

# BRIEF PROFILE OF THE FACULTY

## Department of Chemistry

|                                          |   |                                                                                |
|------------------------------------------|---|--------------------------------------------------------------------------------|
| 1. Name                                  | : | Dr. Manisha Thakur                                                             |
| 2. Designation                           | : | Assistant Professor                                                            |
| 3. Educational Qualification             | : | M.Sc., Ph.D. in Chemistry                                                      |
| 4. Specialization in P.G.                | : | Inorganic Chemistry                                                            |
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| 6. Teaching Experience (as on 1.11.2015) | : | Years 18                                                                       |
| 7. Details of publication                |   |                                                                                |

## List of Publication of Dr. Manisha Thakur

(A) Papers in Journals

(B) Book Chapters

(C) Papers Presented/Abstracted in Conferences

### (A)Papers in Journals

|    |                                                                                                                                                                                                                                      |                                                                                                                          |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 1. | Spectrophotometric determination of bismuth in cationic micellar media with iodide and N, N'-diphenylbenzamidine in environmental samples<br>(with P.K. Agnihotri, M.K. Deb and R.K. Mishra)                                         | <i>J. Chem. Environ. Research</i> ,<br><b>6(3&amp;4)</b> , 217-225(1997)                                                 |
| 2. | Spectrophotometric determination rhenium(IV) with thiocyanate,<br>TX-100 and N,N'-diphenylbenzamidine.<br>(P.K. Agnihotri, Manisha Thakur, Manas Kanti Deb* and R.K. Mishra)                                                         | <i>J. Chinese Chem. Soc.</i> ,<br><b>45(3)</b> , 401-406 (1998)<br><b>Impact Factor: 0.819</b>                           |
| 3. | Fractionation and spectrophotometric determination of thallium with N,N'-diphenylbenzamidine, brilliant green and cetylpyridinium chloride.<br>(Manas Kanti Deb*, P.K. Agnihotri, Manisha Thakur and R.K. Mishra)                    | <i>Chem. Spec. &amp; Bioavail.</i> ,<br>Australia<br><b>10(2)</b> , 53-60 (1998) <b>Impact Factor: 1.022</b>             |
| 4. | Sensitive determination of zinc with N-hydroxy-N,N'-diphenylbenzamidine and diphenylcarbazone in airborne dustparticulates.<br>(Manisha Thakur, Manas Kanti Deb* and R.K. Mishra)                                                    | <i>Chemia Analityczna</i> , Poland<br><b>45(5)</b> , 843-850 (1998)<br><b>Impact Factor: 0.566</b>                       |
| 5. | Chemical speciation and determination of antimony with N,N'-diphenylbenzamidine and brilliant green in an acidic non-ionic micellar media.<br>(Manas Kanti Deb*, P.K. Agnihotri, Manisha Thakur and R.K. Mishra)                     | <i>J. Indian Chem. Soc.</i> , © <i>Ind Chem Soc</i> ,<br><b>76</b> , March, 145-147 (1999)<br><b>Impact Factor: 0.34</b> |
| 6. | Field detection and sensitive determination of copper in soil and airborne dust particulates with 1-[pyridyl-(2)-azo]-naphthol-(2), N-Phenyl-N'-(4-methyl-phenyl)-benzamidine and triton X-100.<br>(Manisha Thakur, Manas Kanti Deb) | <i>J. AOAC Intern.</i> , USA<br><b>82(3)</b> , 738-746 (1999)<br><b>Impact Factor 1.046</b>                              |

