Interdepartmental and Inter-institutional collaborative activity-

Prof. Manas Kanti Deb,

School of Studies in Chemistry, PRSU, Raipur

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Type of Collaboration**  **(Joint Publications)**  **AUTHORS** | **Collaboration with** | **Output** |
| 1. | J Nirmalkar, DK Deshmukh, MK Deb, YI Tsai, K Sopajaree | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Department of Environmental Engineering and Science, Chia Nan University of Pharmacy of Science, 60, Sec. 1. ErhJen Road, Jen-Te,Tainan 717, Taiwan * Department of Environmental Engineering, Chiang Mai University, Chiang Mai 50200, Thailand | [Mass loading and episodic variation of molecular markers in PM 2.5 aerosols over a rural area in eastern central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:XR3BWSlh_xcC) Atmospheric Environment  © Elsevier, 117, 41-50, 2015 |
| 2. | J Nirmalkar, MK Deb, YI Tsai, DK Deshmukh | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Department of Environmental Engineering and Science, Chia Nan University of Pharmacy of Science, 60, Sec. 1. ErhJen Road, Jen-Te,Tainan 717, Taiwan | [Arabitol and Mannitol as Tracer for Fungal Contribution to Size-Differentiated Particulate Matter of Rural Atmospheric Aerosols](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:G887dSk7Sz8C)  Intern. J. Environ. Sci. and Develop. 6 (6), 460, 2015 |
| 3. | J Nirmalkar, MK Deb, DK Deshmukh, YI Tsai, SK Verma | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Department of Environmental Engineering and Science, Chia Nan University of Pharmacy of Science, 60, Sec. 1. Erh Jen Road, Jen-Te,Tainan 717, Taiwan * Forensic Science Laboratory, Govt. of Chhattisgarh, Raipur | [Molecular markers in ambient aerosol in the Mahanadi Riverside Basin of eastern central India during winter](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:pyW8ca7W8N0C)  Environ. Sci. and Poll. Res. © Springer , 22 (2), 1220-1231, 2015 |
| 4. | BK Sen, DK Deshmukh, MK Deb, D Verma, J Pal | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Central Ground Water Board, Nagpur | [Removal of Phenolic Compounds from Aqueous Phase by Adsorption onto Polymer Supported Iron Nanoparticles](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:f2IySw72cVMC)  Bull. Environ. Contam. and Toxicol. © Springer, 93 (5), 549-554, 2014 |
| 5. | J Pal, MK Deb, DK Deshmukh | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan | [Microwave-assisted synthesis of silver nanoparticles using benzo-18-crown-6 as reducing and stabilizing agent](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:u_35RYKgDlwC)  Applied Nanoscience © Springer, 4 (4), 507-510, 2014 |
| 6. | J Pal, MK Deb, JK Sircar, PK Agnihotri | * National Metallurgical Laboratory, Jamshedpur, Jharkhand 831007 * Govt. Chhattisgarh College, Raipur | [Microwave green synthesis of biopolymer-stabilized silver nanoparticles and their adsorption behavior for atrazine](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:dfsIfKJdRG4C)  Applied Water Science © Springer, 5 (2), 181-190, 2014 |
| 7. | S Sharma, MK Deb | * Rungta College of Science & Engg, Raipur | [Catalytic diazotization using silver and gold nanoparticles and spectrophotometric determination of parathion residues in fruit and soil](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:mo9XK3BEATIC)  J. Ind. Chem. Soc., © Ind. Chem. Soc., 91 (1), 101-105, 2014 |
| 8. | J Pal, MK Deb, DK Deshmukh | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan | [Removal of phenol in aqueous solution by adsorption onto green synthesized coinage nanoparticles beads](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:MSzX15-gZgkC)  Research on Chemical Intermediates, © Springer, 1-17, 2014 |
| 9. | J Pal, MK Deb, DK Deshmukh, BK Sen | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan | [Microwave-assisted synthesis of platinum nanoparticles and their catalytic degradation of methyl violet in aqueous solution](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:g5m5HwL7SMYC)  Applied Nanoscience © Springer, 4 (1), 61-65, 2014 |
| 10. | DK Deshmukh, MK Deb, D Verma, J Nirmalkar | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Central Ground Water Board, Nagpur | [Seasonal Air Quality Profile of Size-Segregated Aerosols in the Ambient Air of a Central Indian Region](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:fPk4N6BV_jEC)  Bull. Environ. Contam. and Toxicol. © Springer, 91 (6), 704-710, 2013 |
| 11. | J Pal, MK Deb, JK Sircar | * National Metallurgical Laboratory, Jamshedpur, Jharkhand 831007 | [Green synthesis of Au/AgNPs and their photodegradation of organic dyes in aqueous solution](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:K-tzbvM8PMoC)  J. Ind. Chem. Soc., © Ind. Chem. Soc., 90 (11), 2115-2120, 2013 |
| 12. | J Pal, MK Deb, DK Deshmukh, D Verma | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Central Ground Water Board, Nagpur | [Removal of methyl orange by activated carbon modified by silver nanoparticles](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:SeFeTyx0c_EC)  Applied Water Science © Springer, 3 (2), 367-374, 2013 |
