic Compounds, Editors: Archana Pandey and R. k. Gupta, Arvind Prakashan, Agra ,p13-21,July 2013. ISBN: 978-81-88492-57-2.
44. **Babita Agrawal** and Poonam Mohan, “Pterocarpus marsupium: Medicinal Plant With Antibiotic Potential” In: Antibacterial Activity in Natural and Synthetic Compounds, Editors: Archana Pandey and R. k. Gupta,Arvind Prakashan, Agra, p 184-191, July 2013. ISBN: 978-81-88492-57-2.
45. Sunanda Das & **Babita Agrawal**, “Organic Agriculture: A Combination of Tradition and Innovation in Science to Promote Ecological Balance”,In: Recent Advances in Agricultural Biotechnology, Editors: A.K.Pandey, Gopal Pandey and Hemlata Pant, Published by Society of Biological Sciences and Rural Development, Allahabad,2012,p 126-137. ISBN: 978-81-923494-0-4.
46. Sunanda Das & **Babita Agrawal**, “A Perspective of hepatoprotective activities of Boerhaavia and other herbs”. In:Recent Development in Material Science, Editor: Shiela Srivastava, Research India Press, New Delhi, 2011,pp:374-380. ISBN: 978-81-89131-1-7.

**(IV) Serving as Regular Editor:**

Editor of **CHEM-WORLD Vol.I (2012), Vol.II (2013), Vol.III (2014-2016 Vol-IV and V (2017-19)**, An Annual Bulletin published by Dept. of Chemistry, CMP college .

**(V) Articles Published: 19**

**(VI) Invited lecture: 17**

**(VII) Conference Attended with Paper Presentation in International Conferences: 07**

**(VIII) Conference Attended with Paper Presentation in National Conferences: 31**

**(IX) Conference/Workshop Attended: 40**

**(X) One Week Workshop: 09**

**(XI) Refresher and Orientation Courses : 05**

**(XII) Research Project Completed:**

1. UGC minor research project on “Analysis of some Bio Active compounds of Boerhaavia species for Hepatoprotective Activity and SAR Studies”  
**Principal Investigator – Dr. Babita Agrawal.** Co- Investigator : Dr. Sunanda Das  
Duration- May 2010-2012.
2. UGC Minor research project 'Preparation and characterization of spinels of catalytic behavior'.Principal Investigator: Dr. Sunanda Das **Co- Investigator : Dr. Babita Agrawal**, Duration - May 2012-2015
3. UGC Major research project 'New Method of Isolation, characterization, derivatisation of bioactive herbal nutraceuticals & study the synergistic effect of their antioxidant, antimicrobial activities.  
Principal Investigator- **Dr. Archana Pandey**  
**Co- Investigators:** Dr. Babita Agrawal, Dr. Santosh Kumar Srivastava  
Duration – 2010-2013
4. UGC Minor research project 'Isolation, Structural Characterization Activity and SAR Studies of some Anti Obesity compounds from medicinal plants,  
Principal Investigator: Dr. Sunanda Das**Co- Investigator : Dr. Babita Agarwal**  
Duration- 2007-2009

**Membership of Professional Bodies:**

1. Life Member of the Indian Chemical Society, Kolkata, India. Fellowship no.F/7220(LM).since 31 Dec.,2010
2. Life Member of Indian Science Congress Association, Kolkata, L13214.since 19 May 2008.
3. Life Member of Vigyan Parishad, Prayag, Allahabad.since 2000.

4. Life Member of the Bio-Tech Research Society, NIIST, Trivandrum, India. LM 805. since 25 nov.2009.
5. Life Member of Indian Global Academic Society, Varanasi.since 14/3/11.
6. Life Member of Society of Biological Sciences and Rural Development , Allahabad. LM 82.since 15/7/2011.
7. Life Member / Statutory Member of the CSCMPC- Chemical Society C.M.P. College, Allahabad.
8. Life member of ‘Society for Promotion of Education and Science’(SPES), University of Delhi. Since January 2019.

### **Administrative Positions in college:**

1. Coordinator NAAC of CMP College since April 2019.
2. Convener of Chemistry Department from 12 Feb 2022
3. Co-Convener of “Time Table Committee” for the sessions 2023-24 for science faculty of College
4. Member of Internal Quality Assessment Cell (IQAC) of the college for Sessions 2019-20 & 2020-21, 2021-22, 2022-23, 2023-24.

### **Award/prize/certificate :**

1. **"Parishad Gaurav Samman"** Awarded by ‘**Triveni Shakha Bharat Vikas Parishad Prayagraj**’ on April 07,2023.

2. **Honoured by 'Ganga Seva Munch' for** Excellent work in the field of 'conservation of water and environment 'on the occasion of 'World Water Day' on March 22,2022.

3. **“VIGYAN BHUSHAN SAMMAN”**

**Honoured by ‘Sahitya Sangam ,Prayagraj’** for ‘Excellent work in the field of Science ’ on September 14,2021.

4. **“VIGYAN SHIKHA SAMMAN”**

Honoured by ‘ Vigyan Parishad Prayag’ on the occasion of International Women’s Day for ‘Significant contribution in Science writing in Hindi’ on March 8,2021.

5. **“ Bharat Vikas Parishad Vishisht Seva Samman”**

Awarded by ‘Triveni Shakha, Sanskar Shakha, Tejasvini shakha and Swarnim Shakha of **Bharat Vikas Parishad Prayagraj**’ on April 07,2019.



**6. “Mahila Gaurav Samman”**

Awarded by ‘Regional Office of Bank of Baroda’ on the occasion of International Women’s Day’ Mar 8, 2018.

**7. “ACHARYA RAGHUVIR PRASAD TRIVEDI SARJANA PURASKAR”  
Rs.20,000/**

Awarded by “Uttar Pradesh Hindi Sansthan, Lucknow” for writing the book ‘Sugandhit Paudhe’.Sept 14, 2016.

**8. “Anusrijan Samman” Rs. 15000/**

Honoured by AISECT University, Centre for Science Communication, Bhopal, M.P. for outstanding Science writing in Hindi and significant contribution in science communication on Dec.19,2015.

**9. “Distinguished Service Award- 2015**

Honoured by Society of Biological Sciences and Rural Development, Allahabad for outstanding contribution in the field of “Chemistry Teaching and Science Communication” on Dec. 13,2015.

**10. “EDUSHINE 2014”**

Honoured by ‘United group of institutions, Allahabad’ for academic excellence on 7<sup>th</sup> June 2014.

**11. “VIGYAN PARISHAD PRAYAG SHATABDI SAMMAN”- 2012-2013.**

Honoured by ‘ Vigyan Parishad Prayag’ For science communication in shatabdi samaroh on 27 April 2013.

**12. “Bharat Vikas Parishad Swarn Jayanti Samman” 2013**

Honoured by ‘ Bharat Vikas Parishad’ For science communication and social activities.