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| 7.  | Spectrophotometric determination of lead with N-hydroxy-N,N'-diphenylbenzamidine and diphenylcarbazone in airborne dust particulates and soil.<br>(Manisha Thakur, Manas Kanti Deb)                              | The Analyst, © RSC, <b>124</b> , 1331-1335 (1999)<br><b>Impact Factor 3.913</b><br><b>Immediacy index 1.032 – highest of any general analytical chemistry journal</b> |
| 8.  | The use of 1-[pyridyl-(2)-azo]-naphthol-(2) in the presence of TX-100 and N,N'-diphenylbenzamidine for the spectrophotometric determination of copper in real samples.<br>(Manisha Thakur, Manas Kanti Deb*)     | Talanta, © Elsevier, <b>49</b> , 561-569 (1999)<br><b>Impact Factor: 3.722</b>                                                                                        |
| 9.  | Lead levels in the airborne dust particulates of an urban city of central India.<br>(Manisha Thakur, Manas Kanti Deb*)                                                                                           | J. Environ. Monitor. & Assess., © Springer, <b>62</b> , 305-316 (2000)<br><b>Impact Factor: 1.436</b>                                                                 |
| 10. | Assessment of physico-chemical properties of airborne dust particulates in an urban city<br>(Manisha. Thakur, Manas Kanti Deb*)                                                                                  | Indian J. Environ. Hlth., © NEERI <b>21</b> , 225-237 (2001)                                                                                                          |
| 11. | Assessment of atmospheric arsenic level in airborne dust particulates of an urban city of central India.<br>(Manisha Thakur, Manas Kanti Deb*, R.K. Mishra and N. Bodhankar)                                     | J. Water, Air & Soil Poll., © Springer, <b>140</b> (1-4), Sept., 57-71 (2002) <b>Impact Factor: 1.765</b>                                                             |
| 12. | Spectrophotometric determination of nickel(II) using 5-Br-PADAP and N-hydroxy-N,N'- diphenylbenzamidine.<br>(Ravi Kumar Banjare, Manas Kanti Deb* and Manisha Thakur)                                            | J. Indian Chem. Soc., © Ind Chem Soc, <b>81</b> , Aug., 709-111 (2004)<br><b>Impact Factor: 0.34</b>                                                                  |
| 13. | Load of some trace metals in the airborne dust particulates of an urban city of central India.<br>(Manisha Thakur, Manas Kanti Deb*, S. Imai, Y. Suzuki, K. Ueki and A. Hasegawa)                                | J. Environ. Monit. & Assess., ©Springer, <b>95</b> , 257-268 (2004)<br><b>Impact Factor: 1.436</b>                                                                    |
| 14. | Determination of free and total zinc using 2-[(5-bromo-2-pyridylazo)]-5-diethylaminophenol in mixed surfactant medium<br>(Manisha Thakur, Ravi Kumar Banjare, Manas Kanti Deb)                                   | Indian J. Chem. Sec. A , © CSIR, <b>44A</b> , March, 733-736 (2005)<br><b>Impact Factor: 0.920</b>                                                                    |
| 15  | Extraction of Chloroplatinate(II) using 2-[(5-bromo-2-pyridylazo)]-5-diethylaminophenol-(TX-100)-N,N'-diphenylbenzamidine complex<br>( With Manas Kanti Deb* and Pushpa Khande)                                  | Journal of Scientific & Industrial Research, Vol. <b>64</b> , February, 2005, 138-143.                                                                                |
| 16. | Spectrophotometric determination of rhodium(III) using 5-Br-PADAP and N-hydroxy-N,N'- diphenylbenzamidine as reagent by extracting it in dichloromethane.<br>(ManishaThakur, Manas Kanti Deb* and Pushpa Khande) | J. Indian Chem. Soc., © Ind Chem Soc, <b>82</b> , 285-289 (2005)<br><b>Impact Factor: 0.34</b>                                                                        |
| 17. | Determination of nitrite, nitrate and total nitrogen in vegetable samples<br>(Manas Kanti Deb, Manisha Thakur and Pushpa Khande)                                                                                 | Bull. Chem. Soc. Ethiop. , © Chem. Soc. Ethiop., <b>21</b> (3), 445-                                                                                                  |