| 13. | J Nirmalkar, MK Deb, DK Deshmukh, SK Verma | * Institute of Low Temperature Science. Hokkaido University. N19 W8, Kita-ku, Sapporo 060-0819, Japan * Forensic Science Laboratory, Govt. of Chhattisgarh, Raipur | [Mass loading of size-segregated atmospheric aerosols in the ambient air during fireworks episodes in Eastern Central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:HoB7MX3m0LUC)  Bull. Environ. Contam. and Toxicol. © Springer, 90 (4), 434-439, 2013 |
| 14. | DK Deshmukh, MK Deb, SL Mkoma | * Department of Physical Sciences, Faculty of Science, Sokoine University of Agriculture (SUA), P.O. Box 3038, Morogoro, Tanzania | [Size distribution and seasonal variation of size-segregated particulate matter in the ambient air of Raipur city, India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:4DMP91E08xMC)  Air Quality, Atmosphere & Health © Springer, 6 (1), 259-276, 2013 |
| 15. | DK Deshmukh, MK Deb, Y Suzuki, GN Kouvarakis | * Kobe Institute of Health, 4–6, Minatojima-nakamachi, Chuo-ku, Kobe-shi, Hyogo 650-0046, Japan * Environmental Chemical Process Laboratory, Department of Chemistry, University of Crete, P.O. Box 2208, 71003 Heraklion, Greece | [Water-soluble ionic composition of PM2. 5–10 and PM2. 5 aerosols in the lower troposphere of an industrial city Raipur, the eastern central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:ULOm3_A8WrAC) Air Quality, Atmosphere & Health © Springer, 6 (1), 95-110, 2013 |
| 16. | DK Deshmukh, MK Deb, D Verma, SK Verma, J Nirmalkar | * Forensic Science Laboratory, Govt. of Chhattisgarh, Raipur | [Aerosol Size Distribution and Seasonal Variation in an Urban Area of an Industrial City in Central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:M05iB0D1s5AC) Bull. Environ. Contam. and Toxicol. © Springer, 89 (5), 1098-1104, 2012 |
| 17. | DK Deshmukh, YI Tsai, MK Deb, P Zarmpas | * Department of Environmental Resources Management, Chia Nan University of Pharmacy and Science, Tainan 71710, Taiwan * Environmental Chemical Processes Laboratory, Department of Chemistry, University of Crete, Heraklion 71003, Greece | [Characteristics and sources of water-soluble ionic species associated with PM10 particles in the ambient air of central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:ldfaerwXgEUC)  Bull. Environ. Contam. and Toxicol. © Springer, 89 (5), 1091-1097, 2012 |
| 18. | DK Deshmukh, MK Deb, PK Hopke, YI Tsai | * Department of Chemical and Biomolecular Engineering and Center for Air Resources Engineering and Science, Clarkson University, Potsdam, NY 13699-5708, USA * Department of Environmental Engineering and Science, Chia Nan University of Pharmacy and Science, 60, Sec. 1, Erren Rd., Rende Dist., Tainan 71710, Taiwan | [Seasonal characteristics of water-soluble dicarboxylates associated with PM10 in the urban atmosphere of Durg City, India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:70eg2SAEIzsC)  Aerosol Air Qual Res © Taiwan Assoc. Aerosol Res., 12, 683-696, 2012 |
| 19. | DK Deshmukh, YI Tsai, MK Deb, SL Mkoma | * Department of Environmental Resources Management, Chia Nan University of Pharmacy and Science, Tainan 71710, Taiwan * Department of Physical Sciences, Faculty of Science, Sokoine University of Agriculture (SUA), P.O. Box 3038, Morogoro, Tanzania | [Characterization of dicarboxylates and inorganic ions in urban PM10 aerosols in the eastern central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:vV6vV6tmYwMC) Aerosol and Air Quality Research © Taiwan Assoc. Aerosol Res., 12 (4), 592-607, 2012 |
| 20. | DK Deshmukh, MK Deb, YI Tsai, SL Mkoma | * Department of Environmental Resources Management, Chia Nan University of Pharmacy and Science, Tainan 71710, Taiwan * Department of Physical Sciences, Faculty of Science, Sokoine University of Agriculture (SUA), P.O. Box 3038, Morogoro, Tanzania | [Water soluble ions in PM2.5 and PM1 aerosols in Durg city, Chhattisgarh, India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:Se3iqnhoufwC)  Aerosol Air Qual. Res., © Taiwan Assoc. Aerosol Res., 11, 696-708, 2011 |
| 21. | DK Deshmukh, MK Deb, YI Tsai, SL Mkoma | * Department of Environmental Resources Management, Chia Nan University of Pharmacy and Science, Tainan 71710, Taiwan * Department of Physical Sciences, Faculty of Science, Sokoine University of Agriculture (SUA), P.O. Box 3038, Morogoro, Tanzania | [Atmospheric ionic species in PM2.5 and PM1 aerosols in the ambient air of eastern central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:Zph67rFs4hoC) J. Atmospheric Chem. © Springer, 66 (1-2), 81-100, 2010 |
| 22. | SK Verma, MK Deb, Y Suzuki, YI Tsai | * Kobe Institute of Health, 4–6, Minatojima-nakamachi, Chuo-ku, Kobe-shi, Hyogo 650-0046, Japan * Department of Environmental Resources Management, Chia Nan University of Pharmacy and Science, Tainan 71710, Taiwan | [Ion chemistry and source identification of coarse and fine aerosols in an urban area of eastern central India](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:eQOLeE2rZwMC) Atmospheric Research © Elsevier, 95 (1), 65-76, 2010 |
| 23. | MK Deb, D Verma, SK Verma, N Bodhankar, JK Sircar | * School of Studies in Geology & WRM, Pt. Ravishankar Shukla University, Raipur, C.G. * National Metallurgical Laboratory, Jamshedpur, Jharkhand 831007 | [Quantitative analysis of inorganic ions in soil employing diffuse reflectance Fourier transform infrared spectroscopy (DRS-FTIR)](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0oSsEooAAAAJ&cstart=20&sortby=pubdate&citation_for_view=0oSsEooAAAAJ:qUcmZB5y_30C) J. Ind. Chem. Soc., © Ind. Chem. Soc., 87 (11), 1317-1327, 2010 |