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|     |                                                                                                                                                                          | 450 (2007).                                                                                                                                               |
| 18. | Interaction of paraquat with electrochemically synthesized silver nanoparticles<br>(Shilpa Dubey, Manas Kanti Deb, Manisha Thakur)                                       | J. Ind. Chem. Soc., © <i>Ind Chem Soc</i> <b>84</b> , 698-701 (2007)<br><b>Impact Factor: 0.34</b>                                                        |
| 19. | Synthesis of silver nanoparticles using <i>N1,N2</i> -diphenylbenzamidine by microwave irradiation method<br>(Shilpa Sharma, Manas Kanti Deb and Manisha Thakur)         | J. Experimental Nanoscience, © <i>Taylor &amp; Francis</i> , <b>2</b> (4), 251-256 (2007)<br>DOI:10.1080/17458080701753744<br><b>Impact Factor: 1.011</b> |
| 20. | Preparation of Silver Nanoparticles by Microwave Irradiation.<br>(Shilpa Sharma, Manisha Thakur, Manas Kanti Deb*)                                                       | Current Nanoscience, © <i>BenthamPublication</i> , <b>4</b> , 138-140 (2008)<br><b>Impact Factor: 2.793</b>                                               |
| 21. | Logistic management of solid waste with practices and challenges<br>(Md. Wasim Khan and Manisha Thakur)                                                                  | <i>Indian J. Environ. Hlth.</i> , <b>33</b> , 655-663(2013)                                                                                               |
| 22. | Catalytic Diazotization using silver and gold nanoparticles and Spectrophotometric determination of parathion residue in fruit and soil. (With S. Sharma, and M. K. Deb) | SPJMR Journal, volume 11, Issue1, January-2021                                                                                                            |

#### (B) Book Chapters

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|---|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Platinum Group Metal in Environment via Catalytic Converter                            | Modern Research and Environmental Sustainability<br><i>AkiNik Publication</i> , New Delhi<br><b>Chapter 10</b> , Vol.1, Page no. 117-127, 2022<br><b>ISBN:</b> 978-93-5570-305-7<br><b>BookDOI:</b><br><a href="http://doi.org/10.22271/ed.book.1751">http://doi.org/10.22271/ed.book.1751</a>                                                                                      |
| 2 | Fluoride in water-Cause, Health risk and removal studies<br>With Dr. Meena Chakraborty | Modern Research and Environmental Sustainability<br><i>AkiNik Publication</i> , New Delhi<br><b>Chapter 4</b> , Vol.3, Page no. 51-64, 2023<br><b>ISBN:</b> 978-93-5570-636-2<br><b>Book DOI:</b><br><a href="http://doi.org/10.22271/ed.book.2220">http://doi.org/10.22271/ed.book.2220</a>                                                                                        |
| 3 | Toxicology of marine cyanobacteria<br>With Arun Kumar Kashyap, and Neena Rai           | Marine Molecules from Algae and Cyanobacteria.<br><i>Elsevier Publication</i> , 2024<br><b>Chapter 18</b> , Page no. 313-321, 2024<br><b>ISBN:</b> 978-0-443-21674-9<br><b>Book DOI:</b> <a href="https://doi.org/10.1016/B978-0-443-21674-9.00019-2">https://doi.org/10.1016/B978-0-443-21674-9.00019-2</a>                                                                        |
| 4 | Application of Surfactants in Soil Chemistry                                           | Role of Surfactants in Drug Delivery, Pesticides, Antimicrobial Activity and Bioremediation<br><i>Deep Science Publishing</i> , 2025<br><b>Chapter 11</b> , Page no. 191-198, 2025<br><b>ISBN:</b> 978-93-7185-317-0<br><b>E-ISBN:</b> 978-93-7185-025-4<br><b>Book DOI:</b><br><a href="https://doi.org/10.70593/978-93-7185-025-4">https://doi.org/10.70593/978-93-7185-025-4</a> |
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